MOTT MACDONALD

2023 Post-Closure Groundwater Monitoring Report

Scougal Rubber Corporation
Facility/Site No. 93637295
VCP No. NW1707

March 2024

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Scougal Rubber Corporation
6239 Corson Avenue South
Seattle, WA

2023 Post-Closure Groundwater Monitoring Report

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Document reference: 518300048-001 |

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1 Introduction

This report is the second annual groundwater monitoring report for the Site known as Scougal Rubber Corp (Scougal). Scougal is former Voluntary Cleanup Site NW1707 and Washington State Department of Ecology (Ecology) Facility Site #93637295. Scougal's address is 6239 Corson Ave S, Seattle, WA 98108.

As of 2020, Scougal completed soil and groundwater investigation and remediation to Model Toxics Control Act (MTCA) standards, except localized areas of residual groundwater contamination. This is the second annual post-closure groundwater monitoring report that began after receipt of Ecology's No Further Action with Environmental Covenant.

Starting in 2022, groundwater monitoring occurs every six months for two years (2022 and 2023). After that time, if concentrations do not increase by more than 100 percent, the frequency of groundwater monitoring will decrease to once per year until five years after receipt of the No Further Action with Environmental Covenant from Ecology (2024, 2025, and 2026). The monitoring occurs in accordance with the No Further Action Letter and its attachment, Scougal Rubber Corp, Post-Closure Groundwater Monitoring Plan (Pacific Groundwater Group [PGG] February 2021).

2 2023 Groundwater Monitoring

2.1 Work Performed

The locations of post-closure groundwater monitoring wells are shown on Figure 1, as well as the areas where groundwater concentrations exceed MTCA Method A cleanup levels. As shown on Figure 1, the following wells are sampled: MW-12, MW-13, MW-14, and MW-17.

On May 17, 2023 and November 8, 2023, groundwater monitoring was performed at the Scougal Site. The sampling followed procedures set forth in the Post-Closure Groundwater Monitoring Plan (PGG 2021).

Samples were collected according to standard low flow methods described in the Monitoring Plan using care to collect volatile organic compound analyses and maintain sample quality. Samples were stored on ice and chain of custody was maintained until receipt by Analytical Resources, Inc., a Washington-certified laboratory.

2.2 Analytical Results

Samples were analyzed by the laboratory using U.S. Environmental Protection Agency Method 8260 to report concentrations of the following analytes for comparison to MTCA Method A (or Method B for 1,2-Dichloroethylene (DCE)) cleanup levels (micrograms per liter or ug/L) listed:

- Trichloroethylene 5 ug/L
- 1,2-Dichloroethylene 72 ug/L
- Vinyl Chloride 0.2 ug/L

Table 1 provides the analytical results from both 2023 sampling events. As shown and as found in previous sampling, the most downgradient well, MW-12, does not exceed the TCE Method A cleanup level. Also as expected, DCE does not exceed the Method B cleanup level in any wells.

TCE exceeds the Method A cleanup level for both sampling events in wells MW-14 and MW-17. Vinyl chloride exceeds the Method A cleanup level for both sampling events in wells MW-12, MW-13, and MW-14.

3 2024 Monitoring and Reporting Planned

Concentrations have not increased by more than 100 percent when compared to groundwater monitoring data from before the No Further Action (Table 1). Therefore, groundwater monitoring will proceed in 2024 per the Post-Closure Groundwater Monitoring Plan (PGG 2021) with one annual sampling event until five years after receipt of the No Further Action with Environmental Covenant from Ecology (sampling will occur once/year during 2024, 2025, and 2026).

