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# PHASE II INVESTIGATION Victory Road Property

# Block 41, Lots 17, 27 and 28 Howell, Monmouth County, New Jersey Bohler Engineering

March 21, 2022 File No. 26.0092637.00

PREPARED FOR:Bohler Engineering30 Independence Boulevard, Suite 200Warren, New Jersey 07059

# Melick-Tully & Associates, A Division of GZA

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GEOTECHNICAL ENVIRONMENTAL ECOLOGICAL WATER CONSTRUCTION MANAGEMENT

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March 21, 2022 File No. 26.0092637.00

Bohler Engineering 30 Independence Boulevard, Suite 200 Warren, New Jersey 07059

Attention: Mr. Tung-To Lam, P.E.

Phase II Investigation Victory Road Property Block 41, Lots 17, 27 and 28 Howell Township, Monmouth County, New Jersey Bohler Engineering

Dear Mr. Lam,

This letter provides the results of soil sampling and laboratory testing performed by Melick-Tully and Associates, a Division of GZA GeoEnvironmental, Inc. (GZA), to investigate the potential impact of historically applied pesticides (HAP) at the proposed warehouse property located on Victory Road in Howell Township, Monmouth County, New Jersey (the "Site"). The Site is identified as Block 41, Lots 17, 27, and 28 on the municipal tax map. The Site consists of two non-contiguous parcels, identified as the eastern parcel (Lot 17) and the western parcel (Lots 27 and 28) and is approximately 28.0 acres in size. The Site is currently vacant, wooded land with no existing structures and is divided by a portion of a Conrail rail line. The findings of our study are subject to the Limitations presented in **Appendix I**.

GZA completed a Phase I Environmental Site Assessment (ESA) and Preliminary Assessment (PA) for the Site in March 2022. The 2021 GZA Phase I ESA and PA identified the Site was utilized for agriculture purposes starting in 1931. The western parcel (Lots 27 and 28) became wooded land by the 1940s. The eastern parcel (Lot 17) remained as agricultural fields until the 1970s. Since then, the Site has remained vacant and wooded. A portion of the Site on the eastern parcel was developed with dwellings and associated agricultural structures from at least 1931 to until 1974 when they were demolished. Based on the reported historic agricultural use, investigation for the presence of residual pesticides was recommended.



Based on New Jersey Department of Environmental Protection (NJDEP) HAP Site Technical Guidance (Version 3.1; February 2022), a sampling frequency of one sample per 2 acres for up to 10 acres and one sample for every 5 acres greater than 10 acres is required. Given the Site is comprised of 28 acres, nine samples are required to be collected. GZA also recommended that three additional surficial soils samples be collected in the vicinity of the former structures to assess possible storage/mixing areas.

On February 24, 2022, GZA performed a Phase II Investigation which included the sampling and testing of the surficial soils at the Site. GZA collected twelve discrete soil samples from the 0 to 6 inches in depth interval in general accordance with the NJDEP HAP Technical Guidance.

GZA collected three additional samples from the native soils beneath the topsoil layer as contingency samples for determination of natural background concentrations of arsenic, if necessary. Samples were collected using dedicated sampling equipment at each location. The surficial topsoil encountered generally consisted of nine to fourteen inches of sandy soils with varying amounts of silt and organics. The sample locations were marked in the field with wooden stakes, recorded on plans, and their approximate locations were recorded with hand-held GPS equipment. The approximate locations of the soil samples are presented on **Plate 1**, Plot Plan.

The soil samples were placed into laboratory prepared containers, immediately stored on ice and transported under chain-of-custody to Integrated Analytical Laboratories (IAL) in Randolph, New Jersey (NJDEP Certification No. 14751) for Target Compound List (TCL) pesticides, arsenic, and lead in accordance with NJDEP protocol. The laboratory testing was performed within appropriate holding times and achieved method detection levels below regulatory levels. A summary of the soil sampling and laboratory testing is presented on **Plate 2**, Summary of Sampling and Laboratory Testing.

The laboratory testing reported pesticides, arsenic, and lead at concentrations less than the current NJDEP Ingestion/Dermal and Inhalation Soil Remediation Standards (SRS). Lead was reported in one sample (SS-4) at a concentration greater than the Migration to Ground Water Soil Remediation Standard (MGWSRS). As result, subsequent Synthetic Precipitate Leachate Procedure (SPLP) testing was performed on sample SS-4. The laboratory testing reported leachate at concentrations less than the NJDEP Soil Leachate Remediation Standard (SLRS). A summary of analytical results is provided in **Plate 3**, Summary of Laboratory Testing Results. The IAL Laboratory Summary and Laboratory Report is presented in **Appendix II**.

Based on the results of the sampling and laboratory testing, GZA recommends no further action regarding HAP at the Site at this time.



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The following Plates and Appendices are attached and complete this letter:

Plate 1 – Plot Plan Plate 2 – Summary of Sampling and Laboratory Testing Plate 3 – Summary of Laboratory Testing Results Appendix I – Limitations Appendix II – IAL Laboratory Summary and Laboratory Report

Very truly yours,

MELICK-TULLY and ASSOCIATES, a Division of GZA GeoEnvironmental, Inc.

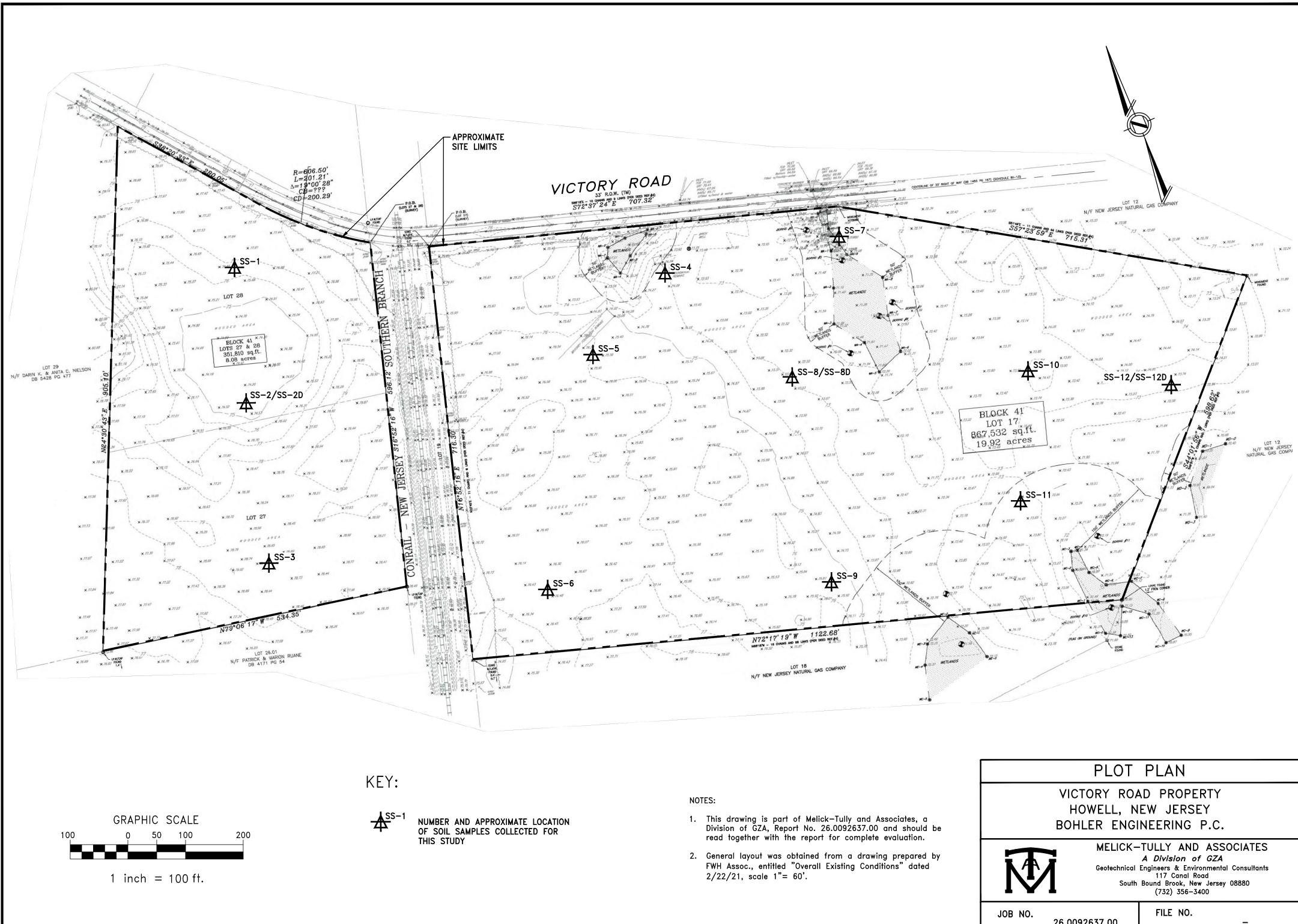
Matthew M. Lev, LSRP Project Manager

Michael / Morris

Michael J. Morris, LSRP, P.G. Principal

MML:MH/jm 26.0092637.00 (1 copy submitted via email)

Marc Hudock, LSRP Consultant/Reviewer



N	Geo		Engineers 117 Bound Br	& Environmental & Environmental Canal Road rook, New Jersey ( ) 356–3400	
JOB NO.	26.0092637.	00	FILE	E NO.	_
DR. BY VJD	CHK. BY JFM		.TE 3/22	SCALE 1"= 100'	PLATE 1

Sample	Sample Medium	Sample Depth	Sample Location	Lab ID Number	Sample Date	Analytical Parameter	Sample Method	Latitude	Longitude
SS-1	Topsoil	0-0.5	Former Field	01119-001	2/24/22	TCL Pest. As., Pb.	Т	40.1435532	-74.1859897
SS-2	Topsoil	0-0.5	Former Field	01119-002	2/24/22	TCL Pest. As., Pb.	Т	40.1429337	-74.1862757
SS-2D	Natural	1.0-1.5	Natural	01119-003	2/24/22	NT	Т	40.1429337	-74.1862757
SS-3	Topsoil	0-0.5	Former Field	01119-004	2/24/22	TCL Pest. As., Pb.	Т	40.1421930	-74.1865211
SS-4	Topsoil	0-0.5	Former Building	01119-005	2/24/22	TCL Pest. As., Pb., SPLP Pb.	Т	40.1427217	-74.1835563
SS-5	Topsoil	0-0.5	Former Building	01119-006	2/24/22	TCL Pest. As., Pb.	Т	40.1425090	-74.1841675
SS-6	Topsoil	0-0.5	Former Field	01119-007	2/24/22	TCL Pest. As., Pb.	Т	40.1415602	-74.1850013
SS-7	Topsoil	0-0.5	Former Building	01119-011	2/24/22	TCL Pest. As., Pb.	Т	40.1425585	-74.1824820
SS-8	Topsoil	0-0.5	Former Field	01119-009	2/24/22	TCL Pest. As., Pb.	Т	40.1420320	-74.1830942
SS-8D	Natural	1.0-1.5	Natural	01119-010	2/24/22	NT	Т	40.1420320	-74.1830942
SS-9	Topsoil	0-0.5	Former Field	01119-008	2/24/22	TCL Pest. As., Pb.	Т	40.1410517	-74.1833718
SS-10	Topsoil	0-0.5	Former Field	01119-012	2/24/22	TCL Pest. As., Pb.	Т	40.1416132	-74.1817307
SS-11	Topsoil	0-0.5	Former Field	01119-013	2/24/22	TCL Pest. As., Pb.	Т	40.1410494	-74.1820891
SS-12	Topsoil	0-0.5	Former Field	01119-014	2/24/22	TCL Pest. As., Pb.	Т	40.1412639	-74.1809113
SS-12D	Natural	1.5-2.0	Natural	01119-015	2/24/22	NT	Т	40.1412639	-74.1809113

Notes:	Т	Trowel
	TCL Pest., As., Pb.	Target Compound List Pesticides, Arsenic and Lead
	SPLP	Synthetic Precipitate Leachate Procedure
	NT	Sample Not Tested

