

Memorandum

October 21, 2024

To: Caroline Jalanti, New York State Department of Environmental Conservation (NYSDEC)

From: Tim DiGiulio, PE, and Tim Johnson

cc: Kerry Maloney, NYSDEC; Seth Levine, Cambrex; Christopher Clark, Warner-Lambert Company, LLC; Matt Robinson, ELT Harriman; Jeff Caputi, Brown and Caldwell

Re: Third Quarter 2024 Semi-Annual Inspection and Progress Report; Harriman Inactive Waste Disposal Site No. 336006

Introduction

This memorandum and the attached inspection reports constitute the third quarter 2024 progress report for the Harriman Inactive Waste Disposal Site (the Site) on behalf of Nepera, Inc., and Warner-Lambert Company, LLC (Corporate Defendants) and ELT Harriman, LLC (ELT).

Because of the concurrence of other remediation programs and voluntary investigative work being performed at the Site, this report, like previous reports, includes activities that are beyond the scope of the parties' obligations under the Consent Decree and Interim Site Management Plan (ISMP).

Site Inspection

This memorandum covers the full scope of the semi-annual and quarterly site inspection requirements pursuant to the ISMP dated December 2023. The site inspection was performed on September 4, 2024, by Anchor QEA staff. In accordance with the ISMP notification requirements, Anchor QEA notified the New York State Department of Environmental Conservation (NYSDEC) 7 days prior to conducting the quarterly inspection.

Monitoring Wells

The quarterly well inspection report covers 76 monitoring wells. Visual observations were conducted at 69 monitoring wells to evaluate each well's collar, plug, lid, lock, tag, and casing. Seven monitoring wells were inaccessible because of extremely dense and sometimes thorny vegetation. Access to these locations will be re-evaluated during future monitoring events.

The components of the 69 monitoring wells that were inspected remain in satisfactory condition, with exceptions noted in the monitoring well summary forms provided in Attachment 1. Two wells were observed to have casing deficiencies, and two others had lid deficiencies. One well had a damaged plug, which was replaced, and one stickup well was missing a lock, which will be replaced during the next scheduled activity. Because no damage that would interfere with planned field

activities was observed, additional well repairs or abandonment will be assessed during the next routine groundwater monitoring event.

Although not part of the monitoring program outlined in the ISMP, monitoring wells installed in December 2023 are included on the inspection checklist and will continue to be inspected as part of these periodic monitoring requirements.

Former Soil Vapor Extraction Well In Situ Product Removal

As outlined in Section 3.3.4 of the ISMP, product has historically been observed in soil vapor extraction (SVE) well VER-2. An absorbent sock was placed in that well, and the sock was monitored during subsequent site inspections. The absorbent sock was last replaced on December 14, 2023, during the Phase III Emerging Contaminant Investigation program. The sock was at 40% capacity when inspected on September 4, 2024.

Absorbent socks were placed in each of four other wells (SVE-2, SVE-3, VER-1, and VER-3) on March 1, 2024, after a thin layer of product was detected by the interface probe. During the September 4, 2024, inspection, none of the of the absorbent socks in the four wells had any discoloration and product was detected in only one of the four wells (0.01 inch in well VER-1). Wells SVE-2 and SVE-4 were dry. No product was observed in SVE-3, VER-3, or VER-4. After the lid to well VER-4 was opened, an elevated photoionization detector (PID) reading was taken. After the reading was noted, the lid was left open while staff worked at other locations. Upon return, within approximately 1 hour, the PID reading was less than 0.1 parts per million (ppm) and it was determined safe to approach and collect measurements. Monitoring well SVE-1 was inundated, and a depth-to-water reading could not be collected. No sheen was observed on the pooled water at this location. It was also observed that the well plug was broken at this location, and the plug was replaced that day.

Future inspections will continue to monitor the socks in these five wells. The semi-annual SVE/VER well inspection form is provided for reference in Attachment 1.

Streambank Interim Cover

The interim riverbank turf reinforcement mat and vegetative cover system along the West Branch of the Ramapo River was inspected. Representative photographs of the area are provided along with the inspection form in Attachment 2. Observations of the cover system showed vegetation with no significant signs of erosion and the system functioning as designed.

Parking Lot

Section 3.4.1 of the ISMP addresses the interim control and integrity of the parking lot asphalt cover. Deficiencies identified during the fourth quarter 2023 inspection were patched and repaired on December 4 and 5, 2023. As with the first quarter inspection, there were some small, localized areas

with limited subsidence of the asphalt. But the asphalt continues to remain intact and to provide erosion protection for materials beneath the parking lot area. Representative photographs of the parking lot conditions are included in Attachment 2.

Former Excavation Areas F and Building 53

Section 3.4.2 of the ISMP requires the inspection of former excavation and backfill areas to evaluate them for signs of significant erosion or vandalism. Areas of Building 53 and Area F were observed to contain vegetation with no visual evidence of disturbance or erosion. The inspection form and photographs for these areas are included in Attachment 3.

Site Perimeter Fencing

Section 3.4.6 of the ISMP requires visual inspections of the fence and gates to restrict unauthorized access to the Site. When staff arrived on site on September 4, 2024, each of the two locks on the fence gates had been cut, indicating possible unauthorized entry at some time previously. Both locks were replaced the same day. During the site inspection, the fence perimeter was visually inspected. The section of the fence adjacent to the parking lot that was repaired on March 26, 2024, was observed to be in good condition. Additional photographs and inspection forms are provided in Attachment 4.

Handling of Soil Pile

As covered in the First Quarter 2024 Semi-Annual Inspection and Progress Report, soil and building debris were illegally dumped on the property on or before February 23, 2024. ELT subsequently moved and secured the soil pile atop a former building slab in the plant site area to prevent interaction with site soil, groundwater, or surface runoff. ELT also collected a composite sample of the soil pile, which was analyzed for volatile organic compounds, semivolatile organic compounds, polychlorinated biphenyls, metals, PFAS, and Resource Conservation and Recovery Act (RCRA) waste characteristics. A summary table of concentrations and the analytical laboratory report are provided in Attachment 5. In summary, four compounds (acetone, p,p'-DDE, p,p'-DDT, and nickel) were above the Unrestricted Use Soil Cleanup Objective (SCO) but below the Commercial Use SCO. Disposal of the soil will be handled in conjunction with remedial actions for the Site.

Summary of Second and Third Quarter 2024 Activities

The following is a summary of activities from the second and third quarters of 2024:

- The second quarter inspection of the riverbank cover and the parking lot asphalt cap was conducted in May and June, and the update was sent to NYSDEC via email on June 20, 2024.
- The Parking Lot Data Gap Investigation was performed from May 8 to 10, 2024. In total, 13 soil borings and 5 cone penetration test measurements were collected for incorporation into the upcoming Parking Lot Feasibility Study.

- A full round of groundwater elevation measurements was conducted on June 17 and 18, 2024.
- In conjunction with the groundwater measurement activities, the following well maintenance tasks were completed:
 - Replaced all well locks
 - Replaced plugs on three wells
 - Re-tagged all wells missing proper markings
 - Inspected the concrete pad around well MW-24S, which was identified as compromised in the Q1 Inspection Report. After further inspection, it appears the concrete is intact. It was buried on one side by dirt and debris, which made it appear compromised. Staff cleared and cleaned around the well.
- Groundwater elevation data were incorporated into the Phase III Emerging Contaminants Report.
- The Phase III Emerging Contaminants Report was submitted to NYSDEC for review on June 28, 2024.
- Repairs of previously identified remote fence breaches were completed on April 10, 2024. See Attachment 4 for pictures.
- The soil pile was characterized and NYSDEC notified of the plans for its disposal.
- Team progress calls were held with NYSDEC on April 22, June 24, July 29, and September 23, 2024.

Projected Fourth Quarter 2024 Activities

The following activities are planned for the fourth quarter (October to December) of 2024:

- Coordination call with NYSDEC around comments on Phase III Emerging Contaminants Report
- Response to comments and submission of revised Phase III Emerging Contaminants Report and Interim Site Management Plan (if required)
- Fourth quarter site inspection of the parking lot and streambank cover

Attachments

Attachment 1 Third Quarter 2024 Semi-Annual Well Inspection Report

Attachment 2 Streambank and Parking Lot Inspection Photographs and Log

Attachment 3 Area F and Building 53 Area Photographs and Log

Attachment 4 Fence Inspection Photographs and Log

Attachment 5 Summary of Analytical Results and Lab Report for the Soil Pile Sample

Attachment 1

First Quarter 2024 Semi-Annual Well
Inspection Report

Third Quarter 2024 Semi-Annual Well Inspection Report

Monitoring Well	Diam (In)	Finish	Routine Monitoring	Well Condition (see notation types below)						Comments	Action Items
				Collar	Lid	Plug	Lock	Tag	Casing		
AMW-1	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-2	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-3	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-4	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-5	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-6	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-7	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-8	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-9	2	Stickup		OK	OK	OK	OK	OK	OK	Labeled with paint pen.	
AMW-10	2	Stickup		OK	OK	OK	OK	OK	OK	Labeled with paint pen.	
AMW-11	2	Stickup		OK	OK	OK	OK	OK	OK		
AMW-12	2	Stickup		OK	OK	OK	OK	OK	OK	Labeled with paint pen.	
AP-101	2	Stickup		OK	OK	OK	OK	OK	OK		
AP-201D	2	Stickup		OK	OK	OK	OK	OK	OK		
AP-201S	2	Stickup		OK	OK	OK	OK	OK	OK		
BP-101*	2	Stickup		OK	OK	OK	OK	OK	OK		
MW-1S	6	Stickup	Chemistry, Water level	NA	NA	OK	NA	NA	OK		
MW-2S	4	Stickup	Water level	OK	OK	OK	OK	OK	D		
MW-3S	4	Stickup	Water level	NI	NI	NI	NI	NI	NI	Can't access due to vegetation overgrowth.	Will be addressed before future sampling activities.
MW-4S	4	Stickup	Water level	NI	NI	NI	NI	NI	NI	Can't access due to vegetation overgrowth.	Will be addressed before future sampling activities.
MW-5S	4	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-6D	4	Stickup	Chemistry, Water level	NI	NI	NI	NI	NI	NI	Can't access due to vegetation overgrowth.	Will be addressed before future sampling activities.
MW-7S	4	Stickup	Chemistry, Water level	NI	NI	NI	NI	NI	NI	Can't access due to vegetation overgrowth.	Will be addressed before future sampling activities.
MW-8S	4	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-9S	4	Stickup	Water level	D	D	NI	NI	NI	NI	Lid was rusted shut. Unable to open well.	Will be addressed before future sampling activities.
MW-10D	6	Stickup		OK	OK	X	X	X	X		
MW-11S	4	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-12S	2	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-13S	2	Flush-mount	Water level	OK	OK	OK	NA	OK	OK	Labeled with paint pen.	

Third Quarter 2024 Semi-Annual Well Inspection Report

Monitoring Well	Diam (In)	Finish	Routine Monitoring	Well Condition (see notation types below)						Comments	Action Items
				Collar	Lid	Plug	Lock	Tag	Casing		
MW-16S	4	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-17S	4	Stickup		OK	OK	OK	OK	OK	D		
MW-18D	6	Stickup		OK	OK	NI	X	NI	NI	Lid was rusted shut. Unable to open well.	Will be addressed before future sampling activities.
MW-20D	4	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-20DR	2	Flush-mount	Chemistry, Water level	NI	NI	NI	NA	NI	NI	Couldn't find/access due to vegetation overgrowth.	Will be addressed before future sampling activities.
MW-20S	4	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-21D	4	Stickup		OK	OK	OK	OK	OK	OK		
MW-21S	4	Stickup	Water level	OK	OK	OK	OK	OK	OK		
MW-22S*	4	Stickup		OK	OK	OK	OK	OK	OK		
MW-23D*	4	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-23S*	4	Stickup		OK	OK	OK	OK	OK	OK		
MW-24S	4	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-25D	4	Stickup		OK	OK	OK	OK	OK	OK	Labeled with paint pen.	
MW-25S	4	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK	Labeled with paint pen.	
MW-26D	2	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-26S	4	Stickup		OK	OK	OK	OK	OK	OK		
MW-27D	6	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-27S	4	Stickup	Water level	OK	OK	OK	OK	OK	OK		
MW-28S	2	Stickup		OK	OK	OK	OK	OK	OK		
MW-29S	2	Stickup		NI	NI	NI	NI	NI	NI	Couldn't access due to excessive vegetation.	Will be addressed before future sampling activities.
MW-33S	2	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-34	2	Flush-		OK	OK	OK	NA	OK	OK		

Third Quarter 2024 Semi-Annual Well Inspection Report

Monitoring Well	Diam (In)	Finish	Routine Monitoring	Well Condition (see notation types below)						Comments	Action Items
				Collar	Lid	Plug	Lock	Tag	Casing		
MW-35AQ	2	Flush-mount		OK	OK	OK	NA	OK	OK		
MW-35S	2	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-36AQ	2	Flush-mount		OK	OK	OK	NA	OK	OK		
MW-36S	2	Flush-mount	Water level	OK	OK	OK	NA	OK	OK		
MW-37AQ	2	Flush-mount		OK	OK	OK	NA	OK	OK		
MW-37S	2	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-53D	4	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-53S	4	Flush-mount		OK	OK	OK	NA	OK	OK		
MW-101	2	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK		
MW-102	2	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-103	2	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK	Damaged plug. Well inundated to top of casing.	Plug was replaced immediately.
MW-104	2	Flush-mount	Chemistry, Water level	OK	OK	OK	NA	OK	OK	Labeled with paint pen. Well inundated to top of casing.	
MW-105	2	Stickup	Chemistry, Water level	OK	OK	OK	X	OK	OK	No lock present.	Replace lock.
MW-106	2	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
MW-201	2	Stickup		OK	OK	OK	OK	OK	OK		
MW-202D	2	Stickup		OK	OK	OK	OK	OK	OK		
MW-202S	2	Stickup		OK	OK	OK	OK	OK	OK		
MW-203	2	Stickup		OK	OK	OK	OK	OK	OK		
OW-6	2	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
OW-7	2	Stickup	Chemistry, Water level	OK	OK	OK	OK	OK	OK		
PZ-1	2	Stickup	Water level	OK	OK	OK	OK	OK	OK		
PZ-3	2	Flush-mount	Water level	OK	OK	OK	NA	OK	OK		

Third Quarter 2024 Semi-Annual Well Inspection Report

Monitoring Well	Diam (In)	Finish	Routine Monitoring	Well Condition (see notation types below)						Comments	Action Items
				Collar	Lid	Plug	Lock	Tag	Casing		
PZ-4	2	Stickup		OK	OK	OK	OK	OK	OK		
R-3D	10	Stickup		NI	NI	NI	NA	NI	NI	Couldn't access due to thorny vegetation.	Will be addressed before future sampling activities.
RW-1R	6	Vault	Chemistry, Water level	OK	OK	NI	NA	OK	OK	Labeled with paint pen.	

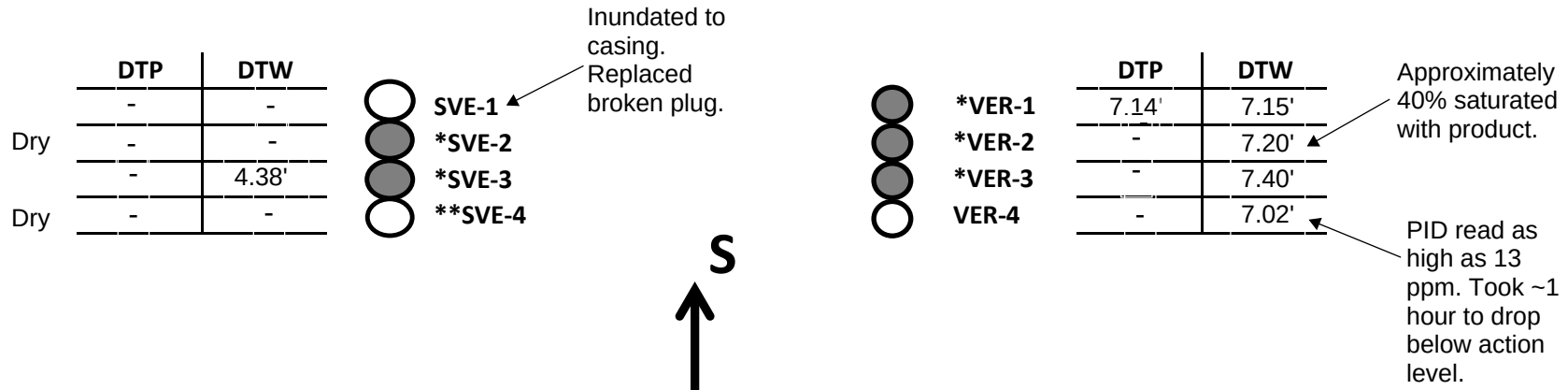
Notes:
* Off-site Well
Diam: diameter
in: inch
Condition Notation:
X: Item missing
B: Bolt missing
D: Damaged
OK: Acceptable condition
NI: Not inspected

SVE/VER PRODUCT MEASUREMENT CHECKLIST

HARRIMAN, NEW YORK

Recorded By: Natalie Lynch

Date: 09/04/2024



NOTE: SVE wells are closer to the side of the road.

VER-1 and SVE-1 are both 4" wells. All others are 2" diameter.

● Indicates absorbent sock in well.

Comments:

Graphic represents orientation of wells when facing south.

Check wells for depth to water (DTW) and depth to product (DTP) after absorbent sock is removed.

*Absorbent sock present in VER-1 through VER-3, SVE-2, and SVE-3 and prior observations of product have been noted in these wells.