Table 1. Analytical Results for Groundwater Samples from before the No Further Action, and for 2022 and 2023 Groundwater Samples from Post-Closure Monitoring Wells, Scougal Rubber Corporation, Seattle, WA

	Well ID	Trichloroethene (TCE)	Vinyl Chloride	cis-1,2-Dichloroethene (1,2-DCE)
Cleanup Levels		5[a] ug/L	0.2[a] ug/L	72[b] ug/L
December 2019	MW-12	1.0U	**0.82**	1.1
December 2019	MW-13	**5.3**	**4.1**	13
December 2019	MW-14	**9.5**	**5.8**	2
December 2019	MW-17	**14**	**0.89**	5.2
February 2020	MW-12	1.0U	**0.95**	1.3
February 2020	MW-13	**28**	0.2U	1.0U
February 2020	MW-14	**16**	**2.6**	1.5
February 2020	MW-17	**21**	0.2U	1.2
March 2022	MW-12	0.11J	**0.79**	1.15
March 2022	MW-13	**30.7**	**0.87**	2.78
March 2022	MW-14	**24.8**	**0.76**	1.02
March 2022	MW-17*	NS	NS	NS
November 2022	MW-12	0.20U	**0.79**	0.89
November 2022	MW-13	4.76	**6.84**	10.9
November 2022	MW-14	**24.1**	**1.95**	1.5
November 2022	MW-17	**16.4**	0.20U	0.34
May 2023	MW-12	0.09J	**0.89**	1.00
May 2023	MW-13	1.34	**4.44**	7.16
May 2023	MW-14	**17**	**1.32**	2.09
May 2023	MW-17	**10.2**	0.20U	0.31
November 2023	MW-12	0.20U	**0.64**	0.79
November 2023	MW-13	1.48	**5.16**	8.44
November 2023	MW-14	**17.13**	**1.97**	2.13
November 2023	MW-17	**15.2**	0.20U	0.27

[a] MTCA Method A cleanup levels are provided for comparison purposes only.

[b] MTCA Method B cleanup levels are provided for comparison purposes only.

U indicates non-detect.

J qualifier signifies the estimated concentration value was detection below the reporting limit.

NS means that the well was not sampled.

*No access to MW-17 as Ecology blocks and other equipment were stored in the area.

K:\JANET\JK0605-ScougalRubber\GIS\Scougal_letter_MonitoringWells.mxd 2/10/2021

Monitoring Wells

N

0 Feet 50

2019 Aerial from King County

Figure 1
Groundwater Monitoring Well Locations
Scougal Rubber Site

MOTT MACDONALD

Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

18 May 2023

Travis Klaas
Mott MacDonald
1601 5th Avenue Suite 800
Seattle, WA 98101

RE: Scougal Rubber (Scougal Rubber)

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
23E0412	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Kelly Bottem, Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006-012

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 237012	Turn-around Requested: STD	Page: 1 of	
ARI Client Company: Mott MacDonald	Phone: 206-329-7587	Date:	Ice Present? X ES
Client Contact: Travis Klaas		No. of Coolers: 1	Cooler Temps: 10-3°
Client Project Name: Scougal Rubber			
Client Project #: 518300048-001	Samplers: AP + TWK		

Analytical Resources, LLC
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: VOC* 8260	Notes/Comments
MW-14 (1)	5/17/23	1015	W	6	X	Just analyze TCE, 1-2-DCE vinyl chloride
MW-17	5/17/23	1005	W	3	X	
MW-13	5/17/23	1345	W	3	X	
MW-12	5/17/23	1230	W	3	X	

Comments/Special Instructions
(1) collected dup. set for MS/MSD

8260
-TCE
-1,2-DCE
-VC

	Relinquished by:	Received by:	Relinquished by:	Received by:
(Signature)				
Printed Name:	Ashley Parkhurst	Roman M.		
Company:	Mott MacDonald	ARI		
Date & Time:	5/17/23 15:18	5/17/23 1518		

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-14	23E0412-01	Water	17-May-2023 10:15	17-May-2023 15:18
MW-17	23E0412-02	Water	17-May-2023 10:05	17-May-2023 15:18
MW-13	23E0412-03	Water	17-May-2023 13:45	17-May-2023 15:18
MW-12	23E0412-04	Water	17-May-2023 12:30	17-May-2023 15:18
Trip Blank	23E0412-05	Water	17-May-2023 10:15	17-May-2023 15:18

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

Work Order Case Narrative

Volatiles - EPA Method SW8260D

The sample(s) were analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits.