Sample Location:	SS-1	SS-2	SS-2D	SS-3		
Sample Depth (ft.):	0-0.5	0-0.5	1.0-1.5	0-0.5		
Sample Date:	2/24/22	2/24/22	2/24/22	2/24/22		
Sample Matrix	Soil	Soil	Soil	Soil		
Laboratory ID No:	01119-001	01119-002	01119-003	01119-004		
ANALYTE	Co	ncentration in Part	s Per Million (pp	m)	"A"	"B"
Pesticides:						
alpha-BHC	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.086	0.0023
beta-BHC	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.3	0.0046
gamma-BHC (Lindane)	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.57	0.0035
delta-BHC	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
Heptachlor	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.15	0.083
Aldrin	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.041	0.13
Heptachlor epoxide	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.076	0.081
Endosulfan I	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
4,4'-DDE	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	2	0.47
Dieldrin	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.034	0.024
Endrin	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	19	1.6
Endosulfan II	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
4,4'-DDD	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	2.3	0.47
Endrin aldehyde	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
Endosulfan sulfate	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
4,4'-DDT	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	1.9	0.67
Endrin ketone	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
Methoxychlor	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	320	NS
alpha-Chlordane	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
gamma-Chlordane	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	NS	NS
Toxaphene	ND (0.00374)	ND (0.00381)	NT	ND (0.00368)	0.49	6.2
Endosulfan (I and II)	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	470	NS
Chlordane (alpha and gamma)	ND (0.000187)	ND (0.000191)	NT	ND (0.000184)	0.27	1.4
Metals:						
Arsenic	1.57	2.98	NT	1.37	19	19
Lead	16.3	12.1	NT	11.3	400	90

#### Notes:

"A" NJDEP Residential Soil Remediation Standard (RSRS) (lower of the Ingestion-Dermal Exposure Pathway (Table 1) or the Inhalation Exposure Pathway (Table 3)

- "B" NJDEP Migration to Groundwater (MGW) Soil Remediation Standard
- **Bold** Concentrations reported above RSRS
- *Italics* Concentrations reported above MGW
- ND Not Detected (Method detection limits in parenthesis)
- NT Not Tested
- NS No Standard

Sample Location:	SS-4	SS-5	SS-6	SS-7					
Sample Depth (ft.):	0-0.5	0-0.5	0-0.5	0-0.5					
Sample Date:	2/24/22	2/24/22	2/24/22	2/24/22					
Sample Matrix	Soil	Soil	Soil	Soil					
Laboratory ID No:	01119-005	01119-006	01119-007	01119-011					
ANALYTE	Co	ncentration in Part	s Per Million (pp	m)	"A"	"B"			
Pesticides:									
alpha-BHC	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.086	0.0023			
beta-BHC	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.3	0.0046			
gamma-BHC (Lindane)	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.57	0.0035			
delta-BHC	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
Heptachlor	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.15	0.083			
Aldrin	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.041	0.13			
Heptachlor epoxide	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.076	0.081			
Endosulfan I	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
4,4'-DDE	0.00169	ND (0.000177)	ND (0.00018)	0.0026	2	0.47			
Dieldrin	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.034	0.024			
Endrin	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	19	1.6			
Endosulfan II	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
4,4'-DDD	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	2.3	0.47			
Endrin aldehyde	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
Endosulfan sulfate	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
4,4'-DDT	ND (0.000198)	ND (0.000177)	ND (0.00018)	0.000974	1.9	0.67			
Endrin ketone	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
Methoxychlor	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	320	NS			
alpha-Chlordane	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
gamma-Chlordane	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	NS	NS			
Toxaphene	ND (0.00395)	ND (0.00354)	ND (0.0036)	ND (0.00418)	0.49	6.2			
Endosulfan (I and II)	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	470	NS			
Chlordane (alpha and gamma)	ND (0.000198)	ND (0.000177)	ND (0.00018)	ND (0.000209)	0.27	1.4			
Metals:									
Arsenic	1.95	1.03	1.08	2.17	19	19			
Lead	<u>113</u>	23.8	8.57	33.1	400	90			
SPLP Testing	Concentration in Parts Per Billion (ppb) "C"								
SPLP Lead	ND (1.00)	NT	NT	NT	1	00			

Notes:

"A"	NJDEP Residential Soil Remediation Standard (RSRS) (lower of the Ingestion-Dermal Exposure Pathway (Table 1) or the Inhalation Exposure Pathway (Table 3)
"B"	NJDEP Migration to Groundwater (MGW) Soil Remediation Standard
"C"	NJDEP Soil Leachate Remediation Standard for the Migration to Ground Water Exposure Pathway (Table 6)
Bold	Concentrations reported above RSRS
<u>Italics</u>	Concentrations reported above MGW
ND	Not Detected (Method detection limits in parenthesis)
NT	Not Tested
NS	No Standard

Sample Location:	SS-8	SS-8D	SS-9	SS-10		
Sample Depth (ft.):	0-0.5	1.0-1.5	0-0.5	0-0.5		
Sample Date:	2/24/22	2/24/22	2/24/22	2/24/22		
Sample Matrix	Soil	Soil	Soil	Soil		
Laboratory ID No:	01119-009	01119-010	01119-008	01119-012		
ANALYTE	Co	"A"	"B"			
Pesticides:						
alpha-BHC	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.086	0.0023
beta-BHC	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.3	0.0046
gamma-BHC (Lindane)	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.57	0.0035
delta-BHC	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
Heptachlor	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.15	0.083
Aldrin	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.041	0.13
Heptachlor epoxide	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.076	0.081
Endosulfan I	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
4,4'-DDE	ND (0.000194)	NT	ND (0.000183)	0.00143	2	0.47
Dieldrin	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.034	0.024
Endrin	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	19	1.6
Endosulfan II	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
4,4'-DDD	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	2.3	0.47
Endrin aldehyde	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
Endosulfan sulfate	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
4,4'-DDT	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	1.9	0.67
Endrin ketone	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
Methoxychlor	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	320	NS
alpha-Chlordane	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
gamma-Chlordane	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	NS	NS
Toxaphene	ND (0.00387)	NT	ND (0.00365)	ND (0.00367)	0.49	6.2
Endosulfan (I and II)	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	470	NS
Chlordane (alpha and gamma)	ND (0.000194)	NT	ND (0.000183)	ND (0.000184)	0.27	1.4
Metals:						
Arsenic	2.09	NT	1.30	1.21	19	19
Lead	14.7	NT	15.7	20.9	400	90

#### Notes:

"A"	NJDEP Residential Soil Remediation Standard (RSRS) (lower of the Ingestion-Dermal Exposure
	Pathway (Table 1) or the Inhalation Exposure Pathway (Table 3)

- "B" NJDEP Migration to Groundwater (MGW) Soil Remediation Standard
- (1) Ecological Soil Remediation Criterion
- **Bold** Concentrations reported above RSRS
- <u>Italics</u> Concentrations reported above MGW
- ND Not Detected (Method detection limits in parenthesis)
- NT Not Tested
- NS No Standard

Sample Location:	SS-11	SS-12	SS-12D		
Sample Depth (ft.):	0-0.5	0-0.5	1.5-2.0		
Sample Date:	2/24/22	2/24/22	2/24/22		
Sample Matrix	Soil	Soil	Soil		
Laboratory ID No:	01119-013	01119-014	01119-015		
ANALYTE	Concentratio	"A"	"B"		
Pesticides:					
alpha-BHC	ND (0.00018)	ND (0.000182)	NT	0.086	0.0023
beta-BHC	ND (0.00018)	ND (0.000182)	NT	0.3	0.0046
gamma-BHC (Lindane)	ND (0.00018)	ND (0.000182)	NT	0.57	0.0035
delta-BHC	ND (0.00018)	ND (0.000182)	NT	NS	NS
Heptachlor	ND (0.00018)	ND (0.000182)	NT	0.15	0.083
Aldrin	ND (0.00018)	ND (0.000182)	NT	0.041	0.13
Heptachlor epoxide	ND (0.00018)	ND (0.000182)	NT	0.076	0.081
Endosulfan I	ND (0.00018)	ND (0.000182)	NT	NS	NS
4,4'-DDE	ND (0.00018)	ND (0.000182)	NT	2	0.47
Dieldrin	ND (0.00018)	ND (0.000182)	NT	0.034	0.024
Endrin	ND (0.00018)	ND (0.000182)	NT	19	1.6
Endosulfan II	ND (0.00018)	ND (0.000182)	NT	NS	NS
4,4'-DDD	ND (0.00018)	ND (0.000182)	NT	2.3	0.47
Endrin aldehyde	ND (0.00018)	ND (0.000182)	NT	NS	NS
Endosulfan sulfate	ND (0.00018)	ND (0.000182)	NT	NS	NS
4,4'-DDT	ND (0.00018)	ND (0.000182)	NT	1.9	0.67
Endrin ketone	ND (0.00018)	ND (0.000182)	NT	NS	NS
Methoxychlor	ND (0.00018)	ND (0.000182)	NT	320	NS
alpha-Chlordane	ND (0.00018)	ND (0.000182)	NT	NS	NS
gamma-Chlordane	ND (0.00018)	ND (0.000182)	NT	NS	NS
Toxaphene	ND (0.00359)	ND (0.00364)	NT	0.49	6.2
Endosulfan (I and II)	ND (0.00018)	ND (0.000182)	NT	470	NS
Chlordane (alpha and gamma)	ND (0.00018)	ND (0.000182)	NT	0.27	1.4
Metals:					
Arsenic	1.17	1.53	NT	19	19
Lead	11.3	8.40	NT	400	90

#### Notes:

"A"	NJDEP Residential Soil Remediation Standard (RSRS) (lower of the Ingestion-Dermal Exposure
	Pathway (Table 1) or the Inhalation Exposure Pathway (Table 3)

- "B" NJDEP Migration to Groundwater (MGW) Soil Remediation Standard
- **Bold** Concentrations reported above RSRS
- *Italics* Concentrations reported above MGW
- ND Not Detected (Method detection limits in parenthesis)
- NT Not Tested
- NS No Standard

**APPENDIX I** 

Limitations

## LIMITATIONS

### FOR ENVIRONMENTAL CONSULTING SERVICES

# A. NO RELIANCE BY THIRD PARTIES

This report and any other documents or materials prepared by Melick-Tully and Associates, a Division of GZA GeoEnvironmental, Inc. (MTA) in connection with the environmental consulting services performed pursuant to MTA's contract are for the benefit and use of MTA's client only, and are not intended to be nor shall be deemed to be for the benefit of any third party, including without limitation, an owner or lessee of the property.

## B. LIMITATIONS ON WORK PRODUCT

All work product and reports provided by MTA in connection with the performance of environmental consulting services are subject to the following limitations:

- 1) The observations described in this Report were made under the conditions stated therein. The conclusions presented in the Report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client. The work described in this report was carried out in accordance with the General Terms and Conditions attached to MTA's Agreement for Consulting Services.
- 2) In preparing this Report, MTA has relied on certain information provided by state and local officials and information and representations made by other parties referenced therein, and on information contained in the files of state and/or local agencies made available to MTA. To the extent that such files are missing, incomplete or not provided to MTA, MTA is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, MTA did not attempt to independently verify the accuracy or completeness of all information reviewed or received.
- 3) Observations may have been made of the site and of structures on the site as indicated within the Report. Where access to portions of the site or to structures on the site was unavailable or limited, MTA renders no opinion as to the presence of hazardous substances, wastes or petroleum and chemical products and wastes. In addition, MTA renders no opinion as to the presence of indirect evidence relating to hazardous substances or wastes, or petroleum and chemical products or wastes, where direct observation of the interior walls, floors, or ceilings of structures on a site were obstructed by objects or coverings on or over these surfaces.
- 4) Unless otherwise specified in the Report, MTA did not perform testing or analyses to determine the presence or concentration of asbestos, radon, methane, or polychlorinated biphenyls (PCBs) at the site or in the environment of the site.

- 5) Unless otherwise specified in the Report, the purpose of this Report was to assess the physical characteristics of the subject site with respect to the presence in the environment of hazardous substances or wastes, or petroleum and chemical products and wastes. No specific attempt was made to check the compliance of present or past owners or operators of the site with federal, state, or local laws, rules and regulations, environmental or otherwise.
- 6) If the conclusions and recommendations contained in this Report are based in part upon the data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations; then the nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to re-evaluate the conclusions and recommendations of this report.
- 7) Except as noted in the text of the Report, no quantitative laboratory testing was performed as part of MTA's environmental consulting services. Where such analyses have been conducted by an outside laboratory, MTA has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these tests.
- 8) If the conclusions and recommendations contained in this report are based, in part, upon various types of laboratory analytical data; then the conclusions and recommendations are contingent upon the validity of such data. These data (if obtained) have been reviewed and interpretations made in the Report. If indicated in the Report, some of these data may be preliminary "screening" level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional field or laboratory analytical data become available in the future, these data should be provided to MTA for review, and the conclusions and recommendations presented herein modified accordingly.
- 9) Laboratory or field analytical tests may have been performed for specific parameters as described in the text of the Report. However, it should be noted that additional chemical constituents not searched for during the current study may be present in the air, soil, groundwater or other materials at the site.
- 10) It is recommended that MTA be retained to provide further environmental consulting services during the construction and/or implementation of any remedial measures recommended in the Report. This is to allow MTA to observe compliance with the concepts and recommendations contained herein, and to allow the development of changes in the remedial program in the event that subsurface conditions or other conditions differ from those anticipated.
- 11) MTA assumes no responsibility to report the findings of its environmental consulting services to any federal, state or local regulatory agency. It is MTA's understanding that the Client shall advise the owner/operator of the facility to report any contaminants which have discharged into the environment.