**Bottom of SVE-4 partially filled in during prior demolition work (Bottom at 2.65 ft).

Attachment 2

Streambank and Parking Lot Inspection Photographs and Log

RIVERBANK AND PARKING LOT INSPECTION FORM

HARRIMAN, NEW YORK

DATE: 09/04/2024

INSPECTION (Check): SEMI-ANNUAL

INSPECTOR: Natalie Lynch

QUARTERLY ☒

	STATUS	COMMENTS
A. General condition of riverbank cover material	OK	Stable
B. Settlement of riverbank cover	OK	None observed
C. General condition of parking lot cover material	OK	10-15 small holes observed across the parking lot
D. Settlement of parking lot cover	Some	Recent repairs have settled

Photograph 1
Representative Streambank Photograph



Photograph taken September 4, 2024

Photograph 2
Representative Streambank Photograph



Photograph taken September 4, 2024

Photograph 3
Representative Parking Lot Photograph Facing North



Photograph taken September 4, 2024

Photograph 4
Representative Parking Lot Photograph Facing South



Photograph taken September 4, 2024

Photograph 5
Representative Parking Lot Photograph Showing Signs of Settlement



Photograph taken September 4, 2024

Photograph 6
Representative Parking Lot Photograph Showing Signs of Settlement



Photograph taken September 4, 2024

Attachment 3

Area F and Building 53 Area Photographs and Log

FORMER DRUM EXCAVATION AREAS INSPECTION FORM

HARRIMAN, NEW YORK

DATE: 09/04/2024

INSPECTION (Check): SEMI-ANNUAL ☒

INSPECTOR: Natalie Lynch

QUARTERLY ☐

	STATUS	COMMENTS
A. AREA F	OK	No disturbance. Natural vegetation.
B. BUILDING 53 AREA	OK	No disturbance. Natural vegetation.

Photograph 1
Former Drum Excavation Area Facing Southwest



Photograph taken September 4, 2024

Photograph 2
Former Drum Excavation Area Facing East



Photograph taken September 4, 2024

Attachment 4

Fence Inspection Photographs and Log

SITE FENCE INSPECTION FORM

HARRIMAN, NEW YORK

DATE: 09/04/2024

INSPECTOR: Natalie Lynch

INSPECTION (Check): **SEMI-ANNUAL** X

QUARTERLY

	STATUS	COMMENTS
A. Perimeter Fence around NEPERA Facility	<u>OK</u>	<u>Lock was cut. Fence was closed but accessible.</u>
B. Perimeter fence around NEPERA Parking Lot	<u>OK</u>	<u>Lock was cut. Fence was closed but accessible.</u>
C. Perimeter fence around lagoon area	<u>OK</u>	<u>OK. Couldn't view a significant portion of fence due to excessive vegetation.</u>

Photograph 1
Parking Lot Fence Facing Northwest



Photograph taken September 4, 2024

Photograph 2
Parking Lot Fence Gate



Photograph taken September 4, 2024

Photograph 3
Fence Facing South



Photograph taken September 4, 2024

Photograph 4
Fence Gate Facing South



Photograph taken September 4, 2024

Photograph 5
Remote Fence Breach Repair



Photograph taken April 10, 2024

Photograph 6
Remote Fence Breach Repair



Photograph taken April 10, 2024

Attachment 5

Summary of Analytical Results and Lab Report for the Soil Pile Sample

TABLE 1
SOIL PILE WASTE CHARACTERIZATION: DETECTED RESULTS
FORMER NEPERA PLANT SITE
HARRIMAN, NEW YORK

Constituent	Result	Units	Unrestricted Use SCO	Exceed	Commercial Use SCO	Exceed	Industrial Use SCO	Exceed
VOCs (TCLP ND for all)								
Toluene	0.0013	mg/kg	0.7	No	500	No	1000	No
Acetone	<u>0.098</u>	mg/kg	0.05	Yes	500	No	1000	No
Benzene	0.0012	mg/kg	0.06	No	44	No	89	No
2-Butanone	0.012	mg/kg	0.93	No	500	No	1000	No
SVOCs (TCLP ND for All)								
Acenaphthene	0.0044	mg/kg	20	No	500	No	1000	No
Acenaphthalene	0.01	mg/kg	100	No	500	No	1000	No
Anthracene	0.013	mg/kg	100	No	500	No	1000	No
Benzo(a)anthracene	0.04	mg/kg	1	No	5.6	No	11	No
Benzo(a)pyrene	0.053	mg/kg	1	No	1	No	1.1	No
Benzo(b)fluoranthene	0.067	mg/kg	1	No	5.6	No	11	No
Benzo(g,h,i)perylene	0.047	mg/kg	100	No	500	No	1000	No
Benzo(k)fluoranthene	0.025	mg/kg	0.8	No	56	No	110	No
Butyl benzyl phthalate	0.17	mg/kg		--		--		--
Chrysene	0.048	mg/kg	1	No	56	No	110	No
Fluoranthene	0.076	mg/kg	100	No	500	No	1000	No
Fluorene	0.0059	mg/kg	30	No	500	No	1000	No
Indeno(1,2,3-cd)pyrene	0.033	mg/kg	0.33	No	5.6	No	11	No
Phenanthrene	0.047	mg/kg	100	No	500	No	1000	No
Pyrene	0.087	mg/kg	100	No	500	No	1000	No
Pesticides (TCLP ND for All)								
alpha-Chlordane	0.0033	mg/kg	0.094	No	24	No	47	No
gamma-Chlordane	0.0035	mg/kg		--		--		--
p,p'-DDE	<u>0.014</u>	mg/kg	0.0033	Yes	62	No	120	No
p,p'-DDT	<u>0.052</u>	mg/kg	0.0033	Yes	47	No	94	No
PCBs								
All	ND	mg/kg	0.1	No	1	No	25	No
PFAS								
PFPeA	0.000086	ug/kg	--		--		--	
PFHxA	0.000084	ug/kg	--		--		--	
PFHpA	0.000044	ug/kg	--		--		--	
PFOA	0.00028	ug/kg	0.66	No	500	No	600	No
PFNA	0.000043	ug/kg	--		--		--	
PFOS	0.00017	ug/kg	0.88	No	440	No	440	No
PFDS	0.000038	ug/kg	--		--		--	
NETFOSAA	0.000066	ug/kg	--		--		--	
Metals								
Aluminum	5700	mg/kg		--		--		--
Arsenic	2.3	mg/kg	13	No	16	No	16	No
Barium	68	mg/kg	350	No	400	No	10000	No
Beryllium	0.35	mg/kg	7.2	No	590	No	2700	No
Cadmium	0.11	mg/kg	2.5	No	9.3	No	60	No
Calcium	6400	mg/kg		--		--		--
Chromium	16	mg/kg	30	No	1500	No	6800	No
Cobalt	7.2	mg/kg		--		--		--
Copper	18	mg/kg	50	No	270	No	10000	No
Iron	11000	mg/kg		--		--		--
Lead	36	mg/kg	63	No	1000	No	3900	No
Magnesium	3600	mg/kg		--		--		--
Manganese	250	mg/kg	1600	No	10000	No	10000	No
Nickel	<u>53</u>	mg/kg	30	Yes	310	No	10000	No
Potassium	1100	mg/kg		--		--		--
Silver	0.07	mg/kg	2	No	1500	No	6800	No
Sodium	250	mg/kg		--		--		--
Thallium	0.079	mg/kg		--		--		--

TABLE 1
SOIL PILE WASTE CHARACTERIZATION: DETECTED RESULTS
FORMER NEPERA PLANT SITE
HARRIMAN, NEW YORK

Constituent	Result	Units	Unrestricted Use SCO	Exceed	Commercial Use SCO	Exceed	Industrial Use SCO	Exceed
Zinc	65	mg/kg	109	No	10000	No	10000	No
Vanadium	19	mg/kg		--		--		--
Mercury	0.094	mg/kg	0.18	No	2.8	No	5.7	No
Tox Charaistic Haz				Exceed				
TCLP Metals								
Barium	0.18	mg/l	100	No				
Cadmium	0.0031	mg/l	1	No				
Lead	0.15	mg/l	5	No				
Mercury	0.000000079	mg/l	0.2	No				
RCRA Parameters								
Flashpoint	>180	deg F						
Cyanide, Reactive	ND							
Sulfide, Reactive	ND							
pH	7.6							
Corrosivity	No							
Petroleum								
GRO	0.74	mg/kg						
DRO	120	mg/kg						

Notes:

deg F - Degrees Fahrenheit
mg/kg - milligrams per kilogram
mg/l - milligrams per liter
SCO - Soil Cleanup Objective
ug/kg - micrograms per kilogram



ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Paul Thorn, LSRP
Brown and Caldwell
500 North Franklin Turnpike
Suite 306
Ramsey, New Jersey 07446
Generated 5/3/2024 10:14:35 AM Revision 1

JOB DESCRIPTION

Former Nepera Plant Site

JOB NUMBER

410-167546-1

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Authorized for release by
Barbara Weyandt, Project Manager
Barbara.Weyandt@et.eurofinsus.com
(717)556-7264

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Revision 1

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Barb Weyandt

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Definitions/Glossary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)

Eurofins Lancaster Laboratories Environment Testing, LLC

Definitions/Glossary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Brown and Caldwell
Project: Former Nepera Plant Site

Job ID: 410-167546-1

Job ID: 410-167546-1

Eurofins Lancaster Laboratories Environment

**Job Narrative
410-167546-1**

REVISION

The report being provided is a revision of the original report sent on 4/30/2024. The report (revision 1) is being revised due to updating the project name to Former Nepera Plant Site.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 4/11/2024 5:20 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received. The COC is missing number of containers per sample. This does not meet regulatory requirements.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-495946 recovered above the upper control limit for Acetone. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-495946 recovered outside acceptance criteria, low biased, for Methylcyclohexane and Dichlorodifluoromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D - TCLP: The continuing calibration verification (CCV) associated with batch 410-497415 recovered outside acceptance criteria, low biased, for Chloroform. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

Method 8270E - TCLP: The continuing calibration verification (CCV) analyzed in batch 410-495591 was below the method criteria for the following analyte(s): Hexachlorobutadiene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Lancaster Laboratories Environment Testing, LLC

Case Narrative

Client: Brown and Caldwell
Project: Former Nepera Plant Site

Job ID: 410-167546-1

Job ID: 410-167546-1 (Continued)

Eurofins Lancaster Laboratories Environment

PCBs

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 8081B - TCLP: The following sample was diluted due to the nature of the sample matrix: WL-SO-01-20240410 (410-167546-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PFAS

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6020B - TCLP: The TCLP leachate blank for batch 410-494156 and 410-495021 contained Lead above the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Limit. The associated samples were also below the TCLP Regulatory Limit for this analyte; therefore, re-extraction was not performed.

Method 7470A - TCLP: The TCLP leachate blank for batch 410-494156 contained Mercury above the method detection limit (MDL) and below the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Limit. The associated samples were also below the TCLP Regulatory Limit for this analyte; therefore, re-extraction was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 1010B: The Pensky Martens closed cup apparatus is designed to determine the flash point of a liquid sample. The sample submitted could not be mixed well enough to obtain uniform heating. The temperature being measured was that of the material near the top of the cup. The material at the bottom of the cup could have a higher temperature. The temperature reported may not be accurate.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Toluene	1.3	J	5.5	1.1	ug/Kg	1	☼		8260D	Total/NA
Acetone	98	cn	22	6.6	ug/Kg	1	☼		8260D	Total/NA
Benzene	1.2	J	5.5	0.88	ug/Kg	1	☼		8260D	Total/NA
2-Butanone	12		11	2.2	ug/Kg	1	☼		8260D	Total/NA
Acenaphthene	4.4	J	18	3.6	ug/Kg	1	☼		8270E	Total/NA
Acenaphthylene	10	J	18	4.3	ug/Kg	1	☼		8270E	Total/NA
Anthracene	13	J	18	3.6	ug/Kg	1	☼		8270E	Total/NA
Benzo[a]anthracene	40		18	3.6	ug/Kg	1	☼		8270E	Total/NA
Benzo[a]pyrene	53		18	3.6	ug/Kg	1	☼		8270E	Total/NA
Benzo[b]fluoranthene	67		18	3.6	ug/Kg	1	☼		8270E	Total/NA
Benzo[g,h,i]perylene	47		18	3.6	ug/Kg	1	☼		8270E	Total/NA
Benzo[k]fluoranthene	25		18	3.6	ug/Kg	1	☼		8270E	Total/NA
Butyl benzyl phthalate	170	J	180	72	ug/Kg	1	☼		8270E	Total/NA
Chrysene	48		18	3.6	ug/Kg	1	☼		8270E	Total/NA
Dibenz(a,h)anthracene	14	J	18	7.2	ug/Kg	1	☼		8270E	Total/NA
Fluoranthene	76		18	3.6	ug/Kg	1	☼		8270E	Total/NA
Fluorene	5.9	J	18	3.6	ug/Kg	1	☼		8270E	Total/NA
Indeno[1,2,3-cd]pyrene	33		18	4.3	ug/Kg	1	☼		8270E	Total/NA
Phenanthrene	47		18	4.3	ug/Kg	1	☼		8270E	Total/NA
Pyrene	87		18	3.6	ug/Kg	1	☼		8270E	Total/NA
GRO (1C)	0.74	J	1.3	0.55	mg/Kg	25	☼		8015D	Total/NA
DRO (C10-C28)	120		13	5.4	mg/Kg	1	☼		8015D	Total/NA
alpha-Chlordane (1C)	3.3	J	8.9	1.8	ug/Kg	10	☼		8081B	Total/NA
gamma-Chlordane (1C)	3.5	J	8.9	2.7	ug/Kg	10	☼		8081B	Total/NA
p,p'-DDE (1C)	14	J	18	7.5	ug/Kg	10	☼		8081B	Total/NA
p,p'-DDT (1C)	52		18	8.5	ug/Kg	10	☼		8081B	Total/NA
Perfluoropentanoic acid (PFPeA)	0.086	J I	0.23	0.059	ng/g	1	☼		Draft-4 1633	Total/NA
Perfluorohexanoic acid (PFHxA)	0.084	J	0.12	0.035	ng/g	1	☼		Draft-4 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.044	J	0.12	0.029	ng/g	1	☼		Draft-4 1633	Total/NA
Perfluorooctanoic acid (PFOA)	0.28		0.12	0.030	ng/g	1	☼		Draft-4 1633	Total/NA
Perfluorononanoic acid (PFNA)	0.043	J	0.12	0.029	ng/g	1	☼		Draft-4 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.17		0.12	0.030	ng/g	1	☼		Draft-4 1633	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.038	J	0.12	0.029	ng/g	1	☼		Draft-4 1633	Total/NA
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.066	J	0.12	0.029	ng/g	1	☼		Draft-4 1633	Total/NA
Aluminum	5700		16	8.2	mg/Kg	2	☼		6020B	Total/NA
Arsenic	2.3		0.33	0.11	mg/Kg	2	☼		6020B	Total/NA
Barium	68		0.33	0.15	mg/Kg	2	☼		6020B	Total/NA
Beryllium	0.35		0.082	0.020	mg/Kg	2	☼		6020B	Total/NA
Cadmium	0.11		0.082	0.033	mg/Kg	2	☼		6020B	Total/NA
Calcium	6400		33	16	mg/Kg	2	☼		6020B	Total/NA
Chromium	16		0.33	0.16	mg/Kg	2	☼		6020B	Total/NA
Cobalt	7.2	^2	0.16	0.066	mg/Kg	2	☼		6020B	Total/NA
Copper	18		0.33	0.15	mg/Kg	2	☼		6020B	Total/NA
Iron	11000	^2	16	7.6	mg/Kg	2	☼		6020B	Total/NA
Lead	36	^2	0.16	0.063	mg/Kg	2	☼		6020B	Total/NA
Magnesium	3600		8.2	4.0	mg/Kg	2	☼		6020B	Total/NA
Manganese	250		0.33	0.16	mg/Kg	2	☼		6020B	Total/NA
Nickel	53	^2	0.33	0.16	mg/Kg	2	☼		6020B	Total/NA
Potassium	1100		33	13	mg/Kg	2	☼		6020B	Total/NA
Silver	0.070	J	0.082	0.033	mg/Kg	2	☼		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Detection Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410 (Continued)

Lab Sample ID: 410-167546-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	250		41	20	mg/Kg	2	☼	6020B	Total/NA
Thallium	0.079	J	0.082	0.032	mg/Kg	2	☼	6020B	Total/NA
Zinc	65		25	3.3	mg/Kg	2	☼	6020B	Total/NA
Vanadium	19		0.66	0.16	mg/Kg	2	☼	6020B	Total/NA
Barium	180	F1 cn	20	7.5	ug/L	1		6020B	TCLP
Cadmium	3.1	J cn	5.0	1.5	ug/L	1		6020B	TCLP
Lead	150	B F1 cn	5.0	1.2	ug/L	1		6020B	TCLP
Mercury	0.000079	J F1 B cn	0.00020	0.000079	mg/L	1		7470A	TCLP
Mercury	0.094		0.062	0.021	mg/Kg	1	☼	7471B	Total/NA
Flashpoint	>180	cn	50	50	Degrees F	1		1010B	Total/NA
pH	7.6		0.01	0.01	S.U.	1		9045D	Soluble
Temperature	20.4		0.01	0.01	Degrees C	1		9045D	Soluble
Corrosivity	no		0.01	0.01	NONE	1		9045D	Soluble