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Mott MacDonald
Project Name: Scougal Rubber
COC No(s): (NA)
Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
Assigned ARI Job No: 23E0412
Tracking No: (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES (NO)
Were custody papers included with the cooler? (YES) NO
Were custody papers properly filled out (ink, signed, etc.) (YES) NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 10.3°
Time 1518
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: 9708
Cooler Accepted by: Date: 5/17/23 Time: 1518

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)
What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:
Was sufficient ice used (if appropriate)? NA YES (NO)
How were bottles sealed in plastic bags? Individually Grouped (Not)
Did all bottles arrive in good condition (unbroken)? (YES) NO
Were all bottle labels complete and legible? (YES) NO
Did the number of containers listed on COC match with the number of containers received? (YES) NO
Did all bottle labels and tags agree with custody papers? (YES) NO
Were all bottles used correct for the requested analyses? (YES) NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) (NA) YES NO
Were all VOC vials free of air bubbles? NA (YES) NO
Was sufficient amount of sample sent in each bottle? NA (YES) NO
Date VOC Trip Blank was made at ARI EL 5/17/23 (NA) YES 5/12/23
Were the sample(s) split by ARI? (NA) YES Date/Time: EL 5/17/23 Equipment: Split by:

Samples Logged by: EL Date: May 17/23 Time: 15:58 Labels checked by:

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

① sample not split at ARI

By: Date:

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

ARI Work Order: 23E0412

Cooler#: _____ **Temperature(°C):** 10.10

Sample ID	Bottle Count	Bottle Type
Samples above 6°C		

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Completed by: _____ Date: 5/12/21 Time: 1518

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

MW-14

23E0412-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 05/17/2023 10:15

Instrument: NT2 Analyst: LH — Analyzed: 05/18/2023 09:02

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23E0412-01 B

Preparation Batch: BLE0531 — Sample Size: 10 mL

Prepared: 05/18/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	1.32	ug/L	
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	2.09	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	17.0	ug/L	
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*109*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*94.2*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*96.8*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*102*	*%*	

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

MW-17

23E0412-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 05/17/2023 10:05
Instrument: NT2 Analyst: LH — Analyzed: 05/18/2023 09:23

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23E0412-02 B
Preparation Batch: BLE0531 — Sample Size: 10 mL
Prepared: 05/18/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	0.31	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	10.2	ug/L	
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*108*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*94.8*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*96.4*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*103*	*%*	

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

MW-13

23E0412-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 05/17/2023 13:45
Instrument: NT2 Analyst: LH — Analyzed: 05/18/2023 09:44

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23E0412-03 B
Preparation Batch: BLE0531 — Sample Size: 10 mL
Prepared: 05/18/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	4.44	ug/L	
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	7.16	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	1.34	ug/L	
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*108*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*95.5*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*97.5*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*102*	*%*	

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

MW-12

23E0412-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 05/17/2023 12:30
Instrument: NT2 Analyst: LH — Analyzed: 05/18/2023 10:04

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23E0412-04 B
Preparation Batch: BLE0531 — Sample Size: 10 mL
Prepared: 05/18/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	0.89	ug/L	
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	1.00	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	0.09	ug/L	J
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*110*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*96.4*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*92.8*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*104*	*%*	

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

Trip Blank

23E0412-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 05/17/2023 10:15

Instrument: NT2 Analyst: LH — Analyzed: 05/18/2023 08:42

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23E0412-05 B

Preparation Batch: BLE0531 — Sample Size: 10 mL

Prepared: 05/18/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.07	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*106*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*98.0*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*97.9*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*102*	*%*	