# C. SUBSURFACE INFORMATION

- 1) <u>Locations:</u> Unless stated otherwise, the locations of explorations performed by MTA were approximately determined by tape measurement from the existing site facilities. Elevations of the explorations, if provided, were approximately determined by interpolation between contours shown on topographic plans provided to us by the owner. The locations and elevations of the explorations should be considered accurate only to the degree implied by the method used.
- 2) <u>Interface of Strata</u>: The stratification lines shown on the individual Logs of the subsurface explorations represent the approximate boundary between soil types, and the transition may be gradual. Further, the subsurface conditions may vary between the subsurface explorations.
- 3) <u>Field Logs/Final Logs:</u> A field log was prepared for each exploration by a member of our staff. The field log contains factual information and interpretation of the soil conditions between samples.

We must emphasize that our recommendations are based on the final logs and the information contained therein, and not on the field logs.

The final logs represent our interpretation of the contents of the field logs, and the results of any observations and laboratory tests of the field samples. The final logs are included in our report.

- 4) <u>Water Levels:</u> If water level readings have been made in test pits, borings, and/or monitoring wells; these observations were made at the times and under the conditions stated on the test pit, boring or monitoring well logs or in the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall, passage of time and other factors.
- 5) <u>Additional Data:</u> Should additional data become available in the future, these data should be provided to MTA for review, and the conclusions and recommendations presented in MTA's report modified accordingly.

# D. EXCLUDED WORK

- 1) Unless specifically indicated to the contrary in this report, the scope of our services was limited only to investigation and evaluation of the items discussed in the "Purpose and Scope of Work" section of our Agreement for Consulting Services, and did not include any consideration of potential site pollution or contamination resulting from radon gas, methane gas, asbestos or radioactive elements.
- 2) Unless specifically indicated to the contrary in this report, this report does not address the following environmental considerations which may affect the site development: wetlands determinations; flora and fauna; wildlife; etc. The conclusions and recommendations of this report are not intended to supersede any of these additional environmental considerations.

# E. STANDARD OF CARE

- 1) Services performed by MTA under MTA's Agreement for Consulting Services were conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. NO OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE.
- 2) Client recognizes that subsurface conditions may vary from those encountered at the locations where borings, surveys or other explorations are made by MTA and that the data, interpretations and recommendations of MTA are based solely on the information available to MTA. MTA will be responsible for those data, interpretations and recommendations but shall not be responsible for the interpretations by others of the information developed.

# F. USE OF DATA

1) Unless otherwise specified in our Agreement for Consulting Services, the client acknowledges that the data developed by MTA is intended for use in design efforts only, and may not be sufficient to prepare an accurate bid or to determine the exact extent of work required. Client agrees to inform the design team and all prospective bidders that the data in our reports should not be relied on to estimate bid quantities, schedules, costs, etc. Client agrees to require all prospective bidders to perform whatever additional explorations or data gathering they deem necessary to prepare their bids accurately, and will allow sufficient time in the bidding process for prospective contractors to do so. If Client fails to do either, Client releases and gives up all claims against MTA for extra payment related to the work and agrees to indemnify and save harmless MTA from all contractor and other third party claims for extra payment.

# G. OWNERSHIP OF DOCUMENTS

1) Client agrees that all reports and other work furnished to the Client or his agents, which are not paid for, will be returned upon demand and will not be used for any purposes whatever.

# H. CONSTRUCTION OBSERVATION

1) We recommend that MTA be retained to provide continuous on-site consultation services during the construction and/or remediation phases of the work. This is to observe compliance with the design concepts and to allow changes in the event that subsurface conditions differ from those anticipated prior to the start of construction and/or remediation.

APPENDIX II

IAL Laboratory Summary and Laboratory Report

Sample #:		NJDEP SOIL REMEDIATION						SS-1					SS-2				SS-2D			
Field ID:				STANDARDS																
Lab ID:		Ingestion-	Inhalation	Ingestion-	Inhalation	Migration to		0	1119-001		01119-002					0	1119-003	4		
Date Sampled:		Dermal		Dermal		Ground		0	2/24/2022		02/24/2022				02/24/2022					
Depth(ft):		Residential	Residential	Nonresidential	Nonresidential	Water	0/0.5						0/0.5		1.0/1.5					
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)														
Pesticides (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
alpha-BHC	319-84-6	0.086	NA1	0.41	NA1	0.0023	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
beta-BHC	319-85-7	0.3	NA1	1.4	NA1	0.0046	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
gamma-BHC (Lindane)	58-89-9	0.57	NA1	2.8	NA1	0.0035	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
delta-BHC	319-86-8	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Heptachlor	76-44-8	0.15	NA1	0.81	NA1	0.083	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Aldrin	309-00-2	0.041	NA1	0.21	NA1	0.13	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Heptachlor epoxide	1024-57-3	0.076	NA1	0.4	NA1	0.081	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Endosulfan I	959-98-8	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
4,4'-DDE	72-55-9	2	NA1	11	NA1	0.47	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Dieldrin	60-57-1	0.034	NA1	0.16	NA1	0.024	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Endrin	72-20-8	19	NA1	270	NA1	1.6	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Endosulfan II	33213-65-9	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
4,4'-DDD	72-54-8	2.3	NA1	11	NA1	0.47	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Endrin aldehyde	7421-93-4	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Endosulfan sulfate	1031-07-8	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
4,4'-DDT	50-29-3	1.9	NA1	9.5	NA1	0.67	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Endrin ketone	53494-70-5	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Methoxychlor	72-43-5	320	NA1	4600	NA1	NA1	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
alpha-Chlordane	5103-71-9	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
gamma-Chlordane	5103-74-2	NS	NS	NS	NS	NS	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Toxaphene	8001-35-2	0.49	NA1	2.3	NA1	6.2	ND		0.00935	0.00374	ND		0.00953	0.00381	~		~	~		
Endosulfan (I and II)	115-29-7	470	NA1	7800	NA1	NA1	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Chlordane (alpha and gamma)	57-74-9	0.27	NA2,3	1.4	NA2,3	1.4	ND		0.000748	0.000187	ND		0.000762	0.000191	~		~	~		
Metals (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
Arsenic	7440-38-2	19	1100	19	5200	19	1.57		0.513	0.049	2.98		0.552	0.053	~		~	~		
Lead	7439-92-1	400	NA1	800	NA1	90	16.3		0.513	0.257	12.1		0.552	0.276	~		~	~		
SPLP Metals (ug/L)							Conc	Q	RL	MDL	Conc	Q		MDL	Conc	Q	RL	MDL		
SPLP Lead	7439-92-1	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~		
General Analytical							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
Final pH of SPLP SVOC and/or Metals Le	IALCAS080	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~		
Weight of soil for SPLP SVOC and/or Met	IALCAS081	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~		
SPLP SVOC and/or Metals Leachate volu	IALCAS082	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~		
																		+		

Sample #:		NJDEP SOIL REMEDIATION							S-3			SS-4				SS-5				
Field ID:				STANDARDS														·		
Lab ID:		Ingestion-	Inhalation	Ingestion-	Inhalation	Migration to		0111	9-004			0	1119-005			0	01119-006			
Date Sampled:		Dermal		Dermal		Ground		02/24	/2022			2/24/2022		02/24/2022						
Depth(ft):		Residential	Residential	Nonresidential	Nonresidential	Water		0/	0.5			0/0.5				0/0.5				
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)														
Pesticides (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
alpha-BHC	319-84-6	0.086	NA1	0.41	NA1	0.0023	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
beta-BHC	319-85-7	0.3	NA1	1.4	NA1	0.0046	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
gamma-BHC (Lindane)	58-89-9	0.57	NA1	2.8	NA1	0.0035	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
delta-BHC	319-86-8	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Heptachlor	76-44-8	0.15	NA1	0.81	NA1	0.083	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Aldrin	309-00-2	0.041	NA1	0.21	NA1	0.13	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Heptachlor epoxide	1024-57-3	0.076	NA1	0.4	NA1	0.081	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Endosulfan I	959-98-8	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
4,4'-DDE	72-55-9	2	NA1	11	NA1	0.47	ND	0	.000736	0.000184	0.00169		0.00079	0.000198	ND		0.000708	0.000177		
Dieldrin	60-57-1	0.034	NA1	0.16	NA1	0.024	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Endrin	72-20-8	19	NA1	270	NA1	1.6	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Endosulfan II	33213-65-9	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
4,4'-DDD	72-54-8	2.3	NA1	11	NA1	0.47	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Endrin aldehyde	7421-93-4	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Endosulfan sulfate	1031-07-8	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
4,4'-DDT	50-29-3	1.9	NA1	9.5	NA1	0.67	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Endrin ketone	53494-70-5	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Methoxychlor	72-43-5	320	NA1	4600	NA1	NA1	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
alpha-Chlordane	5103-71-9	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
gamma-Chlordane	5103-74-2	NS	NS	NS	NS	NS	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Toxaphene	8001-35-2	0.49	NA1	2.3	NA1	6.2	ND		0.0092	0.00368	ND		0.00988	0.00395	ND		0.00885	0.00354		
Endosulfan (I and II)	115-29-7	470	NA1	7800	NA1	NA1	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Chlordane (alpha and gamma)	57-74-9	0.27	NA2,3	1.4	NA2,3	1.4	ND	0	.000736	0.000184	ND		0.00079	0.000198	ND		0.000708	0.000177		
Metals (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
Arsenic	7440-38-2	19	1100	19	5200	19	1.37		0.538	0.052	1.95		0.587	0.056	1.03		0.538	0.052		
Lead	7439-92-1	400	NA1	800	NA1	90	11.3		0.538	0.269	113	1	0.587	0.293	23.8		0.538	0.269		
SPLP Metals (ug/L)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
SPLP Lead	7439-92-1	NS	NS	NS	NS	NS	~		~	~	ND	-	2.00	1.00	~		~	~		
General Analytical							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
Final pH of SPLP SVOC and/or Metals Le	IALCAS080	NS	NS	NS	NS	NS	~		~	~	6.52		NA	NA	~		~	~		
Weight of soil for SPLP SVOC and/or Met	IALCAS081	NS	NS	NS	NS	NS	~		~	~	0.100		NA	NA	~		~	~		
SPLP SVOC and/or Metals Leachate volu	IALCAS082	NS	NS	NS	NS	NS	~		~	~	2.00		NA	NA	~		~	~		
•		•									•					I				