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.5	0.66	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
trans-1,3-Dichloropropene	ND		5.5	0.66	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Ethylbenzene	ND		5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Styrene	ND		5.5	0.99	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,4-Dichlorobenzene	ND		5.5	0.99	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,2-Dibromoethane	ND		5.5	0.77	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,2-Dichloroethane	ND		5.5	0.66	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
4-Methyl-2-pentanone	ND		11	2.2	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Methylcyclohexane	ND	cn	5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Toluene	1.3	J	5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Chlorobenzene	ND		5.5	0.99	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Cyclohexane	ND		5.5	0.99	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,2,4-Trichlorobenzene	ND		11	5.5	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Dibromochloromethane	ND		5.5	0.55	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Xylenes, Total	ND		11	0.77	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Tetrachloroethene	ND		5.5	1.7	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
cis-1,2-Dichloroethene	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
trans-1,2-Dichloroethene	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Methyl tertiary butyl ether	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,3-Dichlorobenzene	ND		5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Carbon tetrachloride	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
2-Hexanone	ND		11	2.8	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Acetone	98	cn	22	6.6	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Chloroform	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Benzene	1.2	J	5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,1,1-Trichloroethane	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Bromomethane	ND		5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Chloromethane	ND		5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Chloroethane	ND		5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Vinyl chloride	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Methylene Chloride	ND		5.5	2.2	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Carbon disulfide	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Bromoform	ND		11	5.5	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Bromodichloromethane	ND		5.5	0.77	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,1-Dichloroethane	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,1-Dichloroethene	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Trichlorofluoromethane	ND		5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Dichlorodifluoromethane	ND	cn	5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Freon 113	ND		11	0.99	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,2-Dichloropropane	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
2-Butanone	12		11	2.2	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,1,2-Trichloroethane	ND		5.5	0.77	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Trichloroethene	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Methyl acetate	ND		5.5	1.1	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,1,2,2-Tetrachloroethane	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,2-Dichlorobenzene	ND		5.5	0.99	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
1,2-Dibromo-3-Chloropropane	ND		5.5	0.88	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1
Isopropylbenzene	ND		5.5	1.7	ug/Kg	✱	04/16/24 15:46	04/19/24 02:43	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		54 - 135	04/16/24 15:46	04/19/24 02:43	1
Dibromofluoromethane (Surr)	96		50 - 141	04/16/24 15:46	04/19/24 02:43	1
4-Bromofluorobenzene (Surr)	94		50 - 131	04/16/24 15:46	04/19/24 02:43	1
Toluene-d8 (Surr)	99		52 - 141	04/16/24 15:46	04/19/24 02:43	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.020	0.0060	mg/L			04/23/24 18:24	20
Carbon tetrachloride	ND		0.020	0.0060	mg/L			04/23/24 18:24	20
Chlorobenzene	ND		0.020	0.0060	mg/L			04/23/24 18:24	20
Chloroform	ND	cn	0.020	0.0060	mg/L			04/23/24 18:24	20
1,1-Dichloroethene	ND		0.020	0.0060	mg/L			04/23/24 18:24	20
1,2-Dichloroethane	ND		0.020	0.0060	mg/L			04/23/24 18:24	20
2-Butanone	ND		0.20	0.010	mg/L			04/23/24 18:24	20
Tetrachloroethene	ND		0.020	0.0060	mg/L			04/23/24 18:24	20
Trichloroethene	ND		0.020	0.0060	mg/L			04/23/24 18:24	20
Vinyl chloride	ND		0.020	0.0060	mg/L			04/23/24 18:24	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		04/23/24 18:24	20
4-Bromofluorobenzene (Surr)	95		80 - 120		04/23/24 18:24	20
Dibromofluoromethane (Surr)	92		80 - 120		04/23/24 18:24	20
Toluene-d8 (Surr)	111		80 - 120		04/23/24 18:24	20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,2'-oxybis[1-chloropropane]	ND		47	21	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,4,5-Trichlorophenol	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,4,6-Trichlorophenol	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,4-Dichlorophenol	ND		47	21	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,4-Dimethylphenol	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,4-Dinitrophenol	ND		1100	180	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,4-Dinitrotoluene	ND		180	36	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2,6-Dinitrotoluene	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2-Chloronaphthalene	ND		36	14	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2-Chlorophenol	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2-Methylnaphthalene	ND		18	5.4	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2-Methylphenol	ND		54	21	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2-Nitroaniline	ND		54	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
2-Nitrophenol	ND		54	21	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
3,3'-Dichlorobenzidine	ND		180	36	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
3-Nitroaniline	ND	*1	180	36	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4,6-Dinitro-2-methylphenol	ND		540	180	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4-Bromophenyl phenyl ether	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4-Chloro-3-methylphenol	ND		54	21	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4-Chloroaniline	ND	*1	180	36	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4-Chlorophenyl phenyl ether	ND		39	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4-Methylphenol	ND		54	18	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4-Nitroaniline	ND		180	36	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1
4-Nitrophenol	ND	*1	540	180	ug/Kg	✱	04/16/24 16:50	04/17/24 15:36	1

Euofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	4.4	J	18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Acenaphthylene	10	J	18	4.3	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Acetophenone	ND		54	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Anthracene	13	J	18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Atrazine	ND	*1	180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Benzaldehyde	ND		180	36	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Benzo[a]anthracene	40		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Benzo[a]pyrene	53		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Benzo[b]fluoranthene	67		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Benzo[g,h,i]perylene	47		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Benzo[k]fluoranthene	25		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Bis(2-chloroethoxy)methane	ND		39	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Bis(2-chloroethyl)ether	ND		39	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Bis(2-ethylhexyl) phthalate	ND		180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Butyl benzyl phthalate	170	J	180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Caprolactam	ND		180	36	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Carbazole	ND		39	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Chrysene	48		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Di-n-butyl phthalate	ND		180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Di-n-octyl phthalate	ND		180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Dibenz(a,h)anthracene	14	J	18	7.2	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Dibenzofuran	ND		39	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Diethyl phthalate	ND		180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Dimethyl phthalate	ND		180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Fluoranthene	76		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Fluorene	5.9	J	18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Hexachlorobenzene	ND		18	7.2	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Hexachlorobutadiene	ND		54	21	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Hexachlorocyclopentadiene	ND		540	180	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Hexachloroethane	ND		180	36	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Indeno[1,2,3-cd]pyrene	33		18	4.3	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Isophorone	ND		72	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
N-Nitrosodi-n-propylamine	ND		72	36	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
N-Nitrosodiphenylamine	ND		39	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Naphthalene	ND		18	7.2	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Nitrobenzene	ND		39	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Pentachlorophenol	ND		180	72	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Phenanthrene	47		18	4.3	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Phenol	ND		39	18	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1
Pyrene	87		18	3.6	ug/Kg	☆	04/16/24 16:50	04/17/24 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74		29 - 120	04/16/24 16:50	04/17/24 15:36	1
2-Fluorophenol (Surr)	74		18 - 120	04/16/24 16:50	04/17/24 15:36	1
Nitrobenzene-d5 (Surr)	66		22 - 120	04/16/24 16:50	04/17/24 15:36	1
p-Terphenyl-d14 (Surr)	84		36 - 123	04/16/24 16:50	04/17/24 15:36	1
2,4,6-Tribromophenol (Surr)	79		13 - 127	04/16/24 16:50	04/17/24 15:36	1
Phenol-d5 (Surr)	80		20 - 120	04/16/24 16:50	04/17/24 15:36	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
2,4,5-Trichlorophenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
2,4,6-Trichlorophenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
2,4-Dinitrotoluene	ND		0.025	0.0050	mg/L		04/17/24 16:02	04/18/24 14:50	1
2-Methylphenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
4-Methylphenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
Hexachlorobenzene	ND		0.0025	0.00055	mg/L		04/17/24 16:02	04/18/24 14:50	1
Hexachlorobutadiene	ND	cn	0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
Hexachloroethane	ND		0.025	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
Nitrobenzene	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 14:50	1
Pentachlorophenol	ND		0.025	0.0050	mg/L		04/17/24 16:02	04/18/24 14:50	1
Pyridine	ND		0.025	0.010	mg/L		04/17/24 16:02	04/18/24 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	55		16 - 120	04/17/24 16:02	04/18/24 14:50	1
2-Fluorobiphenyl (Surr)	76		28 - 120	04/17/24 16:02	04/18/24 14:50	1
2-Fluorophenol (Surr)	37		10 - 120	04/17/24 16:02	04/18/24 14:50	1
Nitrobenzene-d5 (Surr)	76		18 - 120	04/17/24 16:02	04/18/24 14:50	1
p-Terphenyl-d14 (Surr)	59		22 - 120	04/17/24 16:02	04/18/24 14:50	1
Phenol-d5 (Surr)	29		10 - 120	04/17/24 16:02	04/18/24 14:50	1

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	0.74	J	1.3	0.55	mg/Kg	✱	04/16/24 15:23	04/17/24 20:54	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	77		50 - 142	04/16/24 15:23	04/17/24 20:54	25

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	120		13	5.4	mg/Kg	✱	04/15/24 15:55	04/16/24 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	84		49 - 154	04/15/24 15:55	04/16/24 16:57	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		8.9	3.9	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
alpha-BHC (1C)	ND		8.9	4.1	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
alpha-Chlordane (1C)	3.3	J	8.9	1.8	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
beta-BHC (1C)	ND		11	4.7	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
delta-BHC (1C)	ND		11	4.8	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
Dieldrin (1C)	ND		18	3.5	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
Endosulfan I (1C)	ND		8.9	2.4	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
Endosulfan II (1C)	ND		25	12	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
Endosulfan sulfate (1C)	ND		18	4.2	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
Endrin (1C)	ND		18	7.3	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
Endrin aldehyde (1C)	ND		18	4.1	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
Endrin ketone (1C)	ND		21	6.4	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
gamma-BHC (Lindane) (1C)	ND		8.9	2.3	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10
gamma-Chlordane (1C)	3.5	J	8.9	2.7	ug/Kg	✱	04/17/24 09:59	04/18/24 18:20	10

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor (1C)	ND		8.9	3.3	ug/Kg	☆	04/17/24 09:59	04/18/24 18:20	10
Heptachlor epoxide (1C)	ND		8.9	3.8	ug/Kg	☆	04/17/24 09:59	04/18/24 18:20	10
Methoxychlor (1C)	ND		72	28	ug/Kg	☆	04/17/24 09:59	04/18/24 18:20	10
Toxaphene (1C)	ND		350	150	ug/Kg	☆	04/17/24 09:59	04/18/24 18:20	10
p,p'-DDD (1C)	ND		18	8.6	ug/Kg	☆	04/17/24 09:59	04/18/24 18:20	10
p,p'-DDE (1C)	14	J	18	7.5	ug/Kg	☆	04/17/24 09:59	04/18/24 18:20	10
p,p'-DDT (1C)	52		18	8.5	ug/Kg	☆	04/17/24 09:59	04/18/24 18:20	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	98		54 - 143	04/17/24 09:59	04/18/24 18:20	10
DCB Decachlorobiphenyl (Surr) (2C)	85		54 - 143	04/17/24 09:59	04/18/24 18:20	10
Tetrachloro-m-xylene (Surr) (1C)	84		20 - 131	04/17/24 09:59	04/18/24 18:20	10
Tetrachloro-m-xylene (Surr) (2C)	71		20 - 131	04/17/24 09:59	04/18/24 18:20	10

Method: SW846 8081B - TCLP Pesticides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin (1C)	ND	F1 cn	0.00060	0.00016	mg/L		04/17/24 16:15	04/19/24 12:02	10
gamma-BHC (Lindane) (1C)	ND	F1 cn	0.00040	0.000040	mg/L		04/17/24 16:15	04/19/24 12:02	10
Heptachlor (1C)	ND	F1 cn	0.00040	0.000040	mg/L		04/17/24 16:15	04/19/24 12:02	10
Heptachlor epoxide (1C)	ND	F1 cn	0.00040	0.000046	mg/L		04/17/24 16:15	04/19/24 12:02	10
Methoxychlor (1C)	ND	F1 cn	0.0022	0.00060	mg/L		04/17/24 16:15	04/19/24 12:02	10
Toxaphene (1C)	ND	cn	0.020	0.0060	mg/L		04/17/24 16:15	04/19/24 12:02	10
Chlordane (n.o.s.) (1C)	ND	cn	0.010	0.0032	mg/L		04/17/24 16:15	04/19/24 12:02	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	81	cn	21 - 130	04/17/24 16:15	04/19/24 12:02	10
DCB Decachlorobiphenyl (Surr) (2C)	71	cn	21 - 130	04/17/24 16:15	04/19/24 12:02	10
Tetrachloro-m-xylene (Surr) (1C)	67	cn	39 - 139	04/17/24 16:15	04/19/24 12:02	10
Tetrachloro-m-xylene (Surr) (2C)	58	cn	39 - 139	04/17/24 16:15	04/19/24 12:02	10

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	ND		18	5.7	ug/Kg	☆	04/17/24 10:01	04/17/24 21:44	1
PCB-1221 (1C)	ND		18	5.7	ug/Kg	☆	04/17/24 10:01	04/17/24 21:44	1
PCB-1232 (1C)	ND		18	5.7	ug/Kg	☆	04/17/24 10:01	04/17/24 21:44	1
PCB-1242 (1C)	ND		18	5.7	ug/Kg	☆	04/17/24 10:01	04/17/24 21:44	1
PCB-1248 (1C)	ND		18	5.7	ug/Kg	☆	04/17/24 10:01	04/17/24 21:44	1
PCB-1254 (1C)	ND		18	6.9	ug/Kg	☆	04/17/24 10:01	04/17/24 21:44	1
PCB-1260 (1C)	ND		18	6.9	ug/Kg	☆	04/17/24 10:01	04/17/24 21:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	79		66 - 130	04/17/24 10:01	04/17/24 21:44	1
DCB Decachlorobiphenyl (Surr) (2C)	79		66 - 130	04/17/24 10:01	04/17/24 21:44	1
Tetrachloro-m-xylene (1C)	83		68 - 130	04/17/24 10:01	04/17/24 21:44	1
Tetrachloro-m-xylene (2C)	79		68 - 130	04/17/24 10:01	04/17/24 21:44	1

Method: SW846 8151A - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D (1C)	ND		0.050	0.016	mg/L		04/16/24 20:30	04/17/24 11:21	1
Silvex (2,4,5-TP) (1C)	ND		0.0050	0.0010	mg/L		04/16/24 20:30	04/17/24 11:21	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr) (1C)	76		26 - 136	04/16/24 20:30	04/17/24 11:21	1
2,4-Dichlorophenylacetic acid (Surr) (2C)	91		26 - 136	04/16/24 20:30	04/17/24 11:21	1

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.47	0.059	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluoropentanoic acid (PFPeA)	0.086	J I	0.23	0.059	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorohexanoic acid (PFHxA)	0.084	J	0.12	0.035	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluoroheptanoic acid (PFHpA)	0.044	J	0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorooctanoic acid (PFOA)	0.28		0.12	0.030	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorononanoic acid (PFNA)	0.043	J	0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorodecanoic acid (PFDA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluoroundecanoic acid (PFUnA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorododecanoic acid (PFDoA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorooctanesulfonic acid (PFOS)	0.17		0.12	0.030	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorononanesulfonic acid (PFNS)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorodecanesulfonic acid (PFDS)	0.038	J	0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ND		0.47	0.12	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ND		0.59	0.20	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ND		0.59	0.20	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.066	J	0.12	0.029	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.2	0.29	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.2	0.29	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.47	0.030	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.47	0.12	ng/g	✱	04/18/24 10:54	04/27/24 13:33	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.23	0.059	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.23	0.059	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.23	0.061	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid (9CI-PF3ONS)	ND		0.47	0.12	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11CI-PF3OUdS)	ND		0.47	0.12	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	ND		0.23	0.059	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.59	0.15	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		2.9	0.59	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		2.9	0.59	ng/g	☼	04/18/24 10:54	04/27/24 13:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	92.2		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C5 PFPeA	86.3		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C5 PFHxA	87.1		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C4 PFHpA	90.5		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C8 PFOA	93.1		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C9 PFNA	93.7		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C6 PFDA	97.9		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C7 PFUnA	92.9		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C2-PFDoDA	83.9		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C2 PFTeDA	81.0		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C3 PFBS	96.6		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C3 PFHxS	90.3		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C8 PFOS	85.2		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C8 FOSA	69.1		20 - 150	04/18/24 10:54	04/27/24 13:33	1
d3-NMeFOSAA	81.0		20 - 150	04/18/24 10:54	04/27/24 13:33	1
d5-NEtFOSAA	77.3		20 - 150	04/18/24 10:54	04/27/24 13:33	1
M2-4:2 FTS	114		20 - 150	04/18/24 10:54	04/27/24 13:33	1
M2-6:2 FTS	102		20 - 150	04/18/24 10:54	04/27/24 13:33	1
M2-8:2 FTS	108		20 - 150	04/18/24 10:54	04/27/24 13:33	1
13C3 HFPO-DA	82.2		20 - 150	04/18/24 10:54	04/27/24 13:33	1
d7-N-MeFOSE-M	54.4		20 - 150	04/18/24 10:54	04/27/24 13:33	1
d9-N-EtFOSE-M	53.1		20 - 150	04/18/24 10:54	04/27/24 13:33	1
d5-NEtPFOSA	52.7		20 - 150	04/18/24 10:54	04/27/24 13:33	1
d3-NMePFOSA	55.0		20 - 150	04/18/24 10:54	04/27/24 13:33	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5700		16	8.2	mg/Kg	☼	04/15/24 09:20	04/15/24 17:01	2
Antimony	ND		0.16	0.066	mg/Kg	☼	04/15/24 09:20	04/15/24 17:01	2
Arsenic	2.3		0.33	0.11	mg/Kg	☼	04/15/24 09:20	04/15/24 17:01	2
Barium	68		0.33	0.15	mg/Kg	☼	04/15/24 09:20	04/15/24 17:01	2
Beryllium	0.35		0.082	0.020	mg/Kg	☼	04/15/24 09:20	04/15/24 17:01	2
Cadmium	0.11		0.082	0.033	mg/Kg	☼	04/15/24 09:20	04/15/24 17:01	2

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6400		33	16	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Chromium	16		0.33	0.16	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Cobalt	7.2	^2	0.16	0.066	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Copper	18		0.33	0.15	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Iron	11000	^2	16	7.6	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Lead	36	^2	0.16	0.063	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Magnesium	3600		8.2	4.0	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Manganese	250		0.33	0.16	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Nickel	53	^2	0.33	0.16	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Potassium	1100		33	13	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Selenium	ND		0.33	0.082	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Silver	0.070	J	0.082	0.033	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Sodium	250		41	20	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Thallium	0.079	J	0.082	0.032	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Zinc	65		25	3.3	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2
Vanadium	19		0.66	0.16	mg/Kg	☆	04/15/24 09:20	04/15/24 17:01	2

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	cn	20	6.8	ug/L		04/17/24 08:40	04/17/24 21:58	1
Barium	180	F1 cn	20	7.5	ug/L		04/17/24 08:40	04/17/24 21:58	1
Cadmium	3.1	J cn	5.0	1.5	ug/L		04/17/24 08:40	04/17/24 21:58	1
Chromium	ND	cn	20	5.5	ug/L		04/17/24 08:40	04/17/24 21:58	1
Lead	150	B F1 cn	5.0	1.2	ug/L		04/17/24 08:40	04/17/24 21:58	1
Selenium	ND	cn	10	2.8	ug/L		04/17/24 08:40	04/17/24 21:58	1
Silver	ND	F1 cn	5.0	1.0	ug/L		04/17/24 08:40	04/17/24 21:58	1