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BLE0531 - EPA 8260D

Instrument: NT2 Analyst: LH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLE0531-BLK1)					Prepared: 18-May-2023 Analyzed: 18-May-2023 08:21						
Vinyl Chloride	ND	0.08	0.20	ug/L							U
cis-1,2-Dichloroethene	ND	0.08	0.20	ug/L							U
Trichloroethene	ND	0.07	0.20	ug/L							U
Surrogate: 1,2-Dichloroethane-d4	5.38			ug/L	*5.00*		*108*	*80-129*			
Surrogate: Toluene-d8	4.87			ug/L	*5.00*		*97.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	4.90			ug/L	*5.00*		*98.0*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	5.10			ug/L	*5.00*		*102*	*80-120*			
LCS (BLE0531-BS1)					Prepared: 18-May-2023 Analyzed: 18-May-2023 06:59						
Vinyl Chloride	9.39	0.08	0.20	ug/L	10.0		93.9	66-133			
cis-1,2-Dichloroethene	10.2	0.08	0.20	ug/L	10.0		102	80-121			
Trichloroethene	9.81	0.07	0.20	ug/L	10.0		98.1	80-120			
Surrogate: 1,2-Dichloroethane-d4	4.99			ug/L	*5.00*		*99.8*	*80-129*			
Surrogate: Toluene-d8	5.00			ug/L	*5.00*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	5.14			ug/L	*5.00*		*103*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	5.06			ug/L	*5.00*		*101*	*80-120*			
LCS Dup (BLE0531-BSD1)					Prepared: 18-May-2023 Analyzed: 18-May-2023 07:40						
Vinyl Chloride	9.53	0.08	0.20	ug/L	10.0		95.3	66-133	1.45	30	
cis-1,2-Dichloroethene	10.4	0.08	0.20	ug/L	10.0		104	80-121	2.42	30	
Trichloroethene	9.72	0.07	0.20	ug/L	10.0		97.2	80-120	0.84	30	
Surrogate: 1,2-Dichloroethane-d4	5.24			ug/L	*5.00*		*105*	*80-129*			
Surrogate: Toluene-d8	4.94			ug/L	*5.00*		*98.7*	*80-120*			
Surrogate: 4-Bromofluorobenzene	5.04			ug/L	*5.00*		*101*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	5.26			ug/L	*5.00*		*105*	*80-120*			
Matrix Spike (BLE0531-MS1)		**Source: 23E0412-01**			Prepared: 18-May-2023 Analyzed: 18-May-2023 10:25						
Vinyl Chloride	10.5	0.08	0.20	ug/L	10.0	1.32	91.4	66-133			
cis-1,2-Dichloroethene	12.3	0.08	0.20	ug/L	10.0	2.09	102	80-121			
Trichloroethene	26.6	0.07	0.20	ug/L	10.0	17.0	95.9	80-120			
Surrogate: 1,2-Dichloroethane-d4	5.36			ug/L	*5.00*	*5.45*	*107*	*80-129*			
Surrogate: Toluene-d8	4.82			ug/L	*5.00*	*4.71*	*96.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	4.97			ug/L	*5.00*	*4.84*	*99.4*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	4.93			ug/L	*5.00*	*5.10*	*98.7*	*80-120*			