			NJI	DEP SOIL REMEDIAT	ION				SS-6				SS-9				SS-8	<b>/</b>
Field ID:				STANDARDS														
Lab ID:		Ingestion-	Inhalation	Ingestion-	Inhalation	Migration to		0	1119-007			0	1119-008			(	01119-009	
Date Sampled:		Dermal		Dermal		Ground		0	2/24/2022			0	2/24/2022			0	2/24/2022	
Depth(ft):		Residential	Residential	Nonresidential	Nonresidential	Water			0/0.5				0/0.5				0/0.5	
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)												
Pesticides (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.086	NA1	0.41	NA1	0.0023	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
beta-BHC	319-85-7	0.3	NA1	1.4	NA1	0.0046	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
gamma-BHC (Lindane)	58-89-9	0.57	NA1	2.8	NA1	0.0035	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
delta-BHC	319-86-8	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Heptachlor	76-44-8	0.15	NA1	0.81	NA1	0.083	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Aldrin	309-00-2	0.041	NA1	0.21	NA1	0.13	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Heptachlor epoxide	1024-57-3	0.076	NA1	0.4	NA1	0.081	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Endosulfan I	959-98-8	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
4,4'-DDE	72-55-9	2	NA1	11	NA1	0.47	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Dieldrin	60-57-1	0.034	NA1	0.16	NA1	0.024	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Endrin	72-20-8	19	NA1	270	NA1	1.6	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Endosulfan II	33213-65-9	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
4,4'-DDD	72-54-8	2.3	NA1	11	NA1	0.47	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Endrin aldehyde	7421-93-4	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Endosulfan sulfate	1031-07-8	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
4,4'-DDT	50-29-3	1.9	NA1	9.5	NA1	0.67	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Endrin ketone	53494-70-5	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Methoxychlor	72-43-5	320	NA1	4600	NA1	NA1	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
alpha-Chlordane	5103-71-9	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
gamma-Chlordane	5103-74-2	NS	NS	NS	NS	NS	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Toxaphene	8001-35-2	0.49	NA1	2.3	NA1	6.2	ND		0.009	0.0036	ND		0.00913	0.00365	ND		0.00968	0.00387
Endosulfan (I and II)	115-29-7	470	NA1	7800	NA1	NA1	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Chlordane (alpha and gamma)	57-74-9	0.27	NA2,3	1.4	NA2,3	1.4	ND		0.00072	0.00018	ND		0.00073	0.000183	ND		0.000774	0.000194
Metals (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Arsenic	7440-38-2	19	1100	19	5200	19	1.08		0.524	0.050	1.30		0.533	0.051	2.09		0.527	0.051
Lead	7439-92-1	400	NA1	800	NA1	90	8.57		0.524	0.262	15.7		0.533	0.267	14.7		0.527	0.263
SPLP Metals (ug/L)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
SPLP Lead	7439-92-1	NS	NS	NS	NS	NS	~	-	~	~	~	-	~	~	~		~	~
General Analytical							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Final pH of SPLP SVOC and/or Metals Le	IALCAS080	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~
Weight of soil for SPLP SVOC and/or Met	IALCAS081	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~
SPLP SVOC and/or Metals Leachate volu	IALCAS082	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~

Sample #:			NJI	DEP SOIL REMEDIAT	ΓΙΟΝ			SS-8D			SS-7			SS-10	
Field ID:	-			STANDARDS											
Lab ID:		Ingestion-	Inhalation	Ingestion-	Inhalation	Migration to		01119-010	1		01119-011			01119-012	
Date Sampled:		Dermal		Dermal		Ground		02/24/2022			02/24/2022		02/24/2022		
Depth(ft):		Residential	Residential	Nonresidential	Nonresidential	Water		1.0/1.5			0/0.5			0/0.5	
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)									
Pesticides (mg/Kg)							Conc	Q RL	MDL	Conc Q	RL	MDL	Conc	Q RL	MDL
alpha-BHC	319-84-6	0.086	NA1	0.41	NA1	0.0023	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
beta-BHC	319-85-7	0.3	NA1	1.4	NA1	0.0046	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
gamma-BHC (Lindane)	58-89-9	0.57	NA1	2.8	NA1	0.0035	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
delta-BHC	319-86-8	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Heptachlor	76-44-8	0.15	NA1	0.81	NA1	0.083	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Aldrin	309-00-2	0.041	NA1	0.21	NA1	0.13	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Heptachlor epoxide	1024-57-3	0.076	NA1	0.4	NA1	0.081	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Endosulfan I	959-98-8	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
4,4'-DDE	72-55-9	2	NA1	11	NA1	0.47	~	~	~	0.0026	0.000836	0.000209	0.00143	0.000734	0.000184
Dieldrin	60-57-1	0.034	NA1	0.16	NA1	0.024	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Endrin	72-20-8	19	NA1	270	NA1	1.6	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Endosulfan II	33213-65-9	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
4,4'-DDD	72-54-8	2.3	NA1	11	NA1	0.47	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Endrin aldehyde	7421-93-4	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Endosulfan sulfate	1031-07-8	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
4,4'-DDT	50-29-3	1.9	NA1	9.5	NA1	0.67	~	~	~	0.000974	0.000836	0.000209	ND	0.000734	0.000184
Endrin ketone	53494-70-5	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Methoxychlor	72-43-5	320	NA1	4600	NA1	NA1	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
alpha-Chlordane	5103-71-9	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
gamma-Chlordane	5103-74-2	NS	NS	NS	NS	NS	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Toxaphene	8001-35-2	0.49	NA1	2.3	NA1	6.2	~	~	~	ND	0.011	0.00418	ND	0.00918	0.00367
Endosulfan (I and II)	115-29-7	470	NA1	7800	NA1	NA1	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Chlordane (alpha and gamma)	57-74-9	0.27	NA2,3	1.4	NA2,3	1.4	~	~	~	ND	0.000836	0.000209	ND	0.000734	0.000184
Metals (mg/Kg)							Conc	Q RL	MDL	Conc Q	RL	MDL	Conc	Q RL	MDL
Arsenic	7440-38-2	19	1100	19	5200	19	~	~	~	2.17	0.611	0.059	1.21	0.504	0.048
Lead	7439-92-1	400	NA1	800	NA1	90	~	~	~	33.1	0.611	0.305	20.9	0.504	0.252
SPLP Metals (ug/L)							Conc	Q RL	MDL	Conc Q	RL	MDL	Conc	Q RL	MDL
SPLP Lead	7439-92-1	NS	NS	NS	NS	NS	~	~	~	~	~	~	~	~	~
General Analytical							Conc	Q RL	MDL	Conc Q	RL	MDL	Conc	Q RL	MDL
Final pH of SPLP SVOC and/or Metals Le	IALCAS080	NS	NS	NS	NS	NS	~	~	~	~	~	~	~	~	~
Weight of soil for SPLP SVOC and/or Met	IALCAS081	NS	NS	NS	NS	NS	~	~	~	~	~	~	~	~	~
SPLP SVOC and/or Metals Leachate volu		NS	NS	NS	NS	NS	~	~	~	~	~	~	~	~	~
															1
		· · · · · · · · · · · · · · · · · · ·		•	· · · · · ·			· · · ·		· · · · · · · · · · · · · · · · · · ·	•				

Sample #:			NJI	DEP SOIL REMEDIAT	TION				SS-11				SS-12				SS-12D	
Field ID:				STANDARDS														
Lab ID:		Ingestion-	Inhalation	Ingestion-	Inhalation	Migration to		0	1119-013			C	01119-014			C	1119-015	*
Date Sampled:		Dermal		Dermal		Ground		02	2/24/2022			0	)2/24/2022			-	2/24/2022	
Depth(ft):		Residential	Residential	Nonresidential	Nonresidential	Water			0/0.5				0/0.5				1.5/2.0	
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)												
Pesticides (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.086	NA1	0.41	NA1	0.0023	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
beta-BHC	319-85-7	0.3	NA1	1.4	NA1	0.0046	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
gamma-BHC (Lindane)	58-89-9	0.57	NA1	2.8	NA1	0.0035	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
delta-BHC	319-86-8	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Heptachlor	76-44-8	0.15	NA1	0.81	NA1	0.083	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Aldrin	309-00-2	0.041	NA1	0.21	NA1	0.13	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Heptachlor epoxide	1024-57-3	0.076	NA1	0.4	NA1	0.081	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Endosulfan I	959-98-8	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
4,4'-DDE	72-55-9	2	NA1	11	NA1	0.47	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Dieldrin	60-57-1	0.034	NA1	0.16	NA1	0.024	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Endrin	72-20-8	19	NA1	270	NA1	1.6	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Endosulfan II	33213-65-9	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
4,4'-DDD	72-54-8	2.3	NA1	11	NA1	0.47	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Endrin aldehyde	7421-93-4	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Endosulfan sulfate	1031-07-8	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
4,4'-DDT	50-29-3	1.9	NA1	9.5	NA1	0.67	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Endrin ketone	53494-70-5	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Methoxychlor	72-43-5	320	NA1	4600	NA1	NA1	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
alpha-Chlordane	5103-71-9	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
gamma-Chlordane	5103-74-2	NS	NS	NS	NS	NS	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Toxaphene	8001-35-2	0.49	NA1	2.3	NA1	6.2	ND		0.00898	0.00359	ND		0.0091	0.00364	~		~	~
Endosulfan (I and II)	115-29-7	470	NA1	7800	NA1	NA1	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Chlordane (alpha and gamma)	57-74-9	0.27	NA2,3	1.4	NA2,3	1.4	ND		0.000718	0.00018	ND		0.000728	0.000182	~		~	~
Metals (mg/Kg)							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Arsenic	7440-38-2	19	1100	19	5200	19	1.17		0.538	0.052	1.53		0.519	0.050	~		~	~
Lead	7439-92-1	400	NA1	800	NA1	90	11.3		0.538	0.269	8.40		0.519	0.259	~		~	~
SPLP Metals (ug/L)							Conc	Q	RL	MDL	Conc	Q		MDL	Conc	Q	RL	MDL
SPLP Lead	7439-92-1	NS	NS	NS	NS	NS	~	~	~	~	~	~	~	~	~	-	~	~
General Analytical							Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Final pH of SPLP SVOC and/or Metals Le	IALCAS080	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~
Weight of soil for SPLP SVOC and/or Met	IALCAS081	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~
SPLP SVOC and/or Metals Leachate volu	IALCAS082	NS	NS	NS	NS	NS	~		~	~	~		~	~	~		~	~
																		1



# ANALYTICAL DATA REPORT

# Melick Tully & Associates 117 Canal Road South Bound Brook, NJ 08880

# Project Name: BOHLER-HOWELL (VICTORY) IAL Case Number: E22-01119

These data have been reviewed and accepted by:

nicha

Michael H. Leftin, Ph.D. Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road Randolph, NJ 07869 Phone: 973 361 4252

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# Sample Summary

IAL Case No.

E22-01119

Client Melick Tully & Associates

Project BOHLER-HOWELL (VICTORY)

Received On 2/24/2022@17:17

Lab ID	Client Sample ID	Depth Top/Bottom	Sampling Time	Matrix	<u># of</u> <u>Container</u>
01119-001	SS-1	0/0.5	2/24/2022@08:05	Soil	I State
01119-002	SS-2	0/0.5	2/24/2022@08:20	Soil	1
01119-003	SS-2D	1.0/1.5	2/24/2022@08:25	Soil	1
01119-004	SS-3	0/0.5	2/24/2022@08:35	Soil	1
01119-005	SS-4	0/0.5	2/24/2022@09:05	Soil	
01119-006	SS-5	0/0.5	2/24/2022@09:10	Soil	1
01119-007	SS-6	0/0.5	2/24/2022@09:25	Soil	1
01119-008	SS-9	0/0.5	2/24/2022@09:40	Soil	1
01119-009	SS-8	0/0.5	2/24/2022@09:45	Soil	$\leq 1$ and $2$
01119-010	SS-8D	1.0/1.5	2/24/2022@09:50	Soil	1
01119-011	SS-7	0/0.5	2/24/2022@10:00	Soil	When you I and a
01119-012	SS-10	0/0.5	2/24/2022@10:15	Soil	1
01119-013	SS-11	0/0.5	2/24/2022@10:25	Soil	1
01119-014	SS-12	0/0.5	2/24/2022@10:40	Soil	1
01119-015	SS-12D	1.5/2.0	2/24/2022@10:45	Soil	1

Page 1 of 1

Mar 14, 2022 @ 11:01

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

#### DATA QUALIFIERS AND FLAGS

- B Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
- C Indicates analyte is a common laboratory contaminant.
- D Indicates analyte was reported from diluted analysis.
- E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
- J Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
- J1 Indicates an estimated value when ICC or CCV did not meet the criteria.
- M Indicates matrix interference
- N Presumptive evidence of a compound from the use of GC/MS library search.
- T Sample analyzed outside of holding time
- X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
- Y Indicates DO depletion in the BOD blank is >0.20ppm
- Z Indicates internal standard failure. Sample results are either biased high or biased low.
- **\$** Value outside NJDEP DKQP Limits
- \* Result outside of QC limits

#### **PROJECT NOTES**

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

	ACITOTINIC AND		
CFU	Colony Forming Unit	ND	Indicates analyte was analyzed for but not detected
CCB	Continuing Calibration Blank		at MDL or RL (only if MDL is not used)
CCV	Continuing Calibration Verification	NTU	Nephelometric Turbidity Units
DF	Dilution Factor	ppb	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	ppm	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	QC	Quality Control
ICB	Initial Calibration Blank	% Rec	Percent Recovery
ICC	Initial Calibration Curve		Reporting Limit. The RL is typically determined by
ICV	Initial Calibration Verification	] RL	the concentration of the lowest standard in the
kg	kilogram	1	calibration curve
L	Liter	RPD	Relative Percent Difference
LCS	Laboratory Control Sample	RSD	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	RT	Retention Time
MDL	Method Detection Limit as determined according to	SU	Standard Units
WIDL	40 CFR Part 136 Appendix B	тіс	Tentatively Identified Compound AKA Library Search
MF	Membrane Filter		Compounds
mg	milligram (1000mg = 1g)	TNI	The NELAC (National Environmental Laboratory
þд	microgram (1000µg = 1mg)		Accreditation Council) Institute
ml	milliliter (1000ml = 1L)	TNTC	Too numerous to count
μΙ	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this
µmhos	Conductivity units - resistance expressed in ohms		analyte was analyzed by Method SW-846 8270 SIM
MPN	Most Probable Number		When attached to a compound name, indicates this
MS	Matrix Spike	^	analyte was analyzed by Method SW-846 8011 or
MSD	Matrix Spike Duplicate		EPA 504.1
NA	Not applicable	<	Less than; In conjunction with a numerical value,
NC	Not calculated		indicates a concentration less than the RL or MDL

#### ACRONYMS AND ABBREVIATIONS

# SAMPLE DELIVERY GROUP CASE NARRATIVE (Conformance / Non-Conformance Summary)

# SAMPLE DELIVERY GROUP CASE NARRATIVE

## SDG#: E22-01119

Integrated Analytical Laboratories, LLC. received fifteen (15) samples\*\* from Melick Tully & Associates (IAL SDG# **E22-01119**, Project: BOHLER-HOWELL (VICTORY)) on February 24, 2022 for the analysis of :

- (12) TCL Pesticides
- (12) Arsenic As
- (12) Lead Pb
- (1) SPLP Lead Pb
- (1) Final pH of SPLP SVOC and/or Metals Leachate
- (1) SPLP SVOC and/or Metals Leachate volume
- (1) Weight of soil for SPLP SVOC and/or Metals Leachate

\*\*Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order. Cooler temperature was acceptable at  $4 \pm 2$  degree C.