Method: SW846 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000079	J F1 B cn	0.00020	0.000079	mg/L		04/17/24 09:55	04/18/24 10:25	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.094		0.062	0.021	mg/Kg	☆	04/15/24 05:45	04/15/24 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	>180	cn	50	50	Degrees F			04/17/24 08:41	1
Cyanide, Reactive (SW846 9012)	ND		60	20	mg/Kg		04/23/24 08:34	04/23/24 18:27	1
Sulfide, Reactive (SW846 9034)	ND		160	53	mg/Kg		04/23/24 08:34	04/23/24 12:49	1
Percent Moisture (EPA Moisture)	7.4		1.0	1.0	%			04/12/24 15:48	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.6		0.01	0.01	S.U.			04/22/24 15:31	1
Temperature (SW846 9045D)	20.4		0.01	0.01	Degrees C			04/22/24 15:31	1
Corrosivity (SW846 9045D)	no		0.01	0.01	NONE			04/22/24 15:31	1

Surrogate Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	DBFM (80-120)	BFB (80-120)	TOL (80-120)
LCS 410-497415/4	Lab Control Sample	104	91	94	109
LCSD 410-497415/5	Lab Control Sample Dup	105	92	93	108
MB 410-497415/7	Method Blank	102	91	97	111

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (54-135)	DBFM (50-141)	BFB (50-131)	TOL (52-141)
410-167546-1	WL-SO-01-20240410	109	96	94	99
LCS 410-495946/9	Lab Control Sample	110	97	99	102
MB 410-495946/8	Method Blank	112	98	96	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-167546-1	WL-SO-01-20240410	101	95	92	111

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (29-120)	2FP (18-120)	NBZ (22-120)	TPHd14 (36-123)	TBP (13-127)	PHL (20-120)
410-167546-1	WL-SO-01-20240410	74	74	66	84	79	80
LCS 410-494875/2-A	Lab Control Sample	86	84	78	101	95	88
LCSD 410-494875/3-A	Lab Control Sample Dup	72	72	64	85	78	76
MB 410-494875/1-A	Method Blank	86	83	75	102	89	87

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
PHL = Phenol-d5 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (28-120)	2FP (10-120)	NBZ (18-120)	TPHd14 (22-120)	TBP (16-120)	PHL (10-120)
LCS 410-495382/2-A	Lab Control Sample	87	47	89	84	63	37
MB 410-495382/1-A	Method Blank	59	32	62	65	44	26

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
PHL = Phenol-d5 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (16-120)	FBP (28-120)	2FP (10-120)	NBZ (18-120)	TPHd14 (22-120)	PHL (10-120)
410-167546-1	WL-SO-01-20240410	55	76	37	76	59	29

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TFT-F1 (50-142)					
410-167546-1	WL-SO-01-20240410	77					
LCS 410-495301/8	Lab Control Sample	86					
LCSD 410-495301/9	Lab Control Sample Dup	86					
MB 410-495301/5	Method Blank	86					

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

Surrogate Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	OTP (49-154)					
410-167546-1	WL-SO-01-20240410	84					
LCS 410-494334/2-A	Lab Control Sample	85					
MB 410-494334/1-A	Method Blank	83					
Surrogate Legend							
OTP = o- terphenyl (Surr)							

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	DCB1 (54-143)	DCB2 (54-143)	TCX1 (20-131)	TCX2 (20-131)		
410-167546-1	WL-SO-01-20240410	98	85	84	71		
LCS 410-495070/2-A	Lab Control Sample	80	82	37	34		
MB 410-495070/1-A	Method Blank	89	93	37	36		
Surrogate Legend							
DCB = DCB Decachlorobiphenyl (Surr)							
TCX = Tetrachloro-m-xylene (Surr)							

Method: 8081B - TCLP Pesticides

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	DCB1 (21-130)	DCB2 (21-130)	TCX1 (39-139)	TCX2 (39-139)		
LCS 410-495395/2-A	Lab Control Sample	68	72	85	94		
MB 410-495395/1-A	Method Blank	106	118	90	100		
Surrogate Legend							
DCB = DCB Decachlorobiphenyl (Surr)							
TCX = Tetrachloro-m-xylene (Surr)							

Method: 8081B - TCLP Pesticides

Matrix: Solid

Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	DCB1 (21-130)	DCB2 (21-130)	TCX1 (39-139)	TCX2 (39-139)		
410-167546-1	WL-SO-01-20240410	81 cn	71 cn	67 cn	58 cn		
410-167546-1 MS	WL-SO-01-20240410	7 S1-	6 S1-	7 S1-	6 S1-		
410-167546-1 MSD	WL-SO-01-20240410	9 S1-	8 S1-	7 S1-	6 S1-		
Surrogate Legend							
DCB = DCB Decachlorobiphenyl (Surr)							
TCX = Tetrachloro-m-xylene (Surr)							

Surrogate Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCB1 (66-130)	DCB2 (66-130)	TCX1 (68-130)	TCX2 (68-130)
410-167546-1	WL-SO-01-20240410	79	79	83	79
LCS 410-495075/2-A	Lab Control Sample	89		96	
MB 410-495075/1-A	Method Blank	93		98	
Surrogate Legend					
DCB = DCB Decachlorobiphenyl (Surr)					
TCX = Tetrachloro-m-xylene					

Method: 8151A - TCLP Herbicides

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (26-136)	DCPAA2 (26-136)
LCS 410-494994/3-A	Lab Control Sample	84	101
MB 410-494994/2-A	Method Blank	78	93
Surrogate Legend			
DCPAA = 2,4-Dichlorophenylacetic acid (Surr)			

Method: 8151A - TCLP Herbicides

Matrix: Solid

Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (26-136)	DCPAA2 (26-136)
410-167546-1	WL-SO-01-20240410	76	91
410-167546-1 MS	WL-SO-01-20240410	77	92
410-167546-1 MSD	WL-SO-01-20240410	83	101
Surrogate Legend			
DCPAA = 2,4-Dichlorophenylacetic acid (Surr)			

Isotope Dilution Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (20-150)	PFPeA (20-150)	13C5PHA (20-150)	C4PFHA (20-150)	C8PFOA (20-150)	C9PFNA (20-150)	C6PFDA (20-150)	13C7PUA (20-150)
410-167546-1	WL-SO-01-20240410	92.2	86.3	87.1	90.5	93.1	93.7	97.9	92.9
410-167546-1 DU	WL-SO-01-20240410	91.1	91.2	86.7	92.8	94.9	85.9	85.8	86.4
LCS 410-495793/2-A	Lab Control Sample	87.9	89.9	88.1	87.7	74.9	78.3	76.0	64.9
LLCS 410-495793/3-A	Lab Control Sample	79.2	83.4	78.3	77.5	79.1	77.4	71.5	70.0
MB 410-495793/1-A	Method Blank	76.6	73.2	69.9	77.8	68.3	75.4	65.3	61.9

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDODA (20-150)	PFTDA (20-150)	C3PFBS (20-150)	C3PFHS (20-150)	C8PFOS (20-150)	PFOSA (20-150)	d3NMFOS (20-150)	d5NEFOS (20-150)
410-167546-1	WL-SO-01-20240410	83.9	81.0	96.6	90.3	85.2	69.1	81.0	77.3
410-167546-1 DU	WL-SO-01-20240410	75.8	86.2	88.2	88.5	84.9	71.4	89.6	72.9
LCS 410-495793/2-A	Lab Control Sample	54.1	52.5	82.2	74.7	68.1	64.5	67.6	63.7
LLCS 410-495793/3-A	Lab Control Sample	62.9	57.8	73.0	72.5	66.6	57.4	60.6	60.6
MB 410-495793/1-A	Method Blank	51.2	48.1	75.8	66.9	60.1	54.7	51.5	52.6

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M242FTS (20-150)	M262FTS (20-150)	M282FTS (20-150)	HFPODA (20-150)	NMFM (20-150)	NEFM (20-150)	d5NPFSA (20-150)	d3NMFSA (20-150)
410-167546-1	WL-SO-01-20240410	114	102	108	82.2	54.4	53.1	52.7	55.0
410-167546-1 DU	WL-SO-01-20240410	117	176 *5+	146	80.5	58.6	57.0	62.5	58.6
LCS 410-495793/2-A	Lab Control Sample	98.5	81.3	83.7	87.0	51.4	46.3	41.7	46.2
LLCS 410-495793/3-A	Lab Control Sample	85.0	87.2	68.7	75.9	49.0	48.0	40.2	42.7
MB 410-495793/1-A	Method Blank	81.1	71.5	72.3	74.2	42.9	39.3	34.5	39.3

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDODA = 13C2-PFDODA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-495946/8

Matrix: Solid

Analysis Batch: 495946

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg			04/18/24 21:26	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg			04/18/24 21:26	1
Ethylbenzene	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Styrene	ND		5.0	0.90	ug/Kg			04/18/24 21:26	1
1,4-Dichlorobenzene	ND		5.0	0.90	ug/Kg			04/18/24 21:26	1
1,2-Dibromoethane	ND		5.0	0.70	ug/Kg			04/18/24 21:26	1
1,2-Dichloroethane	ND		5.0	0.60	ug/Kg			04/18/24 21:26	1
4-Methyl-2-pentanone	ND		10	2.0	ug/Kg			04/18/24 21:26	1
Methylcyclohexane	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Toluene	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Chlorobenzene	ND		5.0	0.90	ug/Kg			04/18/24 21:26	1
Cyclohexane	ND		5.0	0.90	ug/Kg			04/18/24 21:26	1
1,2,4-Trichlorobenzene	ND		10	5.0	ug/Kg			04/18/24 21:26	1
Dibromochloromethane	ND		5.0	0.50	ug/Kg			04/18/24 21:26	1
Xylenes, Total	ND		10	0.70	ug/Kg			04/18/24 21:26	1
Tetrachloroethene	ND		5.0	1.5	ug/Kg			04/18/24 21:26	1
cis-1,2-Dichloroethene	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
trans-1,2-Dichloroethene	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Methyl tertiary butyl ether	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
1,3-Dichlorobenzene	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Carbon tetrachloride	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
2-Hexanone	ND		10	2.5	ug/Kg			04/18/24 21:26	1
Acetone	ND		20	6.0	ug/Kg			04/18/24 21:26	1
Chloroform	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Benzene	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
1,1,1-Trichloroethane	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Bromomethane	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Chloromethane	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Chloroethane	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Vinyl chloride	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Methylene Chloride	ND		5.0	2.0	ug/Kg			04/18/24 21:26	1
Carbon disulfide	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Bromoform	ND		10	5.0	ug/Kg			04/18/24 21:26	1
Bromodichloromethane	ND		5.0	0.70	ug/Kg			04/18/24 21:26	1
1,1-Dichloroethane	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
1,1-Dichloroethene	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Trichlorofluoromethane	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
Freon 113	ND		10	0.90	ug/Kg			04/18/24 21:26	1
1,2-Dichloropropane	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
2-Butanone	ND		10	2.0	ug/Kg			04/18/24 21:26	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			04/18/24 21:26	1
Trichloroethene	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Methyl acetate	ND		5.0	1.0	ug/Kg			04/18/24 21:26	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
1,2-Dichlorobenzene	ND		5.0	0.90	ug/Kg			04/18/24 21:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.80	ug/Kg			04/18/24 21:26	1
Isopropylbenzene	ND		5.0	1.5	ug/Kg			04/18/24 21:26	1

Euromins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-495946/8

Matrix: Solid

Analysis Batch: 495946

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		54 - 135		04/18/24 21:26	1
Dibromofluoromethane (Surr)	98		50 - 141		04/18/24 21:26	1
4-Bromofluorobenzene (Surr)	96		50 - 131		04/18/24 21:26	1
Toluene-d8 (Surr)	100		52 - 141		04/18/24 21:26	1

Lab Sample ID: LCS 410-495946/9

Matrix: Solid

Analysis Batch: 495946

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,3-Dichloropropene	20.0	18.4		ug/Kg		92	66 - 120
trans-1,3-Dichloropropene	20.0	20.1		ug/Kg		101	68 - 122
Ethylbenzene	20.0	18.7		ug/Kg		94	78 - 120
Styrene	20.0	18.6		ug/Kg		93	76 - 120
1,4-Dichlorobenzene	20.0	19.1		ug/Kg		96	80 - 120
1,2-Dibromoethane	20.0	20.5		ug/Kg		102	76 - 120
1,2-Dichloroethane	20.0	18.0		ug/Kg		90	71 - 128
4-Methyl-2-pentanone	250	247		ug/Kg		99	67 - 128
Methylcyclohexane	20.0	17.9		ug/Kg		90	61 - 124
Toluene	20.0	19.2		ug/Kg		96	80 - 120
Chlorobenzene	20.0	19.3		ug/Kg		97	80 - 120
Cyclohexane	20.0	17.5		ug/Kg		88	58 - 126
1,2,4-Trichlorobenzene	20.0	18.6		ug/Kg		93	56 - 130
Dibromochloromethane	20.0	20.1		ug/Kg		100	69 - 125
Xylenes, Total	60.0	56.0		ug/Kg		93	75 - 120
Tetrachloroethene	20.0	19.1		ug/Kg		95	73 - 120
cis-1,2-Dichloroethene	20.0	18.9		ug/Kg		95	80 - 125
trans-1,2-Dichloroethene	20.0	18.3		ug/Kg		92	80 - 126
Methyl tertiary butyl ether	20.0	17.7		ug/Kg		89	72 - 120
1,3-Dichlorobenzene	20.0	19.2		ug/Kg		96	75 - 120
Carbon tetrachloride	20.0	17.3		ug/Kg		86	64 - 134
2-Hexanone	250	257		ug/Kg		103	54 - 140
Acetone	250	270		ug/Kg		108	41 - 150
Chloroform	20.0	18.0		ug/Kg		90	80 - 120
Benzene	20.0	18.9		ug/Kg		95	80 - 120
1,1,1-Trichloroethane	20.0	17.2		ug/Kg		86	69 - 123
Bromomethane	20.0	16.0		ug/Kg		80	45 - 140
Chloromethane	20.0	16.5		ug/Kg		83	56 - 120
Chloroethane	20.0	17.9		ug/Kg		89	43 - 135
Vinyl chloride	20.0	16.9		ug/Kg		85	52 - 120
Methylene Chloride	20.0	18.6		ug/Kg		93	76 - 122
Carbon disulfide	20.0	16.7		ug/Kg		83	64 - 133
Bromoform	20.0	19.7		ug/Kg		98	51 - 127
Bromodichloromethane	20.0	18.4		ug/Kg		92	70 - 120
1,1-Dichloroethane	20.0	18.9		ug/Kg		94	79 - 120
1,1-Dichloroethene	20.0	18.8		ug/Kg		94	73 - 129
Trichlorofluoromethane	20.0	16.7		ug/Kg		83	55 - 134
Dichlorodifluoromethane	20.0	15.9		ug/Kg		79	21 - 127

Euofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-495946/9

Matrix: Solid

Analysis Batch: 495946

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Freon 113	20.0	15.9		ug/Kg		79	64 - 135
1,2-Dichloropropane	20.0	19.7		ug/Kg		99	80 - 120
2-Butanone	250	256		ug/Kg		102	57 - 128
1,1,2-Trichloroethane	20.0	21.5		ug/Kg		108	80 - 120
Trichloroethene	20.0	18.3		ug/Kg		92	80 - 120
Methyl acetate	20.0	19.7		ug/Kg		98	67 - 128
1,1,2,2-Tetrachloroethane	20.0	21.4		ug/Kg		107	69 - 125
1,2-Dichlorobenzene	20.0	19.3		ug/Kg		97	76 - 120
1,2-Dibromo-3-Chloropropane	20.0	18.0		ug/Kg		90	48 - 134
Isopropylbenzene	20.0	19.8		ug/Kg		99	77 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		54 - 135
Dibromofluoromethane (Surr)	97		50 - 141
4-Bromofluorobenzene (Surr)	99		50 - 131
Toluene-d8 (Surr)	102		52 - 141

Lab Sample ID: MB 410-497415/7

Matrix: Solid

Analysis Batch: 497415

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
Chlorobenzene	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
Tetrachloroethene	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
Carbon tetrachloride	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
Chloroform	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
Benzene	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
Vinyl chloride	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
1,1-Dichloroethene	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1
2-Butanone	ND		0.010	0.00050	mg/L			04/23/24 11:15	1
Trichloroethene	ND		0.0010	0.00030	mg/L			04/23/24 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		04/23/24 11:15	1
Dibromofluoromethane (Surr)	91		80 - 120		04/23/24 11:15	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/23/24 11:15	1
Toluene-d8 (Surr)	111		80 - 120		04/23/24 11:15	1

Lab Sample ID: LCS 410-497415/4

Matrix: Solid

Analysis Batch: 497415

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	0.0200	0.0166		mg/L		83	73 - 124
Chlorobenzene	0.0200	0.0197		mg/L		98	80 - 120
Tetrachloroethene	0.0200	0.0202		mg/L		101	80 - 120
Carbon tetrachloride	0.0200	0.0164		mg/L		82	64 - 134

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QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-497415/4

Matrix: Solid

Analysis Batch: 497415

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	0.0200	0.0170		mg/L		85	80 - 120
Benzene	0.0200	0.0198		mg/L		99	80 - 120
Vinyl chloride	0.0200	0.0191		mg/L		96	56 - 120
1,1-Dichloroethene	0.0200	0.0167		mg/L		84	80 - 131
2-Butanone	0.250	0.214		mg/L		85	59 - 135
Trichloroethene	0.0200	0.0191		mg/L		95	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	91		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Toluene-d8 (Surr)	109		80 - 120