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BLE0531 - EPA 8260D

Instrument: NT2 Analyst: LH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BLE0531-MS1)	**Source: 23E0412-01**			Prepared: 18-May-2023 Analyzed: 18-May-2023 10:25							
Recovery limits for target analytes in MS/MSD QC samples are advisory only.											
Matrix Spike Dup (BLE0531-MSD1)	**Source: 23E0412-01**			Prepared: 18-May-2023 Analyzed: 18-May-2023 10:45							
Vinyl Chloride	10.2	0.08	0.20	ug/L	10.0	1.32	88.8	66-133	2.52	30	
cis-1,2-Dichloroethene	11.9	0.08	0.20	ug/L	10.0	2.09	98.3	80-121	2.98	30	
Trichloroethene	25.7	0.07	0.20	ug/L	10.0	17.0	87.1	80-120	3.35	30	
Surrogate: 1,2-Dichloroethane-d4	5.26			ug/L	*5.00*	*5.45*	*105*	*80-129*			
Surrogate: Toluene-d8	4.92			ug/L	*5.00*	*4.71*	*98.3*	*80-120*			
Surrogate: 4-Bromofluorobenzene	5.10			ug/L	*5.00*	*4.84*	*102*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	5.06			ug/L	*5.00*	*5.10*	*101*	*80-120*			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

Certified Analyses included in this Report

Analyte	Certifications
EPA 8260D in Water	
Vinyl Chloride	DoD-ELAP,ADEC,NELAP,WADOE
cis-1,2-Dichloroethene	DoD-ELAP,ADEC,NELAP,WADOE
Trichloroethene	DoD-ELAP,ADEC,NELAP,WADOE

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
WADOE	WA Dept of Ecology	C558	06/30/2023
WA-DW	Ecology - Drinking Water	C558	06/30/2023

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: Scougal Rubber	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	18-May-2023 13:45

Notes and Definitions

*	Flagged value is not within established control limits.
J	Estimated concentration value detected below the reporting limit.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

11 November 2023

Travis Klaas
Mott MacDonald
1601 5th Avenue Suite 800
Seattle, WA 98101

RE: Scougal Rubber (518300048-001)

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
23K0259	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Kelly Bottem, Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006-012

23K0259

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: STD
ARI Client Company: MOTT MACDONALD	Phone: 206-329-7587
Client Contact: ~~SC~~ TRAVIS KLAAS	
Client Project Name: SCOUGAL RUBBER	
Client Project #: 518300048-001	Samplers: AP + TPB

Page: 1 of 1	
Date:	Ice Present?
No. of Coolers: 1	Cooler Temps:

Analytical Resources, LLC
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: *VOC 8260	Notes/Comments
MW-12	11/8/23	1245	W	3	X	* JUST ANALYZE TCE, 1-2-DCE VINYL CHLORIDE
MW-14 ①	11/8/23	1010	W	6	X	
MW-17	11/8/23	1015	W	3	X	
MW-13	11/8/23	1345	W	3	X	

Comments/Special Instructions

① COLLECTED DUP SET FOR MS/MSD

8260: - TCE
- 1-2-DCE
- VC

	Relinquished by:	Received by:	Relinquished by:	Received by:
(Signature)	Thais P. Brito			
Printed Name:	THAIS PALMA DE BRITO	Kevin Cruz		
Company:	MOTT MACDONALD	ARIC		
Date & Time:	11/8/23 15:25	11-8-23 1525		

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-12	23K0259-01	Water	08-Nov-2023 12:45	08-Nov-2023 15:25
MW-16	23K0259-02	Water	08-Nov-2023 10:10	08-Nov-2023 15:25
MW-17	23K0259-03	Water	08-Nov-2023 10:15	08-Nov-2023 15:25
MW-13	23K0259-04	Water	08-Nov-2023 13:45	08-Nov-2023 15:25
Trip Blanks	23K0259-05	Water	08-Nov-2023 10:10	08-Nov-2023 15:25

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Work Order Case Narrative

Volatiles - EPA Method SW8260D

The sample(s) were analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits.