Pesticides E	By SW 8081B		Batch: 220225-05	Matrix: Soil
QC	<ul> <li>Calibration curve met</li> <li>Surrogate percent red</li> <li>Method blank met QC</li> <li>LCS Percent Recover</li> <li>RPD between MS/MS</li> <li>MS/MSD Percent Red</li> </ul>	covery met C criteria. y met QC cr D met QC c	iteria. riteria.	
E22-01119	Per SW-846 8000D, t - The following sample: LCSS220225-05, E22 E22-01119-004, E22-	he lower of t s were clean 2-01119-0141 01119-005, E 01119-012, E sived within h acted within lyzed within	the two concentrations was rep ed up using method 3660B to MS, E22-01119-014MSD, E22- 222-01119-006, E22-01119-00 22-01119-013, E22-01119-014 holding time. holding time. holding time.	remove sulfur: BLKS220225-05, -01119-001, E22-01119-002, 7, E22-01119-008, E22-01119-009,
	Dilution Summary:		Dilution For	
	Sample ID E22-01119-001	DF(s)	NA	
	E22-01119-002	1	NA	
	E22-01119-004	1	NA	
	E22-01119-005	1	NA	
	E22-01119-006	1	NA	
	E22-01119-007	1	NA	
	E22-01119-008	1	NA	
	E22-01119-009	1	NA	
	E22-01119-011	1	NA	
	E22-01119-012 E22-01119-013	1	NA NA	

# SAMPLE DELIVERY GROUP CASE NARRATIVE

## SDG#: E22-01119

QC	<ul> <li>Calibration Curve Linearity me</li> <li>Internal Standard Recovery m</li> </ul>		C criteria.	
		net Q	C criteria.	
	- Method Blank met QC criteria	ı.		
	- LCS Percent Recovery met Q	C cr	iteria.	
	- MS Percent Recovery met QC			
	- RPD between Sample/Duplica			
	- Serial Dilution met QC criteria			
E22-01119	- All samples were received wit		olding time	
	- All samples were leached with		-	
			-	
	- All samples were digested wit		•	
	- All samples were analyzed with	tnin i	holding time.	
	Dilution Summary:			
	Sample ID DF	-(s)	Dilution For	
	E22-01119-005	1	NA	
Metals By SV	V 6020B		Batch: S220301-01 (113A)	Matrix: Soil
QC	- Calibration Curve Linearity me	et QC	Criteria.	
	- Internal Standard Recovery m	net Q	C criteria.	
	Method Blank met QC criteria	ı.		
	- LCS Percent Recovery met Q	C cri	teria.	
	- MS Percent Recovery met QC			
	- RPD between Sample/Duplica			
	- Serial Dilution met QC criteria			
E22-01119	- All samples were received wit	hin h	oldina time.	
	- All samples were digested wit		-	
	- All samples were analyzed with		+	
			lolding time.	
	Dilution Summary:	-/->	Dilution For	
		(s)	Dilution For	
		1	NA	
		1 1	NA	
		' 1	NA NA	
		1	NA	
	E22-01119-007	1	NA	
		1	NA	
	E22-01119-009	1	NA	
		1	NA	
		1	NA	
		1	NA	
	E22-01119-014	1	NA	
Final pH of S By SW 9040C	PLP SVOC and/or Metals Leac	hate	Batch: AP119-0019	Matrix: SPLP Leachate

# SAMPLE DELIVERY GROUP CASE NARRATIVE

# SDG#: E22-01119

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

MD Reviewed by

3/15/2022

Date

## DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Integrated Analytical Laboratories Client: Melick Tully & Associates Project Location: BOHLER-HOWELL (VICTORY) IAL Project #: E22-01119 IAL Sample ID(s): E22-01119-001 ~ -015 Sampling Date(s): 2/24/2022

#### List of DKQP Method Used:

TCL Pesticides by 8081B Arsenic - As by 6020B Lead - Pb by 6020B SPLP Lead - Pb by 1312/6020B Final pH of SPLP SVOC and/or Metals Leachate by 9040C SPLP SVOC and/or Metals Leachate volume by 1312 Weight of soil for SPLP SVOC and/or Metals Leachate by 1312

**Notes:** For all questions to which the response was "No" (with the exception of question #7), additional information is provided in the case narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."

		YES	NO	N/A
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	x		
1A	Were the method specified handling, preservation, and holding time requirements met?	x		
1B	EPH Method: Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)			x
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	x		
3	Were samples received at an appropriate temperature (4±2° C)?	X		
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	x		
5A	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	x		
5B	Were these reporting limits met?	X		
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	x		
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?		x	

# RESULTS SUMMARY REPORT

		Projec	SUMMAH Client: Melick Ct: BOHLER-I Lab Case N	Fully & HOWE lo.: E22	Associates LL (VICTORY -01119					
M	Lab ID:	01	119-001	01	119-002		19-003	01	119-004	
	Client ID:		SS-1		SS-2		SS-2D		SS-3	
	Depth:		0/0.5		0/0.5		.0/1.5		0/0.5	
	Matrix:		Soil		Soil		Soil		Soil	
	Sampled Date	:	2/24/22		2/24/22		/24/22		2/24/22	
PARAMETER(Units)		Conc	Q MDL	Conc	Q MDL	Conc	Q MDL	Conc	Q MDL	
Pesticides (Units)			(mg/Kg)	(	(mg/Kg)	(n	ng/Kg)	(	mg/Kg)	
alpha-BHC		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
beta-BHC		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
gamma-BHC (Lindane)		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
delta-BHC		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Heptachlor		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Aldrin		ND	0.000187	ND	0.000191	~	2	ND	0.000184	
Heptachlor epoxide		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Endosulfan I	(	ND	0.000187	ND	0.000191	~	~	ND	0.000184	
4,4'-DDE		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Dieldrin		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Endrin		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Endosulfan II		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
4,4'-DDD		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Endrin aldehyde		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Endosulfan sulfate		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
4,4'-DDT		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Endrin ketone		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Methoxychlor		ND	0.000187	ND	0.000191	~	2	ND	0.000184	
alpha-Chlordane		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
gamma-Chlordane		ND	0.000187	ND	0.000191	~	2	ND	0.000184	
Toxaphene		ND	0.00374	ND	0.00381	~	~	ND	0.00368	
Endosulfan (I and II)		ND	0.000187	ND	0.000191	~	~	ND	0.000184	
Chlordane (alpha and gar	nma)	ND	0.000187	ND	0.000191	~	2	ND	0.000184	
Metals (Units)			(mg/Kg)		(mg/Kg)	(1	ng/Kg)	(mg/Kg)		
Arsenic		1.57	0.049	2.98	0.053	~	~	1.37	0.052	
Lead		16.3	0.257	12.1	0.276	~	~	11.3	0.269	

	P	Client: Mo roject: BOHI	elick Tul LER-HO	REPORT ly & Associat WELL (VICT E22-01119					
Lab ID:	0111	9-005	011	19-006	011	.19-007	01	119-008	
Client ID:	S	S-4		SS-5	1	SS-6	SS-9		
Depth:	0/	0.5		0/0.5		0/0.5	0/0.5		
Matrix:		oil		Soil		Soil	Soil		
SPLP Matrix:		eachate							
Sampled Date		4/22		/24/22		24/22		2/24/22	
PARAMETER(Units)	Conc	Q MDL	Conc	Q MDL	Conc	Q MDL	Conc	Q MDL	
Pesticides (Units)	(mg	/Kg)	(n	ng/Kg)	(n	ng/Kg)	(	mg/Kg)	
alpha-BHC	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
beta-BHC	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
gamma-BHC (Lindane)	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
delta-BHC	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Heptachlor	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Aldrin	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Heptachlor epoxide	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Endosulfan I	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
4,4'-DDE	0.00169	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Dieldrin	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Endrin	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Endosulfan II	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
4,4'-DDD	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Endrin aldehyde	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Endosulfan sulfate	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
4,4'-DDT	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Endrin ketone	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Methoxychlor	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
alpha-Chlordane	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
gamma-Chlordane	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Toxaphene	ND	0.00395	ND	0.00354	ND	0.0036	ND	0.00365	
Endosulfan (I and II)	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Chlordane (alpha and gamma)	ND	0.000198	ND	0.000177	ND	0.00018	ND	0.000183	
Metals (Units)	(mg	y/Kg)	(n	ng/Kg)	(11	ng/Kg)	(	mg/Kg)	
Arsenic	1.95	0.056	1.03	0.052	1.08	0.050	1.30	0.051	
Lead	113	0.293	23.8	0.269	8.57	0.262	15.7	0.267	
SPLP Metals (Units)	(u)	g/L)	(	ug/L)	(.	ug/L)		(ug/L)	
SPLP Lead	ND	1.00	~	~	~	~	~	~	
General Analytical									
Final pH of SPLP SVOC	6.52	NA	~	~	~	~	~	~	
and/or Metals Leachate(SU)									
Weight of soil for SPLP SVOC	0.100	NA	~	~	~	~	2	~	
and/or Metals Leachate(kg) SPLP SVOC and/or Metals Leachate volume(L)	2.00	NA	~	~	~	~	~	~	

Client: Melick Tully & Associates												
Project: BOHLER-HOWELL (VICTORY) Lab Case No.: E22-01119												
Lab ID:	01119-009		01119-010		01119-011		01119-012					
Client ID:	SS-8		SS-8D		SS-7		SS-10					
Depth:	0/0.5 Soil		1.0/1.5 Soil		0/0.5 Soil		0/0.5 Soil					
Matrix:												
SPLP Matrix:												
Sampled Date	2/24/22		2/24/22		2/24/22		2/24/22					
PARAMETER(Units)	Conc Q	MDL	Conc	Q MDL	Conc (	Q MDL	Conc	Q MDL				
Pesticides (Units)	(mį	g/Kg)	(	mg/Kg)	(mg/Kg)		(mg/Kg)					
alpha-BHC	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
beta-BHC	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
gamma-BHC (Lindane)	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
delta-BHC	ND	0.000194	~	2	ND	0.000209	ND	0.000184				
Heptachlor	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Aldrin	ND	0.000194	~	2	ND	0.000209	ND	0.000184				
Heptachlor epoxide	ND	0.000194	~	2	ND	0.000209	ND	0.000184				
Endosulfan I	ND	0.000194	~	2	ND	0.000209	ND	0.000184				
4,4'-DDE	ND	0.000194	~	2	0.0026	0.000209	0.00143	0.000184				
Dieldrin	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Endrin	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Endosulfan II	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
4,4'-DDD	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Endrin aldehyde	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Endosulfan sulfate	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
4,4'-DDT	ND	0.000194	~	~	0.000974	0.000209	ND	0.000184				
Endrin ketone	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Methoxychlor	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
alpha-Chlordane	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
gamma-Chlordane	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Toxaphene	ND	0.00387	~	~	ND	0.00418	ND	0.00367				
Endosulfan (I and II)	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Chlordane (alpha and gamma)	ND	0.000194	~	~	ND	0.000209	ND	0.000184				
Metals (Units)	(mg/Kg)		(mg/Kg)		(mg/Kg)		(mg/Kg)					
Arsenic	2.09	0.051	~	~	2.17	0.059	1.21	0.048				
Lead	14.7	0.263	~	~	33.1	0.305	20.9	0.252				