Lab Sample ID: LCSD 410-497415/5

Matrix: Solid

Analysis Batch: 497415

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloroethane	0.0200	0.0166		mg/L		83	73 - 124	0	30
Chlorobenzene	0.0200	0.0194		mg/L		97	80 - 120	2	30
Tetrachloroethene	0.0200	0.0196		mg/L		98	80 - 120	3	30
Carbon tetrachloride	0.0200	0.0159		mg/L		79	64 - 134	3	30
Chloroform	0.0200	0.0170		mg/L		85	80 - 120	0	30
Benzene	0.0200	0.0196		mg/L		98	80 - 120	1	30
Vinyl chloride	0.0200	0.0187		mg/L		94	56 - 120	2	30
1,1-Dichloroethene	0.0200	0.0162		mg/L		81	80 - 131	3	30
2-Butanone	0.250	0.213		mg/L		85	59 - 135	0	30
Trichloroethene	0.0200	0.0189		mg/L		95	80 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	92		80 - 120
4-Bromofluorobenzene (Surr)	93		80 - 120
Toluene-d8 (Surr)	108		80 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-494875/1-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 494875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2,2'-oxybis[1-chloropropane]	ND		43	20	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2,4,5-Trichlorophenol	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2,4,6-Trichlorophenol	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2,4-Dichlorophenol	ND		43	20	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2,4-Dimethylphenol	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-494875/1-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 494875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		1000	170	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2,4-Dinitrotoluene	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2,6-Dinitrotoluene	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2-Chloronaphthalene	ND		33	13	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2-Chlorophenol	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2-Methylnaphthalene	ND		17	5.0	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2-Methylphenol	ND		50	20	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2-Nitroaniline	ND		50	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
2-Nitrophenol	ND		50	20	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
3,3'-Dichlorobenzidine	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
3-Nitroaniline	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4,6-Dinitro-2-methylphenol	ND		500	170	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4-Bromophenyl phenyl ether	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4-Chloro-3-methylphenol	ND		50	20	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4-Chloroaniline	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4-Chlorophenyl phenyl ether	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4-Methylphenol	ND		50	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4-Nitroaniline	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
4-Nitrophenol	ND		500	170	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Acenaphthene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Acenaphthylene	ND		17	4.0	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Acetophenone	ND		50	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Anthracene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Atrazine	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Benzaldehyde	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Benzo[a]anthracene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Benzo[a]pyrene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Benzo[b]fluoranthene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Benzo[g,h,i]perylene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Benzo[k]fluoranthene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Bis(2-chloroethoxy)methane	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Bis(2-chloroethyl)ether	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Bis(2-ethylhexyl) phthalate	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Butyl benzyl phthalate	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Caprolactam	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Carbazole	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Chrysene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Di-n-butyl phthalate	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Di-n-octyl phthalate	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Dibenz(a,h)anthracene	ND		17	6.7	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Dibenzofuran	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Diethyl phthalate	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Dimethyl phthalate	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Fluoranthene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Fluorene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Hexachlorobenzene	ND		17	6.7	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Hexachlorobutadiene	ND		50	20	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Hexachlorocyclopentadiene	ND		500	170	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Hexachloroethane	ND		170	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-494875/1-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 494875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		17	4.0	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Isophorone	ND		67	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
N-Nitrosodi-n-propylamine	ND		67	33	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
N-Nitrosodiphenylamine	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Naphthalene	ND		17	6.7	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Nitrobenzene	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Pentachlorophenol	ND		170	67	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Phenanthrene	ND		17	4.0	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Phenol	ND		37	17	ug/Kg		04/16/24 16:50	04/17/24 08:47	1
Pyrene	ND		17	3.3	ug/Kg		04/16/24 16:50	04/17/24 08:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	86		29 - 120	04/16/24 16:50	04/17/24 08:47	1
2-Fluorophenol (Surr)	83		18 - 120	04/16/24 16:50	04/17/24 08:47	1
Nitrobenzene-d5 (Surr)	75		22 - 120	04/16/24 16:50	04/17/24 08:47	1
p-Terphenyl-d14 (Surr)	102		36 - 123	04/16/24 16:50	04/17/24 08:47	1
2,4,6-Tribromophenol (Surr)	89		13 - 127	04/16/24 16:50	04/17/24 08:47	1
Phenol-d5 (Surr)	87		20 - 120	04/16/24 16:50	04/17/24 08:47	1

Lab Sample ID: LCS 410-494875/2-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 494875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	1670	1570		ug/Kg		94	59 - 120
2,2'-oxybis[1-chloropropane]	1670	1330		ug/Kg		80	42 - 120
2,4,5-Trichlorophenol	1670	1670		ug/Kg		100	63 - 120
2,4,6-Trichlorophenol	1670	1670		ug/Kg		100	65 - 120
2,4-Dichlorophenol	1670	1540		ug/Kg		93	64 - 120
2,4-Dimethylphenol	1670	1560		ug/Kg		94	56 - 120
2,4-Dinitrophenol	3330	3310		ug/Kg		99	34 - 136
2,4-Dinitrotoluene	1670	1690		ug/Kg		101	65 - 120
2,6-Dinitrotoluene	1670	1710		ug/Kg		103	67 - 120
2-Chloronaphthalene	1670	1510		ug/Kg		90	63 - 120
2-Chlorophenol	1670	1450		ug/Kg		87	55 - 120
2-Methylnaphthalene	1670	1530		ug/Kg		92	61 - 120
2-Methylphenol	1670	1580		ug/Kg		95	59 - 120
2-Nitroaniline	1670	1660		ug/Kg		100	62 - 124
2-Nitrophenol	1670	1500		ug/Kg		90	60 - 120
3,3'-Dichlorobenzidine	3330	2470		ug/Kg		74	28 - 120
3-Nitroaniline	1670	1190		ug/Kg		71	34 - 120
4,6-Dinitro-2-methylphenol	3330	3600		ug/Kg		108	55 - 131
4-Bromophenyl phenyl ether	1670	1580		ug/Kg		95	66 - 120
4-Chloro-3-methylphenol	1670	1640		ug/Kg		98	59 - 120
4-Chloroaniline	1670	1010		ug/Kg		61	27 - 120
4-Chlorophenyl phenyl ether	1670	1610		ug/Kg		96	64 - 120
4-Methylphenol	1670	1590		ug/Kg		96	52 - 120
4-Nitroaniline	1670	1550		ug/Kg		93	60 - 120

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-494875/2-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 494875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitrophenol	3330	3320		ug/Kg		99	51 - 120
Acenaphthene	1670	1610		ug/Kg		96	61 - 120
Acenaphthylene	1670	1600		ug/Kg		96	60 - 120
Acetophenone	1670	1460		ug/Kg		87	52 - 120
Anthracene	1670	1700		ug/Kg		102	69 - 120
Atrazine	1670	1600		ug/Kg		96	59 - 140
Benzaldehyde	1670	1150		ug/Kg		69	41 - 120
Benzo[a]anthracene	1670	1740		ug/Kg		104	68 - 120
Benzo[a]pyrene	1670	1740		ug/Kg		104	71 - 120
Benzo[b]fluoranthene	1670	1640		ug/Kg		99	66 - 120
Benzo[g,h,i]perylene	1670	1570		ug/Kg		94	69 - 120
Benzo[k]fluoranthene	1670	1750		ug/Kg		105	63 - 120
Bis(2-chloroethoxy)methane	1670	1590		ug/Kg		95	53 - 120
Bis(2-chloroethyl)ether	1670	1310		ug/Kg		79	52 - 120
Bis(2-ethylhexyl) phthalate	1670	1790		ug/Kg		107	57 - 127
Butyl benzyl phthalate	1670	1760		ug/Kg		105	57 - 122
Caprolactam	1670	1620		ug/Kg		97	50 - 120
Carbazole	1670	1680		ug/Kg		101	65 - 120
Chrysene	1670	1750		ug/Kg		105	67 - 120
Di-n-butyl phthalate	1670	1780		ug/Kg		107	67 - 128
Di-n-octyl phthalate	1670	1960		ug/Kg		118	58 - 136
Dibenz(a,h)anthracene	1670	1600		ug/Kg		96	70 - 123
Dibenzofuran	1670	1640		ug/Kg		98	62 - 120
Diethyl phthalate	1670	1730		ug/Kg		104	62 - 120
Dimethyl phthalate	1670	1670		ug/Kg		100	61 - 120
Fluoranthene	1670	1760		ug/Kg		106	67 - 120
Fluorene	1670	1640		ug/Kg		98	63 - 120
Hexachlorobenzene	1670	1600		ug/Kg		96	64 - 120
Hexachlorobutadiene	1670	1420		ug/Kg		85	52 - 120
Hexachlorocyclopentadiene	1670	1750		ug/Kg		105	30 - 143
Hexachloroethane	1670	1290		ug/Kg		78	48 - 120
Indeno[1,2,3-cd]pyrene	1670	1610		ug/Kg		97	67 - 122
Isophorone	1670	1500		ug/Kg		90	54 - 120
N-Nitrosodi-n-propylamine	1670	1430		ug/Kg		86	51 - 120
N-Nitrosodiphenylamine	1420	1410		ug/Kg		100	66 - 120
Naphthalene	1670	1440		ug/Kg		87	56 - 120
Nitrobenzene	1670	1390		ug/Kg		83	50 - 120
Pentachlorophenol	3330	3300		ug/Kg		99	46 - 134
Phenanthrene	1670	1620		ug/Kg		97	63 - 120
Phenol	1670	1570		ug/Kg		94	49 - 120
Pyrene	1670	1730		ug/Kg		104	65 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	86		29 - 120
2-Fluorophenol (Surr)	84		18 - 120
Nitrobenzene-d5 (Surr)	78		22 - 120
p-Terphenyl-d14 (Surr)	101		36 - 123
2,4,6-Tribromophenol (Surr)	95		13 - 127

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-494875/2-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 494875

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Phenol-d5 (Surr)	88		20 - 120

Lab Sample ID: LCSD 410-494875/3-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 494875

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	1670	1310		ug/Kg		78	59 - 120	18	34
2,2'-oxybis[1-chloropropane]	1670	1180		ug/Kg		71	42 - 120	12	35
2,4,5-Trichlorophenol	1670	1400		ug/Kg		84	63 - 120	17	30
2,4,6-Trichlorophenol	1670	1390		ug/Kg		83	65 - 120	19	31
2,4-Dichlorophenol	1670	1340		ug/Kg		80	64 - 120	14	39
2,4-Dimethylphenol	1670	1320		ug/Kg		79	56 - 120	17	33
2,4-Dinitrophenol	3330	2650		ug/Kg		79	34 - 136	22	29
2,4-Dinitrotoluene	1670	1400		ug/Kg		84	65 - 120	18	27
2,6-Dinitrotoluene	1670	1420		ug/Kg		85	67 - 120	18	25
2-Chloronaphthalene	1670	1250		ug/Kg		75	63 - 120	19	30
2-Chlorophenol	1670	1280		ug/Kg		77	55 - 120	13	33
2-Methylnaphthalene	1670	1300		ug/Kg		78	61 - 120	16	34
2-Methylphenol	1670	1400		ug/Kg		84	59 - 120	12	31
2-Nitroaniline	1670	1390		ug/Kg		83	62 - 124	18	29
2-Nitrophenol	1670	1290		ug/Kg		77	60 - 120	15	36
3,3'-Dichlorobenzidine	3330	1730		ug/Kg		52	28 - 120	35	43
3-Nitroaniline	1670	916	*1	ug/Kg		55	34 - 120	26	25
4,6-Dinitro-2-methylphenol	3330	3060		ug/Kg		92	55 - 131	16	22
4-Bromophenyl phenyl ether	1670	1340		ug/Kg		80	66 - 120	17	24
4-Chloro-3-methylphenol	1670	1400		ug/Kg		84	59 - 120	16	28
4-Chloroaniline	1670	734	*1	ug/Kg		44	27 - 120	32	31
4-Chlorophenyl phenyl ether	1670	1360		ug/Kg		82	64 - 120	17	30
4-Methylphenol	1670	1420		ug/Kg		85	52 - 120	11	34
4-Nitroaniline	1670	1270		ug/Kg		76	60 - 120	20	29
4-Nitrophenol	3330	2650	*1	ug/Kg		80	51 - 120	22	21
Acenaphthene	1670	1360		ug/Kg		81	61 - 120	17	28
Acenaphthylene	1670	1340		ug/Kg		80	60 - 120	18	32
Acetophenone	1670	1270		ug/Kg		76	52 - 120	14	35
Anthracene	1670	1430		ug/Kg		86	69 - 120	17	27
Atrazine	1670	1320	*1	ug/Kg		79	59 - 140	19	16
Benzaldehyde	1670	1080		ug/Kg		65	41 - 120	7	27
Benzo[a]anthracene	1670	1430		ug/Kg		86	68 - 120	19	20
Benzo[a]pyrene	1670	1520		ug/Kg		91	71 - 120	14	25
Benzo[b]fluoranthene	1670	1430		ug/Kg		86	66 - 120	14	21
Benzo[g,h,i]perylene	1670	1340		ug/Kg		80	69 - 120	16	24
Benzo[k]fluoranthene	1670	1500		ug/Kg		90	63 - 120	15	27
Bis(2-chloroethoxy)methane	1670	1330		ug/Kg		80	53 - 120	18	36
Bis(2-chloroethyl)ether	1670	1150		ug/Kg		69	52 - 120	13	36
Bis(2-ethylhexyl) phthalate	1670	1510		ug/Kg		91	57 - 127	17	18
Butyl benzyl phthalate	1670	1480		ug/Kg		89	57 - 122	17	19
Caprolactam	1670	1340		ug/Kg		80	50 - 120	19	20

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-494875/3-A

Matrix: Solid

Analysis Batch: 495064

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 494875

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbazole	1670	1400		ug/Kg		84	65 - 120	18	23
Chrysene	1670	1430		ug/Kg		86	67 - 120	20	22
Di-n-butyl phthalate	1670	1490		ug/Kg		90	67 - 128	18	21
Di-n-octyl phthalate	1670	1750		ug/Kg		105	58 - 136	11	24
Dibenz(a,h)anthracene	1670	1380		ug/Kg		83	70 - 123	15	26
Dibenzofuran	1670	1370		ug/Kg		82	62 - 120	18	29
Diethyl phthalate	1670	1440		ug/Kg		86	62 - 120	19	25
Dimethyl phthalate	1670	1400		ug/Kg		84	61 - 120	18	28
Fluoranthene	1670	1420		ug/Kg		85	67 - 120	21	22
Fluorene	1670	1390		ug/Kg		83	63 - 120	16	28
Hexachlorobenzene	1670	1360		ug/Kg		81	64 - 120	16	30
Hexachlorobutadiene	1670	1160		ug/Kg		70	52 - 120	20	29
Hexachlorocyclopentadiene	1670	1460		ug/Kg		88	30 - 143	18	45
Hexachloroethane	1670	1120		ug/Kg		67	48 - 120	15	42
Indeno[1,2,3-cd]pyrene	1670	1370		ug/Kg		82	67 - 122	16	26
Isophorone	1670	1260		ug/Kg		75	54 - 120	18	35
N-Nitrosodi-n-propylamine	1670	1280		ug/Kg		77	51 - 120	11	32
N-Nitrosodiphenylamine	1420	1200		ug/Kg		85	66 - 120	16	27
Naphthalene	1670	1200		ug/Kg		72	56 - 120	18	37
Nitrobenzene	1670	1160		ug/Kg		69	50 - 120	18	33
Pentachlorophenol	3330	2590		ug/Kg		78	46 - 134	24	25
Phenanthrene	1670	1380		ug/Kg		83	63 - 120	16	26
Phenol	1670	1350		ug/Kg		81	49 - 120	15	35
Pyrene	1670	1450		ug/Kg		87	65 - 120	17	22

Surrogate	%Recovery	LCSD Qualifier	LCSD Limits
2-Fluorobiphenyl (Surr)	72		29 - 120
2-Fluorophenol (Surr)	72		18 - 120
Nitrobenzene-d5 (Surr)	64		22 - 120
p-Terphenyl-d14 (Surr)	85		36 - 123
2,4,6-Tribromophenol (Surr)	78		13 - 127
Phenol-d5 (Surr)	76		20 - 120

Lab Sample ID: MB 410-495382/1-A

Matrix: Solid

Analysis Batch: 495591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 495382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1
2,4,5-Trichlorophenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1
2,4,6-Trichlorophenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1
2,4-Dinitrotoluene	ND		0.025	0.0050	mg/L		04/17/24 16:02	04/18/24 11:49	1
Pyridine	ND		0.025	0.010	mg/L		04/17/24 16:02	04/18/24 11:49	1
2-Methylphenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1
4-Methylphenol	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1
Hexachlorobenzene	ND		0.0025	0.00055	mg/L		04/17/24 16:02	04/18/24 11:49	1
Hexachlorobutadiene	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1
Hexachloroethane	ND		0.025	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-495382/1-A

Matrix: Solid

Analysis Batch: 495591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 495382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		0.010	0.0025	mg/L		04/17/24 16:02	04/18/24 11:49	1
Pentachlorophenol	ND		0.025	0.0050	mg/L		04/17/24 16:02	04/18/24 11:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	59		28 - 120	04/17/24 16:02	04/18/24 11:49	1
2-Fluorophenol (Surr)	32		10 - 120	04/17/24 16:02	04/18/24 11:49	1
Nitrobenzene-d5 (Surr)	62		18 - 120	04/17/24 16:02	04/18/24 11:49	1
p-Terphenyl-d14 (Surr)	65		22 - 120	04/17/24 16:02	04/18/24 11:49	1
2,4,6-Tribromophenol (Surr)	44		16 - 120	04/17/24 16:02	04/18/24 11:49	1
Phenol-d5 (Surr)	26		10 - 120	04/17/24 16:02	04/18/24 11:49	1

Lab Sample ID: LCS 410-495382/2-A

Matrix: Solid

Analysis Batch: 495591

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 495382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.250	0.208		mg/L		83	28 - 120
2,4,5-Trichlorophenol	0.250	0.207		mg/L		83	55 - 133
2,4,6-Trichlorophenol	0.250	0.201		mg/L		80	54 - 139
2,4-Dinitrotoluene	0.250	0.262		mg/L		105	54 - 143
Pyridine	0.500	0.249		mg/L		50	14 - 120
2-Methylphenol	0.250	0.190		mg/L		76	39 - 120
4-Methylphenol	0.250	0.179		mg/L		72	35 - 120
Hexachlorobenzene	0.250	0.221		mg/L		88	50 - 128
Hexachlorobutadiene	0.250	0.170		mg/L		68	20 - 120
Hexachloroethane	0.250	0.202		mg/L		81	21 - 120
Nitrobenzene	0.250	0.242		mg/L		97	37 - 128
Pentachlorophenol	0.500	0.370		mg/L		74	32 - 163

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	87		28 - 120
2-Fluorophenol (Surr)	47		10 - 120
Nitrobenzene-d5 (Surr)	89		18 - 120
p-Terphenyl-d14 (Surr)	84		22 - 120
2,4,6-Tribromophenol (Surr)	63		16 - 120
Phenol-d5 (Surr)	37		10 - 120