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Mott MacDonald — Project Name: Scougal Rubber

COC No(s): NA — Delivered by: Fed-Ex UPS Courier Hand Delivered Other:

Assigned ARI Job No: 23K0259 — Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 1525 — 15.1

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: T009708

Cooler Accepted by: KFC — Date: 11-8-23 — Time: 1525

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used?	Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA	11/07/23	

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: MP — Date: 11/09/23 — Time: 0938 — Labels checked by: MP

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

ARI Work Order: 23K0294

Cooler#: 1 **Temperature(°C):** 15.1

Sample ID	Bottle Count	Bottle Type
Samples recieved above 6°C		

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Completed by: KFC Date: 11-8-23 Time: 1525

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

MW-12

23K0259-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 11/08/2023 12:45
Instrument: NT20 Analyst: LH — Analyzed: 11/09/2023 14:12

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23K0259-01 B
Preparation Batch: BLK0271 — Sample Size: 10 mL
Prepared: 11/09/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	0.64	ug/L	
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	0.79	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*104*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*98.0*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*94.3*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*103*	*%*	

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

MW-16

23K0259-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 11/08/2023 10:10
Instrument: NT20 Analyst: LH — Analyzed: 11/09/2023 14:35

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23K0259-02 C
Preparation Batch: BLK0271 — Sample Size: 10 mL
Prepared: 11/09/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	1.97	ug/L	
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	2.13	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	17.3	ug/L	
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*103*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*98.6*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*96.8*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*97.8*	*%*	

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

MW-17

23K0259-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 11/08/2023 10:15
Instrument: NT20 Analyst: LH — Analyzed: 11/09/2023 14:59

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23K0259-03 A
Preparation Batch: BLK0271 — Sample Size: 10 mL
Prepared: 11/09/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	0.27	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	15.2	ug/L	
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*105*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*99.0*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*96.8*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*101*	*%*	

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Report

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

MW-13

23K0259-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 11/08/2023 13:45
Instrument: NT20 Analyst: LH — Analyzed: 11/09/2023 15:21

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23K0259-04 A
Preparation Batch: BLK0271 — Sample Size: 10 mL
Prepared: 11/09/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	5.16	ug/L	
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	8.44	ug/L	
Trichloroethene	79-01-6	1	0.07	0.20	1.48	ug/L	
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*104*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*100*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*93.7*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*105*	*%*	

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Trip Blanks

23K0259-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D — Sampled: 11/08/2023 10:10

Instrument: NT20 Analyst: LH — Analyzed: 11/09/2023 13:49

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) — Extract ID: 23K0259-05 A

Preparation Batch: BLK0271 — Sample Size: 10 mL

Prepared: 11/09/2023 — Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Vinyl Chloride	75-01-4	1	0.08	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.08	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.07	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4				*80-129 %*	*105*	*%*	
Surrogate: Toluene-d8				*80-120 %*	*98.3*	*%*	
Surrogate: 4-Bromofluorobenzene				*80-120 %*	*94.1*	*%*	
Surrogate: 1,2-Dichlorobenzene-d4				*80-120 %*	*103*	*%*	

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BLK0271 - EPA 8260D

Instrument: NT20 Analyst: LH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLK0271-BLK2)	Prepared: 09-Nov-2023 Analyzed: 09-Nov-2023 08:45										
Vinyl Chloride	ND	0.08	0.20	ug/L							U
cis-1,2-Dichloroethene	ND	0.08	0.20	ug/L							U
Trichloroethene	ND	0.07	0.20	ug/L							U
Surrogate: 1,2-Dichloroethane-d4	5.02			ug/L	*5.00*		*100*	*80-129*			
Surrogate: Toluene-d8	4.94			ug/L	*5.00*		*98.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	4.99			ug/L	*5.00*		*99.8*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	4.87			ug/L	*5.00*		*97.4*	*80-120*			

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BLK0271 - EPA 8260D

Instrument: NT20 Analyst: LH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BLK0271-BS2)				Prepared: 09-Nov-2023 Analyzed: 09-Nov-2023 07:13							
Vinyl Chloride	10.4	0.08	0.20	ug/L	10.0		104	66-133			
cis-1,2-Dichloroethene	9.77	0.08	0.20	ug/L	10.0		97.7	80-121			
Trichloroethene	9.90	0.07	0.20	ug/L	10.0		99.0	80-120			
Surrogate: 1,2-Dichloroethane-d4	4.94			ug/L	*5.00*		*98.8*	*80-129*			
Surrogate: Toluene-d8	5.04			ug/L	*5.00*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	5.09			ug/L	*5.00*		*102*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	4.96			ug/L	*5.00*		*99.3*	*80-120*			