SUMMARY REPORT

Client: Melick Tully & Associates											
Project: BOHLER-HOWELL (VICTORY)											
Lab Case No.: E22-01119											
Lab		01119-013		01119-014		01119-015					
Client	ID:	SS-11		SS-12		SS-12D					
Dep	oth:	0/0.5		0/0.5		1.5/2.0					
Mat	rix:	Soil		Soil		Soil					
SPLP Mat											
Sampled D	ate	2/24/22		2/24/22		2/24/22					
PARAMETER(Units)	Con	Q MDL	Conc	Q MDL	Conc	Q MDL					
Pesticides (Units)		(mg/Kg)		(mg/Kg)		(mg/Kg)					
alpha-BHC	ND	0.00018	ND	0.000182	~	~					
beta-BHC	ND	0.00018	ND	0.000182	~	~					
gamma-BHC (Lindane)	ND	0.00018	ND	0.000182	~	~					
delta-BHC	ND	0.00018	ND	0.000182	~	~					
Heptachlor	ND	0.00018	ND	0.000182	~	~					
Aldrin	ND	0.00018	ND	0.000182	~	~					
Heptachlor epoxide	ND	0.00018	ND	0.000182	~	~					
Endosulfan I	ND	0.00018	ND	0.000182	~	~					
4,4'-DDE	ND	0.00018	ND	0.000182	~	~					
Dieldrin	ND	0.00018	ND	0.000182	~	~					
Endrin	ND	0.00018	ND	0.000182	~	~					
Endosulfan II	ND	0.00018	ND	0.000182	~	~					
4,4'-DDD	ND	0.00018	ND	0.000182	~	~					
Endrin aldehyde	ND	0.00018	ND	0.000182	~	~					
Endosulfan sulfate	ND	0.00018	ND	0.000182	~	~					
4,4'-DDT	ND	0.00018	ND	0.000182	~	~					
Endrin ketone	ND		ND	0.000182	~	~					
Methoxychlor	ND	0.00018	ND	0.000182	~	~					
alpha-Chlordane	ND		ND	0.000182	~	~					
gamma-Chlordane	ND		ND	0.000182	~	~					
Toxaphene	ND		ND	0.00364	~	~					
Endosulfan (I and II)	ND		ND	0.000182	~	~					
Chlordane (alpha and gamma)	ND	0.00018	ND	0.000182	~	~					
Metals (Units)		(mg/Kg)		(mg/Kg)		(mg/Kg)					
Arsenic	1.1	0.052	1.53	0.050	~	~					
Lead	11.3	0.269	8.40	0.259	~	~					

SUMMARY REPORT

## ANALYTICAL RESULTS

Lab ID: E22-01119-001 Client ID: SS-1/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9228.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.70g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 14.8

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000748	0.000187
beta-BHC	ND		0.000748	0.000187
gamma-BHC (Lindane)	ND		0.000748	0.000187
delta-BHC	ND		0.000748	0.000187
Heptachlor	ND		0.000748	0.000187
Aldrin	ND		0.000748	0.000187
Heptachlor epoxide	ND		0.000748	0.000187
Endosulfan I	ND		0.000748	0.000187
4,4'-DDE	ND		0.000748	0.000187
Dieldrin	ND		0.000748	0.000187
Endrin	ND		0.000748	0.000187
Endosulfan II	ND		0.000748	0.000187
4,4'-DDD	ND		0.000748	0.000187
Endrin aldehyde	ND		0.000748	0.000187
Endosulfan sulfate	ND		0.000748	0.000187
4,4'-DDT	ND		0.000748	0.000187
Endrin ketone	ND		0.000748	0.000187
Methoxychlor	ND		0.000748	0.000187
alpha-Chlordane	ND		0.000748	0.000187
gamma-Chlordane	ND		0.000748	0.000187
Toxaphene	ND		0.00935	0.00374
Endosulfan (I and II)	ND		0.000748	0.000187
Chlordane (alpha and gamma)	ND		0.000748	0.000187

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-002 Client ID: SS-2/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9229.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.40g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 14.8

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000762	0.000191
beta-BHC	ND		0.000762	0.000191
gamma-BHC (Lindane)	ND		0.000762	0.000191
delta-BHC	ND		0.000762	0.000191
Heptachlor	ND		0.000762	0.000191
Aldrin	ND		0.000762	0.000191
Heptachlor epoxide	ND		0.000762	0.000191
Endosulfan I	ND		0.000762	0.000191
4,4'-DDE	ND		0.000762	0.000191
Dieldrin	ND		0.000762	0.000191
Endrin	ND		0.000762	0.000191
Endosulfan II	ND		0.000762	0.000191
4,4'-DDD	ND		0.000762	0.000191
Endrin aldehyde	ND		0.000762	0.000191
Endosulfan sulfate	ND		0.000762	0.000191
4,4'-DDT	ND		0.000762	0.000191
Endrin ketone	ND		0.000762	0.000191
Methoxychlor	ND		0.000762	0.000191
alpha-Chlordane	ND		0.000762	0.000191
gamma-Chlordane	ND		0.000762	0.000191
Toxaphene	ND		0.00953	0.00381
Endosulfan (I and II)	ND		0.000762	0.000191
Chlordane (alpha and gamma)	ND		0.000762	0.000191

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-004 Client ID: SS-3/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9230.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.47g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 12.2

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000736	0.000184
beta-BHC	ND		0.000736	0.000184
gamma-BHC (Lindane)	ND		0.000736	0.000184
delta-BHC	ND		0.000736	0.000184
Heptachlor	ND		0.000736	0.000184
Aldrin	ND		0.000736	0.000184
Heptachlor epoxide	ND		0.000736	0.000184
Endosulfan I	ND		0.000736	0.000184
4,4'-DDE	ND		0.000736	0.000184
Dieldrin	ND		0.000736	0.000184
Endrin	ND		0.000736	0.000184
Endosulfan II	ND		0.000736	0.000184
4,4'-DDD	ND		0.000736	0.000184
Endrin aldehyde	ND		0.000736	0.000184
Endosulfan sulfate	ND		0.000736	0.000184
4,4'-DDT	ND		0.000736	0.000184
Endrin ketone	ND		0.000736	0.000184
Methoxychlor	ND		0.000736	0.000184
alpha-Chlordane	ND		0.000736	0.000184
gamma-Chlordane	ND		0.000736	0.000184
Toxaphene	ND		0.0092	0.00368
Endosulfan (I and II)	ND		0.000736	0.000184
Chlordane (alpha and gamma)	ND		0.000736	0.000184

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-005 Client ID: SS-4/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9219.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.41g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 17.8

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00079	0.000198
beta-BHC	ND		0.00079	0.000198
gamma-BHC (Lindane)	ND		0.00079	0.000198
delta-BHC	ND		0.00079	0.000198
Heptachlor	ND		0.00079	0.000198
Aldrin	ND		0.00079	0.000198
Heptachlor epoxide	ND		0.00079	0.000198
Endosulfan I	ND		0.00079	0.000198
4,4'-DDE	0.00169		0.00079	0.000198
Dieldrin	ND		0.00079	0.000198
Endrin	ND		0.00079	0.000198
Endosulfan II	ND		0.00079	0.000198
4,4'-DDD	ND		0.00079	0.000198
Endrin aldehyde	ND		0.00079	0.000198
Endosulfan sulfate	ND		0.00079	0.000198
4,4'-DDT	ND		0.00079	0.000198
Endrin ketone	ND		0.00079	0.000198
Methoxychlor	ND		0.00079	0.000198
alpha-Chlordane	ND		0.00079	0.000198
gamma-Chlordane	ND		0.00079	0.000198
Toxaphene	ND		0.00988	0.00395
Endosulfan (I and II)	ND		0.00079	0.000198
Chlordane (alpha and gamma)	ND		0.00079	0.000198

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-006 Client ID: SS-5/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9220.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.76g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 10.5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000708	0.000177
beta-BHC	ND		0.000708	0.000177
gamma-BHC (Lindane)	ND		0.000708	0.000177
delta-BHC	ND		0.000708	0.000177
Heptachlor	ND		0.000708	0.000177
Aldrin	ND		0.000708	0.000177
Heptachlor epoxide	ND		0.000708	0.000177
Endosulfan I	ND		0.000708	0.000177
4,4'-DDE	ND		0.000708	0.000177
Dieldrin	ND		0.000708	0.000177
Endrin	ND		0.000708	0.000177
Endosulfan II	ND		0.000708	0.000177
4,4'-DDD	ND		0.000708	0.000177
Endrin aldehyde	ND		0.000708	0.000177
Endosulfan sulfate	ND		0.000708	0.000177
4,4'-DDT	ND		0.000708	0.000177
Endrin ketone	ND		0.000708	0.000177
Methoxychlor	ND		0.000708	0.000177
alpha-Chlordane	ND		0.000708	0.000177
gamma-Chlordane	ND		0.000708	0.000177
Toxaphene	ND		0.00885	0.00354
Endosulfan (I and II)	ND		0.000708	0.000177
Chlordane (alpha and gamma)	ND		0.000708	0.000177

D --- Dilution Performed

J ---- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-007 Client ID: SS-6/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9221.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.47g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 10.2

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00072	0.00018
beta-BHC	ND		0.00072	0.00018
gamma-BHC (Lindane)	ND		0.00072	0.00018
delta-BHC	ND		0.00072	0.00018
Heptachlor	ND		0.00072	0.00018
Aldrin	ND		0.00072	0.00018
Heptachlor epoxide	ND		0.00072	0.00018
Endosulfan I	ND		0.00072	0.00018
4,4'-DDE	ND		0.00072	0.00018
Dieldrin	ND		0.00072	0.00018
Endrin	ND		0.00072	0.00018
Endosulfan II	ND		0.00072	0.00018
4,4'-DDD	ND		0.00072	0.00018
Endrin aldehyde	ND		0.00072	0.00018
Endosulfan sulfate	ND		0.00072	0.00018
4,4'-DDT	ND		0.00072	0.00018
Endrin ketone	ND		0.00072	0.00018
Methoxychlor	ND		0.00072	0.00018
alpha-Chlordane	ND		0.00072	0.00018
gamma-Chlordane	ND		0.00072	0.00018
Toxaphene	ND		0.009	0.0036
Endosulfan (I and II)	ND		0.00072	0.00018
Chlordane (alpha and gamma)	ND		0.00072	0.00018

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-008 Client ID: SS-9/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9222.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.49g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 11.5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00073	0.000183
beta-BHC	ND		0.00073	0.000183
gamma-BHC (Lindane)	ND		0.00073	0.000183
delta-BHC	ND		0.00073	0.000183
Heptachlor	ND		0.00073	0.000183
Aldrin	ND		0.00073	0.000183
Heptachlor epoxide	ND		0.00073	0.000183
Endosulfan I	ND		0.00073	0.000183
4,4'-DDE	ND		0.00073	0.000183
Dieldrin	ND		0.00073	0.000183
Endrin	ND		0.00073	0.000183
Endosulfan II	ND		0.00073	0.000183
4,4'-DDD	ND		0.00073	0.000183
Endrin aldehyde	ND		0.00073	0.000183
Endosulfan sulfate	ND		0.00073	0.000183
4,4'-DDT	ND		0.00073	0.000183
Endrin ketone	ND		0.00073	0.000183
Methoxychlor	ND		0.00073	0.000183
alpha-Chlordane	ND		0.00073	0.000183
gamma-Chlordane	ND		0.00073	0.000183
Toxaphene	ND		0.00913	0.00365
Endosulfan (I and II)	ND		0.00073	0.000183
Chlordane (alpha and gamma)	ND		0.00073	0.000183

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-009 Client ID: SS-8/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9223.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.29g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 15.4