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 410-495301/5

Matrix: Solid

Analysis Batch: 495301

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	ND		0.040	0.016	mg/Kg			04/17/24 15:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	86		50 - 142		04/17/24 15:46	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: LCS 410-495301/8
Matrix: Solid
Analysis Batch: 495301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline (Unleaded) (1C)			0.440	0.403		mg/Kg		92	67 - 120		
Surrogate	LCS %Recovery	LCS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)	86		50 - 142								

Lab Sample ID: LCSD 410-495301/9
Matrix: Solid
Analysis Batch: 495301

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline (Unleaded) (1C)			0.440	0.408		mg/Kg		93	67 - 120	1	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)	86		50 - 142								

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 410-494334/1-A
Matrix: Solid
Analysis Batch: 494625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494334

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C10-C28)	ND		12	5.0	mg/Kg		04/15/24 15:55	04/16/24 11:59	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
o- terphenyl (Surr)	83		49 - 154	04/15/24 15:55	04/16/24 11:59	1			

Lab Sample ID: LCS 410-494334/2-A
Matrix: Solid
Analysis Batch: 494625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494334

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
DRO (C10-C28)			134	121		mg/Kg		91	78 - 120		
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
o- terphenyl (Surr)	85		49 - 154								

Method: 8081B - TCLP Pesticides

Lab Sample ID: MB 410-495395/1-A
Matrix: Solid
Analysis Batch: 496049

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 495395

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (n.o.s.) (1C)	ND		0.0010	0.00032	mg/L		04/17/24 16:15	04/19/24 08:36	1
Endrin (1C)	ND		0.000060	0.000016	mg/L		04/17/24 16:15	04/19/24 08:36	1
gamma-BHC (Lindane) (1C)	ND		0.000040	0.0000040	mg/L		04/17/24 16:15	04/19/24 08:36	1
Heptachlor (1C)	ND		0.000040	0.0000040	mg/L		04/17/24 16:15	04/19/24 08:36	1

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QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8081B - TCLP Pesticides (Continued)

Lab Sample ID: MB 410-495395/1-A

Matrix: Solid

Analysis Batch: 496049

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 495395

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide (1C)	ND		0.000040	0.0000046	mg/L		04/17/24 16:15	04/19/24 08:36	1
Methoxychlor (1C)	ND		0.00022	0.000060	mg/L		04/17/24 16:15	04/19/24 08:36	1
Toxaphene (1C)	ND		0.0020	0.00060	mg/L		04/17/24 16:15	04/19/24 08:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	106		21 - 130	04/17/24 16:15	04/19/24 08:36	1
DCB Decachlorobiphenyl (Surr) (2C)	118		21 - 130	04/17/24 16:15	04/19/24 08:36	1
Tetrachloro-m-xylene (Surr) (1C)	90		39 - 139	04/17/24 16:15	04/19/24 08:36	1
Tetrachloro-m-xylene (Surr) (2C)	100		39 - 139	04/17/24 16:15	04/19/24 08:36	1

Lab Sample ID: LCS 410-495395/2-A

Matrix: Solid

Analysis Batch: 496049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 495395

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Endrin (1C)	0.000125	0.000141		mg/L		113	60 - 151
gamma-BHC (Lindane) (1C)	0.000250	0.000233		mg/L		93	51 - 132
Heptachlor (1C)	0.000250	0.000239		mg/L		95	42 - 133
Heptachlor epoxide (1C)	0.000375	0.000362		mg/L		97	56 - 132
Methoxychlor (1C)	0.00100	0.00125		mg/L		125	58 - 165

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	68		21 - 130
DCB Decachlorobiphenyl (Surr) (2C)	72		21 - 130
Tetrachloro-m-xylene (Surr) (1C)	85		39 - 139
Tetrachloro-m-xylene (Surr) (2C)	94		39 - 139

Lab Sample ID: 410-167546-1 MS

Matrix: Solid

Analysis Batch: 496049

Client Sample ID: WL-SO-01-20240410

Prep Type: TCLP

Prep Batch: 495395

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Endrin (1C)	ND	F1 cn	0.000125	ND	F1	mg/L		0	60 - 151
gamma-BHC (Lindane) (1C)	ND	F1 cn	0.000250	0.0000210	J F1	mg/L		8	51 - 132
Heptachlor (1C)	ND	F1 cn	0.000250	0.0000207	J F1	mg/L		8	42 - 133
Heptachlor epoxide (1C)	ND	F1 cn	0.000375	0.0000335	J F1	mg/L		9	56 - 132
Methoxychlor (1C)	ND	F1 cn	0.00100	0.000112	J F1	mg/L		11	58 - 165

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	7	S1-	21 - 130
DCB Decachlorobiphenyl (Surr) (2C)	6	S1-	21 - 130
Tetrachloro-m-xylene (Surr) (1C)	7	S1-	39 - 139

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QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8081B - TCLP Pesticides (Continued)

Lab Sample ID: 410-167546-1 MS

Matrix: Solid

Analysis Batch: 496049

Client Sample ID: WL-SO-01-20240410

Prep Type: TCLP

Prep Batch: 495395

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene (Surr) (2C)	6	S1-	39 - 139

Lab Sample ID: 410-167546-1 MSD

Matrix: Solid

Analysis Batch: 496049

Client Sample ID: WL-SO-01-20240410

Prep Type: TCLP

Prep Batch: 495395

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Endrin (1C)	ND	F1 cn	0.000125	ND	F1	mg/L		0	60 - 151	NC	30
gamma-BHC (Lindane) (1C)	ND	F1 cn	0.000250	0.0000221	J F1	mg/L		9	51 - 132	5	30
Heptachlor (1C)	ND	F1 cn	0.000250	0.0000229	J F1	mg/L		9	42 - 133	10	30
Heptachlor epoxide (1C)	ND	F1 cn	0.000375	0.0000354	J F1	mg/L		9	56 - 132	5	30
Methoxychlor (1C)	ND	F1 cn	0.00100	0.000136	J F1	mg/L		14	58 - 165	19	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	9	S1-	21 - 130
DCB Decachlorobiphenyl (Surr) (2C)	8	S1-	21 - 130
Tetrachloro-m-xylene (Surr) (1C)	7	S1-	39 - 139
Tetrachloro-m-xylene (Surr) (2C)	6	S1-	39 - 139

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-495070/1-A

Matrix: Solid

Analysis Batch: 495535

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 495070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.83	0.36	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
alpha-BHC (1C)	ND		0.83	0.38	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
alpha-Chlordane (1C)	ND		0.83	0.17	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
beta-BHC (1C)	ND		1.0	0.44	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
delta-BHC (1C)	ND		1.0	0.45	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Dieldrin (1C)	ND		1.7	0.33	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Endosulfan I (1C)	ND		0.83	0.22	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Endosulfan II (1C)	ND		2.3	1.1	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Endosulfan sulfate (1C)	ND		1.7	0.39	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Endrin (1C)	ND		1.7	0.68	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Endrin aldehyde (1C)	ND		1.7	0.38	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Endrin ketone (1C)	ND		2.0	0.60	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
gamma-BHC (Lindane) (1C)	ND		0.83	0.21	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
gamma-Chlordane (1C)	ND		0.83	0.25	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Heptachlor (1C)	ND		0.83	0.31	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Heptachlor epoxide (1C)	ND		0.83	0.35	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Methoxychlor (1C)	ND		6.7	2.6	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
Toxaphene (1C)	ND		33	14	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
p,p'-DDD (1C)	ND		1.7	0.80	ug/Kg		04/17/24 09:59	04/18/24 09:00	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-495070/1-A

Matrix: Solid

Analysis Batch: 495535

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 495070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p,p'-DDE (1C)	ND		1.7	0.70	ug/Kg		04/17/24 09:59	04/18/24 09:00	1
p,p'-DDT (1C)	ND		1.7	0.79	ug/Kg		04/17/24 09:59	04/18/24 09:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	89		54 - 143	04/17/24 09:59	04/18/24 09:00	1
DCB Decachlorobiphenyl (Surr) (2C)	93		54 - 143	04/17/24 09:59	04/18/24 09:00	1
Tetrachloro-m-xylene (Surr) (1C)	37		20 - 131	04/17/24 09:59	04/18/24 09:00	1
Tetrachloro-m-xylene (Surr) (2C)	36		20 - 131	04/17/24 09:59	04/18/24 09:00	1

Lab Sample ID: LCS 410-495070/2-A

Matrix: Solid

Analysis Batch: 495535

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 495070

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin (1C)	3.33	2.69		ug/Kg		81	49 - 130
alpha-BHC (1C)	3.33	2.87		ug/Kg		86	32 - 141
beta-BHC (1C)	3.33	3.02		ug/Kg		91	50 - 132
delta-BHC (1C)	3.33	2.82		ug/Kg		85	47 - 141
Dieldrin (1C)	6.67	5.69		ug/Kg		85	54 - 136
Endosulfan I (1C)	3.33	2.80		ug/Kg		84	51 - 124
Endosulfan II (1C)	6.67	5.82		ug/Kg		87	56 - 125
Endosulfan sulfate (1C)	6.67	5.68		ug/Kg		85	39 - 136
Endrin (1C)	6.67	5.68		ug/Kg		85	56 - 129
Endrin aldehyde (1C)	6.67	5.29		ug/Kg		79	46 - 133
Endrin ketone (1C)	6.67	6.15		ug/Kg		92	55 - 128
gamma-BHC (Lindane) (1C)	3.33	2.93		ug/Kg		88	32 - 138
Heptachlor (1C)	3.33	2.93		ug/Kg		88	52 - 139
Heptachlor epoxide (1C)	3.33	2.81		ug/Kg		84	55 - 133
Methoxychlor (1C)	33.3	33.7		ug/Kg		101	54 - 148
p,p'-DDD (1C)	6.67	5.59		ug/Kg		84	59 - 135
p,p'-DDE (1C)	6.67	5.65		ug/Kg		85	57 - 135
p,p'-DDT (1C)	6.67	7.05		ug/Kg		106	53 - 151

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	80		54 - 143
DCB Decachlorobiphenyl (Surr) (2C)	82		54 - 143
Tetrachloro-m-xylene (Surr) (1C)	37		20 - 131
Tetrachloro-m-xylene (Surr) (2C)	34		20 - 131

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 410-495075/1-A
Matrix: Solid
Analysis Batch: 495483

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 495075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	ND		17	5.3	ug/Kg		04/17/24 10:01	04/17/24 20:09	1
PCB-1221 (1C)	ND		17	5.3	ug/Kg		04/17/24 10:01	04/17/24 20:09	1
PCB-1232 (1C)	ND		17	5.3	ug/Kg		04/17/24 10:01	04/17/24 20:09	1
PCB-1242 (1C)	ND		17	5.3	ug/Kg		04/17/24 10:01	04/17/24 20:09	1
PCB-1248 (1C)	ND		17	5.3	ug/Kg		04/17/24 10:01	04/17/24 20:09	1
PCB-1254 (1C)	ND		17	6.4	ug/Kg		04/17/24 10:01	04/17/24 20:09	1
PCB-1260 (1C)	ND		17	6.4	ug/Kg		04/17/24 10:01	04/17/24 20:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	93		66 - 130				04/17/24 10:01	04/17/24 20:09	1
Tetrachloro-m-xylene (1C)	98		68 - 130				04/17/24 10:01	04/17/24 20:09	1

Lab Sample ID: LCS 410-495075/2-A
Matrix: Solid
Analysis Batch: 495483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 495075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016 (2C)	167	178		ug/Kg		106	68 - 121
PCB-1260 (2C)	167	170		ug/Kg		102	75 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
DCB Decachlorobiphenyl (Surr) (1C)	89		66 - 130				
Tetrachloro-m-xylene (1C)	96		68 - 130				

Method: 8151A - TCLP Herbicides

Lab Sample ID: MB 410-494994/2-A
Matrix: Solid
Analysis Batch: 495046

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D (1C)	ND		0.050	0.016	mg/L		04/16/24 20:30	04/17/24 05:14	1
Silvex (2,4,5-TP) (1C)	ND		0.0050	0.0010	mg/L		04/16/24 20:30	04/17/24 05:14	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr) (1C)	78		26 - 136				04/16/24 20:30	04/17/24 05:14	1
2,4-Dichlorophenylacetic acid (Surr) (2C)	93		26 - 136				04/16/24 20:30	04/17/24 05:14	1

Lab Sample ID: LCS 410-494994/3-A
Matrix: Solid
Analysis Batch: 495046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D (2C)	0.0502	0.0548		mg/L		109	42 - 147
Silvex (2,4,5-TP) (2C)	0.00500	0.00534		mg/L		107	58 - 148

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 8151A - TCLP Herbicides (Continued)

Lab Sample ID: LCS 410-494994/3-A

Matrix: Solid

Analysis Batch: 495046

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 494994

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2,4-Dichlorophenylacetic acid (Surr) (1C)	84		26 - 136
2,4-Dichlorophenylacetic acid (Surr) (2C)	101		26 - 136

Lab Sample ID: 410-167546-1 MS

Matrix: Solid

Analysis Batch: 495046

Client Sample ID: WL-SO-01-20240410

Prep Type: TCLP

Prep Batch: 494994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D (2C)	ND		0.0502	0.0512		mg/L		102	42 - 147
Silvex (2,4,5-TP) (2C)	ND		0.00500	0.00537		mg/L		107	58 - 148

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
2,4-Dichlorophenylacetic acid (Surr) (1C)	77		26 - 136
2,4-Dichlorophenylacetic acid (Surr) (2C)	92		26 - 136

Lab Sample ID: 410-167546-1 MSD

Matrix: Solid

Analysis Batch: 495046

Client Sample ID: WL-SO-01-20240410

Prep Type: TCLP

Prep Batch: 494994

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D (2C)	ND		0.0502	0.0555		mg/L		111	42 - 147	8	30
Silvex (2,4,5-TP) (2C)	ND		0.00500	0.00561		mg/L		112	58 - 148	4	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
2,4-Dichlorophenylacetic acid (Surr) (1C)	83		26 - 136
2,4-Dichlorophenylacetic acid (Surr) (2C)	101		26 - 136

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 410-495793/1-A

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 495793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.80	0.10	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoropentanoic acid (PFPeA)	ND		0.40	0.10	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.059	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.051	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorotridecanoic acid (PFTTrDA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 410-495793/1-A

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 495793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeDA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.051	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorononanesulfonic acid (PFNS)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ND		0.80	0.20	ng/g		04/18/24 10:54	04/27/24 10:44	1
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ND		1.0	0.35	ng/g		04/18/24 10:54	04/27/24 10:44	1
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ND		1.0	0.35	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.050	ng/g		04/18/24 10:54	04/27/24 10:44	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		2.0	0.50	ng/g		04/18/24 10:54	04/27/24 10:44	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		2.0	0.50	ng/g		04/18/24 10:54	04/27/24 10:44	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.80	0.051	ng/g		04/18/24 10:54	04/27/24 10:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.80	0.20	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.40	0.10	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.40	0.10	ng/g		04/18/24 10:54	04/27/24 10:44	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.40	0.10	ng/g		04/18/24 10:54	04/27/24 10:44	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.80	0.20	ng/g		04/18/24 10:54	04/27/24 10:44	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.80	0.20	ng/g		04/18/24 10:54	04/27/24 10:44	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.40	0.10	ng/g		04/18/24 10:54	04/27/24 10:44	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		1.0	0.25	ng/g		04/18/24 10:54	04/27/24 10:44	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		5.0	1.0	ng/g		04/18/24 10:54	04/27/24 10:44	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		5.0	1.0	ng/g		04/18/24 10:54	04/27/24 10:44	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	76.6		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C5 PFPeA	73.2		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C5 PFHxA	69.9		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C4 PFHpA	77.8		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C8 PFOA	68.3		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C9 PFNA	75.4		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C6 PFDA	65.3		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C7 PFUnA	61.9		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C2-PFDoDA	51.2		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C2 PFTeDA	48.1		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C3 PFBS	75.8		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C3 PFHxS	66.9		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C8 PFOS	60.1		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C8 FOSA	54.7		20 - 150	04/18/24 10:54	04/27/24 10:44	1
d3-NMeFOSAA	51.5		20 - 150	04/18/24 10:54	04/27/24 10:44	1
d5-NEtFOSAA	52.6		20 - 150	04/18/24 10:54	04/27/24 10:44	1
M2-4:2 FTS	81.1		20 - 150	04/18/24 10:54	04/27/24 10:44	1
M2-6:2 FTS	71.5		20 - 150	04/18/24 10:54	04/27/24 10:44	1
M2-8:2 FTS	72.3		20 - 150	04/18/24 10:54	04/27/24 10:44	1
13C3 HFPO-DA	74.2		20 - 150	04/18/24 10:54	04/27/24 10:44	1
d7-N-MeFOSE-M	42.9		20 - 150	04/18/24 10:54	04/27/24 10:44	1
d9-N-EtFOSE-M	39.3		20 - 150	04/18/24 10:54	04/27/24 10:44	1
d5-NEtPFOSA	34.5		20 - 150	04/18/24 10:54	04/27/24 10:44	1
d3-NMePFOSA	39.3		20 - 150	04/18/24 10:54	04/27/24 10:44	1

Lab Sample ID: LCS 410-495793/2-A
Matrix: Solid
Analysis Batch: 499134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 495793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	10.0	9.81		ng/g		98	40 - 150
Perfluoropentanoic acid (PFPeA)	5.00	4.87		ng/g		97	40 - 150
Perfluorohexanoic acid (PFHxA)	2.50	2.50		ng/g		100	40 - 150
Perfluoroheptanoic acid (PFHpA)	2.50	2.28		ng/g		91	40 - 150
Perfluorooctanoic acid (PFOA)	2.50	2.48		ng/g		99	40 - 150
Perfluorononanoic acid (PFNA)	2.50	2.65		ng/g		106	40 - 150
Perfluorodecanoic acid (PFDA)	2.50	2.34		ng/g		94	40 - 150
Perfluoroundecanoic acid (PFUnA)	2.50	2.45		ng/g		98	40 - 150
Perfluorododecanoic acid (PFDoA)	2.50	2.54		ng/g		102	40 - 150
Perfluorotridecanoic acid (PFTTrDA)	2.50	2.39		ng/g		96	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	2.50	2.36		ng/g		94	40 - 150
Perfluorobutanesulfonic acid (PFBS)	2.21	2.15		ng/g		97	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.35	2.39		ng/g		102	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.28	2.38		ng/g		104	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.38	2.23		ng/g		94	40 - 150