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BLK0271 - EPA 8260D

Instrument: NT20 Analyst: LH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BLK0271-BSD2)				Prepared: 09-Nov-2023 Analyzed: 09-Nov-2023 07:59							
Vinyl Chloride	10.3	0.08	0.20	ug/L	10.0		103	66-133	0.91	30	
cis-1,2-Dichloroethene	10.0	0.08	0.20	ug/L	10.0		100	80-121	2.64	30	
Trichloroethene	9.91	0.07	0.20	ug/L	10.0		99.1	80-120	0.13	30	
Surrogate: 1,2-Dichloroethane-d4	4.90			ug/L	*5.00*		*98.0*	*80-129*			
Surrogate: Toluene-d8	5.08			ug/L	*5.00*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	5.05			ug/L	*5.00*		*101*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	5.00			ug/L	*5.00*		*100*	*80-120*			

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BLK0271 - EPA 8260D

Instrument: NT20 Analyst: LH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BLK0271-MS1)	**Source: 23K0259-02**			Prepared: 09-Nov-2023 Analyzed: 09-Nov-2023 16:53							
Vinyl Chloride	11.7	0.08	0.20	ug/L	10.0	1.97	97.0	66-133			
cis-1,2-Dichloroethene	11.7	0.08	0.20	ug/L	10.0	2.13	95.7	80-121			
Trichloroethene	26.2	0.07	0.20	ug/L	10.0	17.3	88.8	80-120			
Surrogate: 1,2-Dichloroethane-d4	5.12			ug/L	*5.00*	*5.14*	*102*	*80-129*			
Surrogate: Toluene-d8	5.08			ug/L	*5.00*	*4.93*	*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	5.00			ug/L	*5.00*	*4.84*	*100*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	4.99			ug/L	*5.00*	*4.89*	*99.9*	*80-120*			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BLK0271 - EPA 8260D

Instrument: NT20 Analyst: LH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BLK0271-MSD1)	**Source: 23K0259-02**			Prepared: 09-Nov-2023 Analyzed: 09-Nov-2023 17:16							
Vinyl Chloride	12.1	0.08	0.20	ug/L	10.0	1.97	101	66-133	3.35	30	
cis-1,2-Dichloroethene	12.2	0.08	0.20	ug/L	10.0	2.13	101	80-121	4.56	30	
Trichloroethene	27.1	0.07	0.20	ug/L	10.0	17.3	97.7	80-120	3.34	30	
Surrogate: 1,2-Dichloroethane-d4	5.13			ug/L	*5.00*	*5.14*	*103*	*80-129*			
Surrogate: Toluene-d8	5.16			ug/L	*5.00*	*4.93*	*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	5.02			ug/L	*5.00*	*4.84*	*100*	*80-120*			
Surrogate: 1,2-Dichlorobenzene-d4	5.12			ug/L	*5.00*	*4.89*	*102*	*80-120*			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Mott MacDonald	Project: Scougal Rubber	
1601 5th Avenue Suite 800	Project Number: 518300048-001	**Reported:**
Seattle WA, 98101	Project Manager: Travis Klaas	11-Nov-2023 09:43

Certified Analyses included in this Report

Analyte	Certifications
EPA 8260D in Water	
Vinyl Chloride	DoD-ELAP,ADEC,NELAP,WADOE
cis-1,2-Dichloroethene	DoD-ELAP,ADEC,NELAP,WADOE
Trichloroethene	DoD-ELAP,ADEC,NELAP,WADOE

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2024

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Notes and Definitions

E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
J	Estimated concentration value detected below the reporting limit.
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.