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000774	0.000194
beta-BHC	ND		0.000774	0.000194
gamma-BHC (Lindane)	ND		0.000774	0.000194
delta-BHC	ND		0.000774	0.000194
Heptachlor	ND		0.000774	0.000194
Aldrin	ND		0.000774	0.000194
Heptachlor epoxide	ND		0.000774	0.000194
Endosulfan I	ND		0.000774	0.000194
4,4'-DDE	ND		0.000774	0.000194
Dieldrin	ND		0.000774	0.000194
Endrin	ND		0.000774	0.000194
Endosulfan II	ND		0.000774	0.000194
4,4'-DDD	ND		0.000774	0.000194
Endrin aldehyde	ND		0.000774	0.000194
Endosulfan sulfate	ND		0.000774	0.000194
4,4'-DDT	ND		0.000774	0.000194
Endrin ketone	ND		0.000774	0.000194
Methoxychlor	ND		0.000774	0.000194
alpha-Chlordane	ND		0.000774	0.000194
gamma-Chlordane	ND		0.000774	0.000194
Toxaphene	ND		0.00968	0.00387
Endosulfan (I and II)	ND		0.000774	0.000194
Chlordane (alpha and gamma)	ND		0.000774	0.000194

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-011 Client ID: SS-7/0-0 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9224.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.25g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 21.5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000836	0.000209
beta-BHC	ND		0.000836	0.000209
gamma-BHC (Lindane)	ND		0.000836	0.000209
delta-BHC	ND		0.000836	0.000209
Heptachlor	ND		0.000836	0.000209
Aldrin	ND		0.000836	0.000209
Heptachlor epoxide	ND		0.000836	0.000209
Endosulfan I	ND		0.000836	0.000209
4,4'-DDE	0.0026		0.000836	0.000209
Dieldrin	ND		0.000836	0.000209
Endrin	ND		0.000836	0.000209
Endosulfan II	ND		0.000836	0.000209
4,4'-DDD	ND		0.000836	0.000209
Endrin aldehyde	ND		0.000836	0.000209
Endosulfan sulfate	ND		0.000836	0.000209
4,4'-DDT	0.000974		0.000836	0.000209
Endrin ketone	ND		0.000836	0.000209
Methoxychlor	ND		0.000836	0.000209
alpha-Chlordane	ND		0.000836	0.000209
gamma-Chlordane	ND		0.000836	0.000209
Toxaphene	ND		0.011	0.00418
Endosulfan (I and II)	ND		0.000836	0.000209
Chlordane (alpha and gamma)	ND		0.000836	0.000209

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-012 Client ID: SS-10/0-Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9225.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.39g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 11.5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000734	0.000184
beta-BHC	ND		0.000734	0.000184
gamma-BHC (Lindane)	ND		0.000734	0.000184
delta-BHC	ND		0.000734	0.000184
Heptachlor	ND		0.000734	0.000184
Aldrin	ND		0.000734	0.000184
Heptachlor epoxide	ND		0.000734	0.000184
Endosulfan I	ND		0.000734	0.000184
4,4'-DDE	0.00143		0.000734	0.000184
Dieldrin	ND		0.000734	0.000184
Endrin	ND		0.000734	0.000184
Endosulfan II	ND		0.000734	0.000184
4,4'-DDD	ND		0.000734	0.000184
Endrin aldehyde	ND		0.000734	0.000184
Endosulfan sulfate	ND		0.000734	0.000184
4,4'-DDT	ND		0.000734	0.000184
Endrin ketone	ND		0.000734	0.000184
Methoxychlor	ND		0.000734	0.000184
alpha-Chlordane	ND		0.000734	0.000184
gamma-Chlordane	ND		0.000734	0.000184
Toxaphene	ND		0.00918	0.00367
Endosulfan (I and II)	ND		0.000734	0.000184
Chlordane (alpha and gamma)	ND		0.000734	0.000184

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-013 Client ID: SS-11/0-Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9226.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.60g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 10.6

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000718	0.00018
beta-BHC	ND		0.000718	0.00018
gamma-BHC (Lindane)	ND		0.000718	0.00018
delta-BHC	ND		0.000718	0.00018
Heptachlor	ND		0.000718	0.00018
Aldrin	ND		0.000718	0.00018
Heptachlor epoxide	ND		0.000718	0.00018
Endosulfan I	ND		0.000718	0.00018
4,4'-DDE	ND		0.000718	0.00018
Dieldrin	ND		0.000718	0.00018
Endrin	ND		0.000718	0.00018
Endosulfan II	ND		0.000718	0.00018
4,4'-DDD	ND		0.000718	0.00018
Endrin aldehyde	ND		0.000718	0.00018
Endosulfan sulfate	ND		0.000718	0.00018
4,4'-DDT	ND		0.000718	0.00018
Endrin ketone	ND		0.000718	0.00018
Methoxychlor	ND		0.000718	0.00018
alpha-Chlordane	ND		0.000718	0.00018
gamma-Chlordane	ND		0.000718	0.00018
Toxaphene	ND		0.00898	0.00359
Endosulfan (I and II)	ND		0.000718	0.00018
Chlordane (alpha and gamma)	ND		0.000718	0.00018

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Lab ID: E22-01119-014 Client ID: SS-12/0-Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9227.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.40g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: 10.9

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000728	0.000182
beta-BHC	ND		0.000728	0.000182
gamma-BHC (Lindane)	ND		0.000728	0.000182
delta-BHC	ND		0.000728	0.000182
Heptachlor	ND		0.000728	0.000182
Aldrin	ND		0.000728	0.000182
Heptachlor epoxide	ND		0.000728	0.000182
Endosulfan I	ND		0.000728	0.000182
4,4'-DDE	ND		0.000728	0.000182
Dieldrin	ND		0.000728	0.000182
Endrin	ND		0.000728	0.000182
Endosulfan II	ND		0.000728	0.000182
4,4'-DDD	ND		0.000728	0.000182
Endrin aldehyde	ND		0.000728	0.000182
Endosulfan sulfate	ND		0.000728	0.000182
4,4'-DDT	ND		0.000728	0.000182
Endrin ketone	ND		0.000728	0.000182
Methoxychlor	ND		0.000728	0.000182
alpha-Chlordane	ND		0.000728	0.000182
gamma-Chlordane	ND		0.000728	0.000182
Toxaphene	ND		0.0091	0.00364
Endosulfan (I and II)	ND		0.000728	0.000182
Chlordane (alpha and gamma)	ND		0.000728	0.000182

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

#### METALS

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-001 Client ID: SS-1 Date Collected: 02/24/22 08:05 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 14.8 Batch #: 113

Batoli M. The						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.57		1	0.513	0.0493	03/02/22 02:05	SW 6020B
Lead	16.3		1	0.513	0.257	03/02/22 02:05	SW 6020B

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-002 Client ID: SS-2 Date Collected: 02/24/22 08:20 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 14.8 Batch #: 113

Datch #. 115						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	2.98		1	0.552	0.0530	03/02/22 02:10	SW 6020B
Lead	12.1		1	0.552	0.276	03/02/22 02:10	SW 6020B

#### METALS

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-004 Client ID: SS-3 Date Collected: 02/24/22 08:35 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 12.2 Batch #: 113

						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.37		1	0.538	0.0516	03/02/22 02:15	SW 6020B
Lead	11.3		1	0.538	0.269	03/02/22 02:15	SW 6020B

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-005 Client ID: SS-4 Date Collected: 02/24/22 09:05 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 17.8 Batch #: 113

Batoli #. Tro						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.95		1	0.587	0.0563	03/02/22 02:20	SW 6020B
Lead	113		1	0.587	0.293	03/02/22 02:20	SW 6020B

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-006 Client ID: SS-5 Date Collected: 02/24/22 09:10 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 10.5 Batch #: 113

Baton						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.03		1	0.538	0.0517	03/02/22 02:25	SW 6020B
Lead	23.8		1	0.538	0.269	03/02/22 02:25	SW 6020B

## Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-007 Client ID: SS-6 Date Collected: 02/24/22 09:25 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 10.2 Batch #: 113

Daton #. 115						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.08		1	0.524	0.0503	03/02/22 02:30	SW 6020B
Lead	8.57		1	0.524	0.262	03/02/22 02:30	SW 6020B

#### METALS

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-008 Client ID: SS-9 Date Collected: 02/24/22 09:40 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 11.5 Batch #: 113

Batorni. Tro						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.30		1	0.533	0.0512	03/02/22 02:35	SW 6020B
Lead	15.7		1	0.533	0.267	03/02/22 02:35	SW 6020B

#### METALS

## Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-009 Client ID: SS-8 Date Collected: 02/24/22 09:45 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 15.4 Batch #: 113

Baton #. 110						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	2.09		1	0.527	0.0506	03/02/22 02:40	SW 6020B
Lead	14.7		1	0.527	0.263	03/02/22 02:40	SW 6020B

#### METALS

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-011 Client ID: SS-7 Date Collected: 02/24/22 10:00 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 21.5 Batch #: 113

						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	2.17		1	0.611	0.0586	03/02/22 02:45	SW 6020B
Lead	33.1		1	0.611	0.305	03/02/22 02:45	SW 6020B

#### METALS

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-012 Client ID: SS-10 Date Collected: 02/24/22 10:15 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 11.5 Batch #: 113

						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.21		1	0.504	0.0484	03/02/22 03:05	SW 6020B
Lead	20.9		1	0.504	0.252	03/02/22 03:05	SW 6020B

#### METALS

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-013 Client ID: SS-11 Date Collected: 02/24/22 10:25 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 10.6 Batch #: 113

						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.17		1	0.538	0.0517	03/02/22 03:10	SW 6020B
Lead	11.3		1	0.538	0.269	03/02/22 03:10	SW 6020B

#### METALS

#### Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Lab ID: E22-01119-014 Client ID: SS-12 Date Collected: 02/24/22 10:40 Date Received: 02/24/22 17:17 Matrix-Units: Soil-mg/Kg (ppm) % Moisture: 10.9 Batch #: 113

						Date	
Compound	Result	Q	DF	RL	MDL	Analyzed	Method
Arsenic	1.53		1	0.519	0.0498	03/02/22 03:15	SW 6020B
Lead	8.40		1	0.519	0.259	03/02/22 03:15	SW 6020B

## SPLP Lead

#### Client/Project: MT&ABOHLER-HOWELL (VICTORY)

Batch #: 130 Date Received: 02/24/22 17:17 Method: SW 1312/6020B

Analyst: D. Kopcso

								%	Date	Date
Lab ID	Client ID	Result	Q	DF	Matrix-Unit	RL	MDL	Moist	Collected	Analyzed
E22-01119-005	SS-4	ND		1	SPLP	2.00	1.00	NA	02/24/22 09:05	03/10/22 08:45
					Leachate-					
					ug/L					

ND = Analyzed for but Not Detected at the MDL

# Final pH of SPLP SVOC and/or Metals Leachate

Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Date Received: 02/24/22 17:17 Method: SW 9040C

Analyst: A. Palermo

Lab ID	Client ID	Result	QC	DF	Matrix-Unit	MDL	RL	Date Collected	Date Analyzed
E22-01119-005	SS-4	6.52		1	Leachate-SU	NA	NA	02/24/22 09:05	03/08/22 11:10

# Weight of soil for SPLP SVOC and/or Metals Leachate

Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Date Received: 02/24/22 17:17 Method: SW 1312

Analyst: A. Palermo

Lab ID	Client ID	Result	Q DF	Matrix-Unit	MDL	RL	Date Collected	
E22-01119-005	SS-4	0.100	1	Soil-Kg	NA	NA	02/24/22 09:05	03/07/22 15:00

## SPLP SVOC and/or Metals Leachate volume

Client/Project: MT&A/BOHLER-HOWELL (VICTORY)

Date Received: 02/24/22 17:17 Method: SW 1312

Analyst: A. Palermo

Lab ID	Client ID	Result C	DF	Matrix-Unit	MDL	RL	Date Collected	
E22-01119-005	SS-4	2.00	1	Leachate-L	NA	NA	02/24/22 09:05	03/07/22 15:00