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-495793/2-A

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 495793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	2.32	2.18		ng/g		94	40 - 150
Perfluorononanesulfonic acid (PFNS)	2.40	1.83		ng/g		76	40 - 150
Perfluorodecanesulfonic acid (PFDS)	2.41	1.79		ng/g		74	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	2.42	1.76		ng/g		73	40 - 150
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	9.34	7.36		ng/g		79	40 - 150
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	9.48	8.68		ng/g		92	40 - 150
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	9.58	8.06		ng/g		84	40 - 150
Perfluorooctanesulfonamide (PFOSA)	2.50	2.47		ng/g		99	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	2.50	2.69		ng/g		107	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	2.50	2.57		ng/g		103	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.50	2.44		ng/g		98	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.50	2.54		ng/g		101	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	25.0	24.3		ng/g		97	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	25.0	24.9		ng/g		99	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	10.0	10.0		ng/g		100	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.42	9.36		ng/g		99	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.00	5.12		ng/g		102	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.00	5.34		ng/g		107	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.00	5.40		ng/g		108	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	9.32	7.16		ng/g		77	40 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	9.42	6.51		ng/g		69	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	4.45	5.06		ng/g		114	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	12.5	12.2		ng/g		98	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	62.5	60.3		ng/g		96	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	62.5	57.1		ng/g		91	40 - 150

Isotope Dilution	%Recovery	LCS Qualifier	Limits
¹³ C4 PFBA	87.9		20 - 150

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-495793/2-A

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 495793

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C5 PFPeA	89.9		20 - 150
13C5 PFHxA	88.1		20 - 150
13C4 PFHpA	87.7		20 - 150
13C8 PFOA	74.9		20 - 150
13C9 PFNA	78.3		20 - 150
13C6 PFDA	76.0		20 - 150
13C7 PFUnA	64.9		20 - 150
13C2-PFDoDA	54.1		20 - 150
13C2 PFTeDA	52.5		20 - 150
13C3 PFBS	82.2		20 - 150
13C3 PFHxS	74.7		20 - 150
13C8 PFOS	68.1		20 - 150
13C8 FOSA	64.5		20 - 150
d3-NMeFOSAA	67.6		20 - 150
d5-NEtFOSAA	63.7		20 - 150
M2-4:2 FTS	98.5		20 - 150
M2-6:2 FTS	81.3		20 - 150
M2-8:2 FTS	83.7		20 - 150
13C3 HFPO-DA	87.0		20 - 150
d7-N-MeFOSE-M	51.4		20 - 150
d9-N-EtFOSE-M	46.3		20 - 150
d5-NEtPFOSA	41.7		20 - 150
d3-NMePFOSA	46.2		20 - 150

Lab Sample ID: LLCS 410-495793/3-A

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 495793

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	1.60	1.83		ng/g		114	40 - 150
Perfluoropentanoic acid (PFPeA)	0.800	0.894		ng/g		112	40 - 150
Perfluorohexanoic acid (PFHxA)	0.400	0.462		ng/g		116	40 - 150
Perfluoroheptanoic acid (PFHpA)	0.400	0.412		ng/g		103	40 - 150
Perfluorooctanoic acid (PFOA)	0.400	0.466		ng/g		116	40 - 150
Perfluorononanoic acid (PFNA)	0.400	0.514		ng/g		128	40 - 150
Perfluorodecanoic acid (PFDA)	0.400	0.458		ng/g		114	40 - 150
Perfluoroundecanoic acid (PFUnA)	0.400	0.465		ng/g		116	40 - 150
Perfluorododecanoic acid (PFDoA)	0.400	0.442		ng/g		110	40 - 150
Perfluorotridecanoic acid (PFTTrDA)	0.400	0.456		ng/g		114	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	0.400	0.456		ng/g		114	40 - 150
Perfluorobutanesulfonic acid (PFBS)	0.354	0.444		ng/g		126	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.375	0.399		ng/g		106	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.364	0.421		ng/g		116	40 - 150

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-495793/3-A

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 495793

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanesulfonic acid (PFHpS)	0.381	0.424		ng/g		111	40 - 150
Perfluorooctanesulfonic acid (PFOS)	0.371	0.449		ng/g		121	40 - 150
Perfluorononanesulfonic acid (PFNS)	0.384	0.362		ng/g		94	40 - 150
Perfluorodecanesulfonic acid (PFDS)	0.386	0.332		ng/g		86	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	0.387	0.334		ng/g		86	40 - 150
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	1.49	1.50		ng/g		100	40 - 150
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	1.52	1.36		ng/g		89	40 - 150
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	1.53	1.67		ng/g		109	40 - 150
Perfluorooctanesulfonamide (PFOSA)	0.400	0.444		ng/g		111	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.400	0.447		ng/g		112	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.400	0.471		ng/g		118	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.400	0.428		ng/g		107	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.400	0.461		ng/g		115	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	4.00	4.69		ng/g		117	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	4.00	4.45		ng/g		111	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	1.60	1.78		ng/g		111	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.51	1.75		ng/g		116	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.800	0.861		ng/g		108	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.800	0.845		ng/g		106	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.800	0.887		ng/g		111	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	1.49	1.57		ng/g		105	40 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	1.51	1.40		ng/g		93	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	0.712	0.839		ng/g		118	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.00	2.02		ng/g		101	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	10.0	9.86		ng/g		99	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	10.0	9.89		ng/g		99	40 - 150

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	LLCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	79.2		20 - 150
13C5 PFPeA	83.4		20 - 150
13C5 PFHxA	78.3		20 - 150
13C4 PFHpA	77.5		20 - 150
13C8 PFOA	79.1		20 - 150
13C9 PFNA	77.4		20 - 150
13C6 PFDA	71.5		20 - 150
13C7 PFUnA	70.0		20 - 150
13C2-PFDoDA	62.9		20 - 150
13C2 PFTeDA	57.8		20 - 150
13C3 PFBS	73.0		20 - 150
13C3 PFHxS	72.5		20 - 150
13C8 PFOS	66.6		20 - 150
13C8 FOSA	57.4		20 - 150
d3-NMeFOSAA	60.6		20 - 150
d5-NEtFOSAA	60.6		20 - 150
M2-4:2 FTS	85.0		20 - 150
M2-6:2 FTS	87.2		20 - 150
M2-8:2 FTS	68.7		20 - 150
13C3 HFPO-DA	75.9		20 - 150
d7-N-MeFOSE-M	49.0		20 - 150
d9-N-EtFOSE-M	48.0		20 - 150
d5-NEtPFOSA	40.2		20 - 150
d3-NMePFOSA	42.7		20 - 150

Lab Sample ID: 410-167546-1 DU

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: WL-SO-01-20240410

Prep Type: Total/NA

Prep Batch: 495793

Analyte	Sample		DU		Unit	D	RPD	
	Result	Qualifier	Result	Qualifier			RPD	Limit
Perfluorobutanoic acid (PFBA)	ND		ND		ng/g	☼	NC	30
Perfluoropentanoic acid (PFPeA)	0.086	J I	0.121	J F5	ng/g	☼	34	30
Perfluorohexanoic acid (PFHxA)	0.084	J	0.0958	J	ng/g	☼	13	30
Perfluoroheptanoic acid (PFHpA)	0.044	J	0.106	J F5 I	ng/g	☼	83	30
Perfluorooctanoic acid (PFOA)	0.28		0.335		ng/g	☼	19	30
Perfluorononanoic acid (PFNA)	0.043	J	0.0868	J F5 I	ng/g	☼	68	30
Perfluorodecanoic acid (PFDA)	ND		ND		ng/g	☼	NC	30
Perfluoroundecanoic acid (PFUnA)	ND		ND		ng/g	☼	NC	30
Perfluorododecanoic acid (PFDoA)	ND		ND		ng/g	☼	NC	30
Perfluorotridecanoic acid (PFTTrDA)	ND		ND		ng/g	☼	NC	30
Perfluorotetradecanoic acid (PFTeDA)	ND		ND		ng/g	☼	NC	30
Perfluorobutanesulfonic acid (PFBS)	ND		ND		ng/g	☼	NC	30
Perfluoropentanesulfonic acid (PFPeS)	ND		ND		ng/g	☼	NC	30
Perfluorohexanesulfonic acid (PFHxS)	ND		0.0312	J I	ng/g	☼	NC	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		ND		ng/g	☼	NC	30

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 410-167546-1 DU

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: WL-SO-01-20240410

Prep Type: Total/NA

Prep Batch: 495793

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Perfluorooctanesulfonic acid (PFOS)	0.17		0.208		ng/g	✱	22	30
Perfluorononanesulfonic acid (PFNS)	ND		ND		ng/g	✱	NC	30
Perfluorodecanesulfonic acid (PFDS)	0.038 J		0.0431 J		ng/g	✱	13	30
Perfluorododecanesulfonic acid (PFDoS)	ND		ND		ng/g	✱	NC	30
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ND		ND		ng/g	✱	NC	30
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ND		ND		ng/g	✱	NC	30
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ND		ND		ng/g	✱	NC	30
Perfluorooctanesulfonamide (PFOSA)	ND		ND		ng/g	✱	NC	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		ND		ng/g	✱	NC	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		ND		ng/g	✱	NC	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		ND		ng/g	✱	NC	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.066 J		0.0662 J		ng/g	✱	0.4	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		ND		ng/g	✱	NC	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		ND		ng/g	✱	NC	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ND		ng/g	✱	NC	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND		ng/g	✱	NC	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		ND		ng/g	✱	NC	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		ND		ng/g	✱	NC	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.0781 J I		ng/g	✱	NC	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		ND		ng/g	✱	NC	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		ND		ng/g	✱	NC	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		ND		ng/g	✱	NC	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		ND		ng/g	✱	NC	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		ND		ng/g	✱	NC	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		ND		ng/g	✱	NC	30

Isotope Dilution	%Recovery	DU Qualifier	Limits
¹³ C4 PFBA	91.1		20 - 150

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 410-167546-1 DU

Matrix: Solid

Analysis Batch: 499134

Client Sample ID: WL-SO-01-20240410

Prep Type: Total/NA

Prep Batch: 495793

Isotope Dilution	%Recovery	DU DU Qualifier	Limits
13C5 PFPeA	91.2		20 - 150
13C5 PFHxA	86.7		20 - 150
13C4 PFHpA	92.8		20 - 150
13C8 PFOA	94.9		20 - 150
13C9 PFNA	85.9		20 - 150
13C6 PFDA	85.8		20 - 150
13C7 PFUnA	86.4		20 - 150
13C2-PFDoDA	75.8		20 - 150
13C2 PFTeDA	86.2		20 - 150
13C3 PFBS	88.2		20 - 150
13C3 PFHxS	88.5		20 - 150
13C8 PFOS	84.9		20 - 150
13C8 FOSA	71.4		20 - 150
d3-NMeFOSAA	89.6		20 - 150
d5-NEtFOSAA	72.9		20 - 150
M2-4:2 FTS	117		20 - 150
M2-6:2 FTS	176	*5+	20 - 150
M2-8:2 FTS	146		20 - 150
13C3 HFPO-DA	80.5		20 - 150
d7-N-MeFOSE-M	58.6		20 - 150
d9-N-EtFOSE-M	57.0		20 - 150
d5-NEtPFOSA	62.5		20 - 150
d3-NMePFOSA	58.6		20 - 150

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-494154/1-A ^2

Matrix: Solid

Analysis Batch: 494459

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 494154

Analyte	MB MB Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND	20	9.7	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Antimony	ND	0.20	0.078	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Arsenic	ND	0.39	0.13	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Barium	ND	0.39	0.18	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Beryllium	ND	0.098	0.023	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Cadmium	ND	0.098	0.039	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Calcium	ND	39	19	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Chromium	ND	0.39	0.19	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Cobalt	ND	0.20	0.078	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Copper	ND	0.39	0.18	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Iron	ND	20	9.0	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Lead	ND	0.20	0.075	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Magnesium	ND	9.8	4.8	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Manganese	ND	0.39	0.20	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Nickel	ND	0.39	0.19	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Potassium	ND	39	16	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Selenium	ND	0.39	0.098	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Silver	ND	0.098	0.040	mg/Kg		04/15/24 09:20	04/15/24 15:35	2

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-494154/1-A ^2
Matrix: Solid
Analysis Batch: 494459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		49	24	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Thallium	ND		0.098	0.038	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Zinc	ND		29	3.9	mg/Kg		04/15/24 09:20	04/15/24 15:35	2
Vanadium	ND		0.78	0.20	mg/Kg		04/15/24 09:20	04/15/24 15:35	2

Lab Sample ID: LCS 410-494154/2-A ^2
Matrix: Solid
Analysis Batch: 494459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	490	495		mg/Kg		101	83 - 119
Antimony	9.80	10.2		mg/Kg		104	87 - 116
Arsenic	49.0	51.1		mg/Kg		104	87 - 114
Barium	49.0	51.1		mg/Kg		104	87 - 117
Beryllium	4.90	4.79		mg/Kg		98	80 - 120
Cadmium	4.90	5.12		mg/Kg		104	88 - 117
Calcium	490	505		mg/Kg		103	84 - 119
Chromium	49.0	51.3		mg/Kg		105	86 - 116
Cobalt	49.0	52.0		mg/Kg		106	85 - 115
Copper	49.0	51.9		mg/Kg		106	84 - 115
Iron	490	519		mg/Kg		106	87 - 117
Lead	4.90	5.14		mg/Kg		105	88 - 117
Magnesium	490	502		mg/Kg		102	83 - 119
Manganese	49.0	50.6		mg/Kg		103	87 - 116
Nickel	49.0	52.8		mg/Kg		108	87 - 115
Potassium	490	501		mg/Kg		102	83 - 118
Selenium	9.80	10.4		mg/Kg		106	87 - 115
Silver	4.90	5.37		mg/Kg		110	88 - 117
Sodium	490	500		mg/Kg		102	81 - 120
Thallium	9.80	10.2		mg/Kg		104	87 - 116
Zinc	49.0	51.7		mg/Kg		105	86 - 116
Vanadium	49.0	51.0		mg/Kg		104	86 - 115

Lab Sample ID: MB 410-495021/1-A
Matrix: Solid
Analysis Batch: 495547

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 495021

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		20	6.8	ug/L		04/17/24 08:40	04/17/24 21:48	1
Barium	ND		20	7.5	ug/L		04/17/24 08:40	04/17/24 21:48	1
Cadmium	ND		5.0	1.5	ug/L		04/17/24 08:40	04/17/24 21:48	1
Chromium	ND		20	5.5	ug/L		04/17/24 08:40	04/17/24 21:48	1
Lead	ND		5.0	1.2	ug/L		04/17/24 08:40	04/17/24 21:48	1
Selenium	ND		10	2.8	ug/L		04/17/24 08:40	04/17/24 21:48	1
Silver	ND		5.0	1.0	ug/L		04/17/24 08:40	04/17/24 21:48	1

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-495021/2-A
Matrix: Solid
Analysis Batch: 495547

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 495021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	5000	4910		ug/L		98	90 - 109
Barium	5000	5160		ug/L		103	90 - 113
Cadmium	500	493		ug/L		99	90 - 112
Chromium	5000	4770		ug/L		95	90 - 110
Lead	500	499		ug/L		100	90 - 110
Selenium	1000	936		ug/L		94	90 - 110
Silver	500	491		ug/L		98	90 - 112

Lab Sample ID: 410-167546-1 MS
Matrix: Solid
Analysis Batch: 495547

Client Sample ID: WL-SO-01-20240410
Prep Type: TCLP
Prep Batch: 495021

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	cn	5000	4370		ug/L		87	75 - 125
Barium	180	F1 cn	100000	19100	F1	ug/L		19	75 - 125
Cadmium	3.1	J cn	1000	851		ug/L		85	75 - 125
Chromium	ND	cn	5000	4260		ug/L		85	75 - 125
Lead	150	B F1 cn	5000	1620	F1	ug/L		29	75 - 125
Selenium	ND	cn	1000	837	J	ug/L		84	75 - 125
Silver	ND	F1 cn	5000	3010	F1	ug/L		60	75 - 125

Lab Sample ID: 410-167546-1 MSD
Matrix: Solid
Analysis Batch: 495547

Client Sample ID: WL-SO-01-20240410
Prep Type: TCLP
Prep Batch: 495021

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND	cn	5000	4220		ug/L		84	75 - 125	4	20
Barium	180	F1 cn	100000	18500	F1	ug/L		18	75 - 125	3	20
Cadmium	3.1	J cn	1000	885		ug/L		88	75 - 125	4	20
Chromium	ND	cn	5000	3960		ug/L		79	75 - 125	7	20
Lead	150	B F1 cn	5000	1510	F1	ug/L		27	75 - 125	7	20
Selenium	ND	cn	1000	824	J	ug/L		82	75 - 125	2	20
Silver	ND	F1 cn	5000	2890	F1	ug/L		58	75 - 125	4	20

Lab Sample ID: 410-167546-1 DU
Matrix: Solid
Analysis Batch: 495547

Client Sample ID: WL-SO-01-20240410
Prep Type: TCLP
Prep Batch: 495021

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND	cn	ND		ug/L		NC	20
Barium	180	F1 cn	181		ug/L		3	20
Cadmium	3.1	J cn	3.35	J	ug/L		6	20
Chromium	ND	cn	ND		ug/L		NC	20
Lead	150	B F1 cn	153		ug/L		2	20
Selenium	ND	cn	ND		ug/L		NC	20
Silver	ND	F1 cn	ND		ug/L		NC	20

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 410-495023/1-A
Matrix: Solid
Analysis Batch: 495851

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 495023

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000079	mg/L		04/17/24 09:55	04/18/24 10:20	1

Lab Sample ID: LCS 410-495023/2-A
Matrix: Solid
Analysis Batch: 495851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 495023

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00100	0.000995		mg/L		100	80 - 118

Lab Sample ID: 410-167546-1 MS
Matrix: Solid
Analysis Batch: 495851

Client Sample ID: WL-SO-01-20240410
Prep Type: TCLP
Prep Batch: 495023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000079	J F1 B cn	0.0200	0.00954	F1	mg/L		47	80 - 120

Lab Sample ID: 410-167546-1 MSD
Matrix: Solid
Analysis Batch: 495851

Client Sample ID: WL-SO-01-20240410
Prep Type: TCLP
Prep Batch: 495023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000079	J F1 B cn	0.0200	0.00962	F1	mg/L		48	80 - 120	1	20

Lab Sample ID: 410-167546-1 DU
Matrix: Solid
Analysis Batch: 495851

Client Sample ID: WL-SO-01-20240410
Prep Type: TCLP
Prep Batch: 495023

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.000079	J F1 B cn	ND		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-493702/1-A
Matrix: Solid
Analysis Batch: 494305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060	0.020	mg/Kg		04/15/24 05:45	04/15/24 12:32	1

Lab Sample ID: LCS 410-493702/2-A
Matrix: Solid
Analysis Batch: 494305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.160		mg/Kg		96	80 - 120

QC Sample Results

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-495130/1

Matrix: Solid

Analysis Batch: 495130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	81.0	81.0		Degrees F		100	96.9 - 103.1

Lab Sample ID: LCSD 410-495130/2

Matrix: Solid

Analysis Batch: 495130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	81.0	81.0		Degrees F		100	96.9 - 103.1	0	4

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-497402/1-A

Matrix: Solid

Analysis Batch: 497724

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 497402

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		60	20	mg/Kg		04/23/24 08:34	04/23/24 18:25	1

Lab Sample ID: LCS 410-497402/2-A

Matrix: Solid

Analysis Batch: 497724

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 497402

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	ND		mg/Kg		2	0 - 5.14

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-497402/1-A

Matrix: Solid

Analysis Batch: 497558

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 497402

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160	54	mg/Kg		04/23/24 08:34	04/23/24 12:49	1

Lab Sample ID: LCS 410-497402/20-A

Matrix: Solid

Analysis Batch: 497558

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 497402

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	388		mg/Kg		72	62 - 104

Method: 9045D - pH

Lab Sample ID: LCS 410-496264/1-A

Matrix: Solid

Analysis Batch: 497152

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		S.U.		100	95 - 105

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

GC/MS VOA

Prep Batch: 494786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	5035	

Leach Batch: 495617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	1311	

Analysis Batch: 495946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	8260D	494786
MB 410-495946/8	Method Blank	Total/NA	Solid	8260D	
LCS 410-495946/9	Lab Control Sample	Total/NA	Solid	8260D	

Analysis Batch: 497415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	8260D	495617
MB 410-497415/7	Method Blank	Total/NA	Solid	8260D	
LCS 410-497415/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-497415/5	Lab Control Sample Dup	Total/NA	Solid	8260D	

GC/MS Semi VOA

Leach Batch: 494156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	1311	

Prep Batch: 494875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	3546	
MB 410-494875/1-A	Method Blank	Total/NA	Solid	3546	
LCS 410-494875/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 410-494875/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 495064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	8270E	494875
MB 410-494875/1-A	Method Blank	Total/NA	Solid	8270E	494875
LCS 410-494875/2-A	Lab Control Sample	Total/NA	Solid	8270E	494875
LCSD 410-494875/3-A	Lab Control Sample Dup	Total/NA	Solid	8270E	494875

Prep Batch: 495382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	3510C	494156
MB 410-495382/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 410-495382/2-A	Lab Control Sample	Total/NA	Solid	3510C	

Analysis Batch: 495591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	8270E	495382
MB 410-495382/1-A	Method Blank	Total/NA	Solid	8270E	495382
LCS 410-495382/2-A	Lab Control Sample	Total/NA	Solid	8270E	495382

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

GC VOA

Prep Batch: 494785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	5035	

Analysis Batch: 495301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	8015D	494785
MB 410-495301/5	Method Blank	Total/NA	Solid	8015D	
LCS 410-495301/8	Lab Control Sample	Total/NA	Solid	8015D	
LCSD 410-495301/9	Lab Control Sample Dup	Total/NA	Solid	8015D	

GC Semi VOA

Leach Batch: 494156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	1311	
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	1311	
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	1311	

Prep Batch: 494334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	3546	
MB 410-494334/1-A	Method Blank	Total/NA	Solid	3546	
LCS 410-494334/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 494625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	8015D	494334
MB 410-494334/1-A	Method Blank	Total/NA	Solid	8015D	494334
LCS 410-494334/2-A	Lab Control Sample	Total/NA	Solid	8015D	494334

Prep Batch: 494994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	8151A	494156
MB 410-494994/2-A	Method Blank	Total/NA	Solid	8151A	
LCS 410-494994/3-A	Lab Control Sample	Total/NA	Solid	8151A	
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	8151A	494156
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	8151A	494156

Analysis Batch: 495046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	8151A	494994
MB 410-494994/2-A	Method Blank	Total/NA	Solid	8151A	494994
LCS 410-494994/3-A	Lab Control Sample	Total/NA	Solid	8151A	494994
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	8151A	494994
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	8151A	494994

Prep Batch: 495070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	3546	
MB 410-495070/1-A	Method Blank	Total/NA	Solid	3546	
LCS 410-495070/2-A	Lab Control Sample	Total/NA	Solid	3546	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

GC Semi VOA

Prep Batch: 495075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	3546	
MB 410-495075/1-A	Method Blank	Total/NA	Solid	3546	
LCS 410-495075/2-A	Lab Control Sample	Total/NA	Solid	3546	

Prep Batch: 495395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	3510C	494156
MB 410-495395/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 410-495395/2-A	Lab Control Sample	Total/NA	Solid	3510C	
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	3510C	494156
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	3510C	494156

Analysis Batch: 495483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	8082A	495075
MB 410-495075/1-A	Method Blank	Total/NA	Solid	8082A	495075
LCS 410-495075/2-A	Lab Control Sample	Total/NA	Solid	8082A	495075

Analysis Batch: 495535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	8081B	495070
MB 410-495070/1-A	Method Blank	Total/NA	Solid	8081B	495070
LCS 410-495070/2-A	Lab Control Sample	Total/NA	Solid	8081B	495070

Analysis Batch: 496049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	8081B	495395
MB 410-495395/1-A	Method Blank	Total/NA	Solid	8081B	495395
LCS 410-495395/2-A	Lab Control Sample	Total/NA	Solid	8081B	495395
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	8081B	495395
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	8081B	495395

LCMS

Prep Batch: 495793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	1633 Shake	
MB 410-495793/1-A	Method Blank	Total/NA	Solid	1633 Shake	
LCS 410-495793/2-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
LLCS 410-495793/3-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
410-167546-1 DU	WL-SO-01-20240410	Total/NA	Solid	1633 Shake	

Analysis Batch: 499134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	Draft-4 1633	495793
MB 410-495793/1-A	Method Blank	Total/NA	Solid	Draft-4 1633	495793
LCS 410-495793/2-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	495793
LLCS 410-495793/3-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	495793
410-167546-1 DU	WL-SO-01-20240410	Total/NA	Solid	Draft-4 1633	495793

QC Association Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Metals

Prep Batch: 493702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	7471B	
MB 410-493702/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-493702/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 494154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	3050B	
MB 410-494154/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-494154/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	

Leach Batch: 494156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	1311	
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	1311	
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	1311	
410-167546-1 DU	WL-SO-01-20240410	TCLP	Solid	1311	

Analysis Batch: 494305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	7471B	493702
MB 410-493702/1-A	Method Blank	Total/NA	Solid	7471B	493702
LCS 410-493702/2-A	Lab Control Sample	Total/NA	Solid	7471B	493702

Analysis Batch: 494459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	6020B	494154
MB 410-494154/1-A ^2	Method Blank	Total/NA	Solid	6020B	494154
LCS 410-494154/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	494154

Prep Batch: 495021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	3005A	494156
MB 410-495021/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 410-495021/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	3005A	494156
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	3005A	494156
410-167546-1 DU	WL-SO-01-20240410	TCLP	Solid	3005A	494156

Prep Batch: 495023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	7470A	494156
MB 410-495023/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 410-495023/2-A	Lab Control Sample	Total/NA	Solid	7470A	
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	7470A	494156
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	7470A	494156
410-167546-1 DU	WL-SO-01-20240410	TCLP	Solid	7470A	494156

Analysis Batch: 495547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	6020B	495021
MB 410-495021/1-A	Method Blank	Total Recoverable	Solid	6020B	495021

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Metals (Continued)

Analysis Batch: 495547 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-495021/2-A	Lab Control Sample	Total Recoverable	Solid	6020B	495021
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	6020B	495021
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	6020B	495021
410-167546-1 DU	WL-SO-01-20240410	TCLP	Solid	6020B	495021

Analysis Batch: 495851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	TCLP	Solid	7470A	495023
MB 410-495023/1-A	Method Blank	Total/NA	Solid	7470A	495023
LCS 410-495023/2-A	Lab Control Sample	Total/NA	Solid	7470A	495023
410-167546-1 MS	WL-SO-01-20240410	TCLP	Solid	7470A	495023
410-167546-1 MSD	WL-SO-01-20240410	TCLP	Solid	7470A	495023
410-167546-1 DU	WL-SO-01-20240410	TCLP	Solid	7470A	495023

General Chemistry

Analysis Batch: 493804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	Moisture	

Analysis Batch: 495130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	1010B	
LCS 410-495130/1	Lab Control Sample	Total/NA	Solid	1010B	
LCSD 410-495130/2	Lab Control Sample Dup	Total/NA	Solid	1010B	

Leach Batch: 496264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Soluble	Solid	DI Leach	
LCS 410-496264/1-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 497152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Soluble	Solid	9045D	496264
LCS 410-496264/1-A	Lab Control Sample	Soluble	Solid	9045D	496264

Prep Batch: 497402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	7.3.4	
MB 410-497402/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-497402/20-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-497402/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	

Analysis Batch: 497558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	9034	497402
MB 410-497402/1-A	Method Blank	Total/NA	Solid	9034	497402
LCS 410-497402/20-A	Lab Control Sample	Total/NA	Solid	9034	497402

QC Association Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

General Chemistry

Analysis Batch: 497724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-167546-1	WL-SO-01-20240410	Total/NA	Solid	9012	497402
MB 410-497402/1-A	Method Blank	Total/NA	Solid	9012	497402
LCS 410-497402/2-A	Lab Control Sample	Total/NA	Solid	9012	497402

- 1
- 2
- 3
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- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Lab Chronicle

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			495617	UNWS	ELLE	04/18/24 07:39 - 04/19/24 06:50 ¹
TCLP	Analysis	8260D		20	497415	TQ4J	ELLE	04/23/24 18:24
TCLP	Leach	1311			494156	HA8T	ELLE	04/15/24 18:00 - 04/16/24 10:05 ¹
TCLP	Prep	3510C			495382	QJZ6	ELLE	04/17/24 16:02
TCLP	Analysis	8270E		1	495591	N5QU	ELLE	04/18/24 14:50
TCLP	Leach	1311			494156	HA8T	ELLE	04/15/24 18:00 - 04/16/24 10:05 ¹
TCLP	Prep	3510C			495395	T9CY	ELLE	04/17/24 16:15
TCLP	Analysis	8081B		10	496049	UAMZ	ELLE	04/19/24 12:02
TCLP	Leach	1311			494156	HA8T	ELLE	04/15/24 18:00 - 04/16/24 10:05 ¹
TCLP	Prep	8151A			494994	UKL2	ELLE	04/16/24 20:30
TCLP	Analysis	8151A		1	495046	UAMZ	ELLE	04/17/24 11:21
TCLP	Leach	1311			494156	HA8T	ELLE	04/15/24 18:00 - 04/16/24 10:05 ¹
TCLP	Prep	3005A			495021	UAMX	ELLE	04/17/24 08:40
TCLP	Analysis	6020B		1	495547	F7JF	ELLE	04/17/24 21:58
TCLP	Leach	1311			494156	HA8T	ELLE	04/15/24 18:00 - 04/16/24 10:05 ¹
TCLP	Prep	7470A			495023	UAMX	ELLE	04/17/24 09:55
TCLP	Analysis	7470A		1	495851	UEFS	ELLE	04/18/24 10:25
Total/NA	Analysis	1010B		1	495130	USAE	ELLE	04/17/24 08:41 - 04/17/24 08:41 ¹
Total/NA	Prep	7.3.4			497402	USE1	ELLE	04/23/24 08:34
Total/NA	Analysis	9012		1	497724	JCG7	ELLE	04/23/24 18:27
Total/NA	Prep	7.3.4			497402	USE1	ELLE	04/23/24 08:34
Total/NA	Analysis	9034		1	497558	USE1	ELLE	04/23/24 12:49
Soluble	Leach	DI Leach			496264	AVC3	ELLE	04/22/24 14:00
Soluble	Analysis	9045D		1	497152	AVC3	ELLE	04/22/24 15:31
Total/NA	Analysis	Moisture		1	493804	S9WT	ELLE	04/12/24 15:48

Client Sample ID: WL-SO-01-20240410

Lab Sample ID: 410-167546-1

Date Collected: 04/10/24 10:52

Matrix: Solid

Date Received: 04/11/24 17:20

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			494786	PV7W	ELLE	04/16/24 15:46
Total/NA	Analysis	8260D		1	495946	Y6ZN	ELLE	04/19/24 02:43
Total/NA	Prep	3546			494875	MD4W	ELLE	04/16/24 16:50
Total/NA	Analysis	8270E		1	495064	SJ89	ELLE	04/17/24 15:36
Total/NA	Prep	5035			494785	PV7W	ELLE	04/16/24 15:23
Total/NA	Analysis	8015D		25	495301	WJ7F	ELLE	04/17/24 20:54
Total/NA	Prep	3546			494334	MD4W	ELLE	04/15/24 15:55
Total/NA	Analysis	8015D		1	494625	KP5X	ELLE	04/16/24 16:57
Total/NA	Prep	3546			495070	LJG2	ELLE	04/17/24 09:59
Total/NA	Analysis	8081B		10	495535	UAMZ	ELLE	04/18/24 18:20
Total/NA	Prep	3546			495075	LJG2	ELLE	04/17/24 10:01
Total/NA	Analysis	8082A		1	495483	M6UH	ELLE	04/17/24 21:44
Total/NA	Prep	1633 Shake			495793	HQ8B	ELLE	04/18/24 10:54
Total/NA	Analysis	Draft-4 1633		1	499134	BWX7	ELLE	04/27/24 13:33

Eurofins Lancaster Laboratories Environment Testing, LLC

Lab Chronicle

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Client Sample ID: WL-SO-01-20240410
Date Collected: 04/10/24 10:52
Date Received: 04/11/24 17:20

Lab Sample ID: 410-167546-1
Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			494154	UAMX	ELLE	04/15/24 09:20
Total/NA	Analysis	6020B		2	494459	UCIG	ELLE	04/15/24 17:01
Total/NA	Prep	7471B			493702	UAMX	ELLE	04/15/24 05:45
Total/NA	Analysis	7471B		1	494305	UEFS	ELLE	04/15/24 13:23

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9012	7.3.4	Solid	Cyanide, Reactive
9034	7.3.4	Solid	Sulfide, Reactive
9045D		Solid	Temperature
Draft-4 1633	1633 Shake	Solid	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
Draft-4 1633	1633 Shake	Solid	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)
Draft-4 1633	1633 Shake	Solid	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)
Draft-4 1633	1633 Shake	Solid	3-Perfluoroheptylpropanoic acid (7:3 FTCA)
Draft-4 1633	1633 Shake	Solid	3-Perfluoropentylpropanoic acid (5:3 FTCA)
Draft-4 1633	1633 Shake	Solid	3-Perfluoropropylpropanoic acid (3:3 FTCA)
Draft-4 1633	1633 Shake	Solid	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
Draft-4 1633	1633 Shake	Solid	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)
Draft-4 1633	1633 Shake	Solid	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)
Draft-4 1633	1633 Shake	Solid	N-ethylperfluorooctane sulfonamide (NEtFOSA)
Draft-4 1633	1633 Shake	Solid	N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)
Draft-4 1633	1633 Shake	Solid	N-methylperfluorooctane sulfonamide (NMeFOSA)
Draft-4 1633	1633 Shake	Solid	N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)
Draft-4 1633	1633 Shake	Solid	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
Draft-4 1633	1633 Shake	Solid	Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
Draft-4 1633	1633 Shake	Solid	Perfluoro-3-methoxypropanoic acid (PFMPA)
Draft-4 1633	1633 Shake	Solid	Perfluoro-4-methoxybutanoic acid (PFMBA)
Draft-4 1633	1633 Shake	Solid	Perfluorobutanesulfonic acid (PFBS)
Draft-4 1633	1633 Shake	Solid	Perfluorodecanesulfonic acid (PFDS)
Draft-4 1633	1633 Shake	Solid	Perfluorododecanesulfonic acid (PFDoS)
Draft-4 1633	1633 Shake	Solid	Perfluoroheptanesulfonic acid (PFHpS)
Draft-4 1633	1633 Shake	Solid	Perfluorohexanesulfonic acid (PFHxS)
Draft-4 1633	1633 Shake	Solid	Perfluorononanesulfonic acid (PFNS)
Draft-4 1633	1633 Shake	Solid	Perfluorooctanesulfonamide (PFOSA)
Draft-4 1633	1633 Shake	Solid	Perfluoropentanesulfonic acid (PFPeS)
Moisture		Solid	Percent Moisture

Method Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8015D	Gasoline Range Organics (GRO) (GC)	SW846	ELLE
8015D	Diesel Range Organics (DRO) (GC)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
8081B	TCLP Pesticides	SW846	ELLE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ELLE
8151A	TCLP Herbicides	SW846	ELLE
Draft-4 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	TCLP Mercury	SW846	ELLE
7471B	Mercury (CVAA)	SW846	ELLE
1010B	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
9045D	pH	SW846	ELLE
Moisture	Percent Moisture	EPA	ELLE
1311	TCLP Extraction	SW846	ELLE
1633 Shake	Shake Extraction with SPE	EPA	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3050B	Preparation, Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
3546	Microwave Extraction	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
5035	Closed System Purge and Trap	SW846	ELLE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
7471B	Preparation, Mercury	SW846	ELLE
8151A	Extraction (Herbicides)	SW846	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	ELLE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Brown and Caldwell
Project/Site: Former Nepera Plant Site

Job ID: 410-167546-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-167546-1	WL-SO-01-20240410	Solid	04/10/24 10:52	04/11/24 17:20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Login Sample Receipt Checklist

Client: Brown and Caldwell

Job Number: 410-167546-1

Login Number: 167546

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Metzger, Katherine A

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	