PESTICIDE DATA

# PESTICIDE QC SUMMARY

## PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

**Date Analyzed:** 03/01/2022

	Lab		TCMX 1	DCB 1	TCMX 2	DCB 2
Client ID	Sample ID	Matrix	% rec #	% rec #	% rec #	% rec #
Pest	BLKS220225-05	SOIL	83	73	101	88
Pest	LCSS220225-05	SOIL	76	69	93	81
Pest	E22-01119-014MS	SOIL	64	65	88	80
Pest	E22-01119-014MS	SOIL	63	62	86	72
SS-4/0-0	E22-01119-005	SOIL	77	71	95	82
SS-5/0-0	E22-01119-006	SOIL	73	70	91	97
SS-6/0-0	E22-01119-007	SOIL	75	71	92	88
SS-9/0-0	E22-01119-008	SOIL	72	68	92	80
SS-8/0-0	E22-01119-009	SOIL	72	72	89	85
SS-7/0-0	E22-01119-011	SOIL	74	73	90	90
SS-10/0-	E22-01119-012	SOIL	69	71	76	97
SS-11/0-	E22-01119-013	SOIL	74	83	94	85
SS-12/0-	E22-01119-014	SOIL	75	78	100	93
SS-1/0-0	E22-01119-001	SOIL	66	72	81	82
SS-2/0-0	E22-01119-002	SOIL	73	79	94	93
SS-3/0-0	E22-01119-004	SOIL	75	75	101	88
P-SB-2_4	E22-01112-001	SOIL	72	114	82	136
P-SB-1_5	E22-01112-003	SOIL	73	84	80	107
P-SB-1_7	E22-01112-004	SOIL	67	76	76	90
E-SB-1_4	E22-01112-005	SOIL	73	97	85	136
E-SB-1_6	E22-01112-006	SOIL	54	80	64	93
E-SB-2_4	E22-01112-007	SOIL	79	97	91	129
DUP02242	E22-01112-009	SOIL	76	83	89	97
SB-1/2.5	E22-01079-001	SOIL	76	83	87	99

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	28-122	57-120
DCB = Decachlorobiphenyl	35-139	61-118

# Column used to flag recovery values that did not meet criteria

\* Values outside of QC limits

D Surrogate diluted out

M Matrix interference

Pest

## LCS ACCURACY REPORT

Lab ID: LCSS220225-05 Date Received: NA Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9216.D GC Column: RTX-CLP1 Sample wt/vol: 15.17g Matrix-Units: Soil-µg/Kg % Moisture: NA Dilution Factor: 1

	Conc.		Conc.	%Rec.	QC
Compound	Add	Sample	LCS	LCS #	Limits
alpha-BHC	100.0	0.0	80.2	80	59-120
beta-BHC	100.0	0.0	74.4	74	53-120
gamma-BHC (Lindane)	100.0	0.0	79.0	79	60-120
delta-BHC	100.0	0.0	82.8	83	60-120
Heptachlor	100.0	0.0	83.8	84	61-120
Aldrin	100.0	0.0	76.7	77	56-120
Heptachlor epoxide	100.0	0.0	77.0	77	58-120
Endosulfan I	100.0	0.0	77.0	77	58-120
4,4'-DDE	100.0	0.0	76.2	76	50-120
Dieldrin	100.0	0.0	78.1	78	55-120
Endrin	100.0	0.0	80.7	81	59-120
Endosulfan II	100.0	0.0	76.5	77	55-120
4,4'-DDD	100.0	0.0	88.8	89	53-128
Endrin aldehyde	100.0	0.0	73.7	74	51-120
Endosulfan sulfate	100.0	0.0	79.1	79	59-120
4,4'-DDT	100.0	0.0	55.6	56	45-120
Endrin ketone	100.0	0.0	78.8	79	61-120
Methoxychlor	100.0	0.0	72.0	72	55-120
alpha-Chlordane	100.0	0.0	75.5	76	55-120
gamma-Chlordane	100.0	0.0	75.3	75	55-120

	Aqueous	Soil/Sediment
NJ DKQP Limits	40-140	40-140

# Column used to flag recovery values that did not meet criteria

\* Values outside of QC limits

\$ Values outside of NJ DKQP limits

Pest

## LCS ACCURACY REPORT

Lab ID: LCSS220225-05 Date Received: NA Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9216.D GC Column: RTX-CLP2 Sample wt/vol: 15.17g Matrix-Units: Soil-µg/Kg % Moisture: NA Dilution Factor: 1

	Conc.		Conc.	%Rec.	QC
Compound	Add	Sample	LCS	LCS #	Limits
alpha-BHC	100.0	0.0	100.7	101	59-120
beta-BHC	100.0	0.0	94.9	95	53-120
gamma-BHC (Lindane)	100.0	0.0	100.5	101	60-120
delta-BHC	100.0	0.0	107.5	108	60-120
Heptachlor	100.0	0.0	107.9	108	61-120
Aldrin	100.0	0.0	97.5	98	56-120
Heptachlor epoxide	100.0	0.0	99.1	99	58-120
Endosulfan I	100.0	0.0	97.1	97	58-120
4,4'-DDE	100.0	0.0	97.0	97	50-120
Dieldrin	100.0	0.0	100.6	101	55-120
Endrin	100.0	0.0	100.7	101	59-120
Endosulfan II	100.0	0.0	96.4	96	55-120
4,4'-DDD	100.0	0.0	113.4	113	53-128
Endrin aldehyde	100.0	0.0	91.7	92	51-120
Endosulfan sulfate	100.0	0.0	99.4	99	59-120
4,4'-DDT	100.0	0.0	70.1	70	45-120
Endrin ketone	100.0	0.0	105.6	106	61-120
Methoxychlor	100.0	0.0	81.9	82	55-120
alpha-Chlordane	100.0	0.0	94.4	94	55-120
gamma-Chlordane	100.0	0.0	96.6	97	55-120

	Aqueous	Soil/Sediment
NJ DKQP Limits	40-140	40-140

# Column used to flag recovery values that did not meet criteria

\* Values outside of QC limits

\$ Values outside of NJ DKQP limits

Pest

## MS/MSD ACCURACY REPORT

Lab ID: E22-01119-014 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 MS Data file: V9217.D MSD Data file: V9218.D		GC Column: RTX-CLP1 Sample wt/vol: 15.40g Matrix-Units: Soil-µg/Kg % Moisture: 10.9 Dilution Factor: 1 Dilution Factor: 1							
	Conc.		Conc.	%Rec.		Conc.	%Rec.		
Compound	Add	Sample	MS	MS	#	MSD	MSD	# %RPD #	QC Limits
alpha-BHC	100.0	0.0	70.4	70		67.7	68	4	34-123/15
beta-BHC	100.0	0.0	70.8	71		62.5	63	12	23-122/17
gamma-BHC (Lindane)	100.0	0.0	72.3	72		68.9	69	5	36-131/16
delta-BHC	100.0	0.0	76.0	76		68.7	69	10	33-130/16
Heptachlor	100.0	0.0	78.7	79		73.1	73	7	33-128/16
Aldrin	100.0	0.0	70.6	71		66.6	67	6	33-129/16
Heptachlor epoxide	100.0	0.0	72.0	72		66.9	67	7	35-127/15
Endosulfan I	100.0	0.0	72.1	72		65.6	66	9	33-126/16
4,4'-DDE	100.0	0.0	73.8	74		69.9	70	5	29-135/18
Dieldrin	100.0	0.0	64.0	64		60.4	60	6	33-115/14
Endrin	100.0	0.0	84.7	85		77.9	78	8	36-142/18
Endosulfan II	100.0	0.0	72.5	73		65.6	66	10	34-130/16
4,4'-DDD	100.0	0.0	91.5	92		93.0	93	2	20-180/27
Endrin aldehyde	100.0	0.0	59.3	59		49.6	50	18	24-136/19
Endosulfan sulfate	100.0	0.0	77.9	78		69.3	69	12	43-131/15
4,4'-DDT	100.0	0.0	68.2	68		69.3	69	2	29-147/20
Endrin ketone	100.0	0.0	81.6	82		72.0	72	13	42-137/16
Methoxychlor	100.0	0.0	91.6	92		84.1	84	9	38-167/22
alpha-Chlordane	100.0	0.0	71.1	71		66.5	67	7	34-126/15
gamma-Chlordane	100.0	0.0	72.0	72		65.3	65	10	32-128/16

	Aqueous	Soil/Sediment
<ul> <li>MS/MSD Recovery Limits (NJ DKQP)</li> </ul>	30-150	30-150
MS/MSD RPD Limits (NJ DKQP)	20	30

# Column used to flag recovery and RPD values that did not meet criteria

\* Values outside of QC limits

\$ Values outside of NJ DKQP limits

NC Not calculable

Pest

## **MS/MSD ACCURACY REPORT**

Lab ID: E22-01119-014 Date Received: 02/24/2022 Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 MS Data file: V9217.D MSD Data file: V9218.D	GC Column: RTX-CLP2 Sample wt/vol: 15.40g Matrix-Units: Soil-µg/Kg % Moisture: 10.9 Dilution Factor: 1 Dilution Factor: 1								
	Conc.		Conc.	%Rec.		Conc.	%Rec.		
Compound	Add	Sample	MS	MS	#	MSD	MSD	# %RPD #	QC Limits
alpha-BHC	100.0	0.0	88.3	88		84.3	84	5	34-123/15
beta-BHC	100.0	0.0	88.0	88		76.4	76	14	23-122/17
gamma-BHC (Lindane)	100.0	0.0	92.3	92		87.0	87	6	36-131/16
delta-BHC	100.0	0.0	95.3	95		86.9	87	9	33-130/16
Heptachlor	100.0	0.0	98.6	99		91.7	92	7	33-128/16
Aldrin	100.0	0.0	89.2	89		82.2	82	8	33-129/16
Heptachlor epoxide	100.0	0.0	90.8	91		86.0	86	5	35-127/15
Endosulfan I	100.0	0.0	88.7	89		81.1	81	9	33-126/16
4,4'-DDE	100.0	0.0	97.5	98		97.3	97	0	29-135/18
Dieldrin	100.0	0.0	82.3	82		74.7	75	10	33-115/14
Endrin	100.0	0.0	104.4	104		93.8	94	11	36-142/18
Endosulfan II	100.0	0.0	92.4	92		88.7	89	4	34-130/16
4,4'-DDD	100.0	0.0	108.1	108		96.5	97	11	20-180/27
Endrin aldehyde	100.0	0.0	74.8	75		62.0	62	19	24-136/19
Endosulfan sulfate	100.0	0.0	96.3	96		84.8	85	13	43-131/15
4,4'-DDT	100.0	0.0	87.1	87		89.5	90	3	29-147/20
Endrin ketone	100.0	0.0	97.9	98		86.9	87	12	42-137/16
Methoxychlor	100.0	0.0	102.4	102		91.4	91	11	38-167/22
alpha-Chlordane	100.0	0.0	87.9	88		80.0	80	9	34-126/15
gamma-Chlordane	100.0	0.0	89.6	90		84.9	85	5	32-128/16

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (NJ DKQP)	30-150	30-150
MS/MSD RPD Limits (NJ DKQP)	20	30

# Column used to flag recovery and RPD values that did not meet criteria

\* Values outside of QC limits

\$ Values outside of NJ DKQP limits NC Not calculable

## PESTICIDE METHOD BLANK SUMMARY

Lab File ID:	<u>V9215.D</u>	Instrument ID:	<u>GC-V</u>
Date Extracted:	02/25/2022	Matrix:	<u>SOIL</u>
Date Analyzed:	03/01/2022	Time Analyzed:	<u>10:05</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

		Date	Time
Client ID	Lab Sample ID	Analyzed	Analyzed
Pest	LCSS220225-05	03/01/2022	10:18
Pest	E22-01119-014MS	03/01/2022	10:31
Pest	E22-01119-014MSD	03/01/2022	10:43
SS-4/0-0	E22-01119-005	03/01/2022	10:56
SS-5/0-0	E22-01119-006	03/01/2022	11:08
SS-6/0-0	E22-01119-007	03/01/2022	11:21
SS-9/0-0	E22-01119-008	03/01/2022	11:33
SS-8/0-0	E22-01119-009	03/01/2022	11:46
SS-7/0-0	E22-01119-011	03/01/2022	11:59
SS-10/0-	E22-01119-012	03/01/2022	12:11
SS-11/0-	E22-01119-013	03/01/2022	12:24
SS-12/0-	E22-01119-014	03/01/2022	12:36
SS-1/0-0	E22-01119-001	03/01/2022	12:49
SS-2/0-0	E22-01119-002	03/01/2022	13:01
SS-3/0-0	E22-01119-004	03/01/2022	13:14
P-SB-2_4	E22-01112-001	03/01/2022	14:16
P-SB-1_5	E22-01112-003	03/01/2022	14:28
P-SB-1_7	E22-01112-004	03/01/2022	14:41
E-SB-1_4	E22-01112-005	03/01/2022	14:53
E-SB-1_6	E22-01112-006	03/01/2022	15:06
E-SB-2_4	E22-01112-007	03/01/2022	15:18
DUP02242	E22-01112-009	03/01/2022	15:31
SB-1/2.5	E22-01079-001	03/01/2022	15:44

#### PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed:

Data File:

01/18/2022

Instrument ID:	<u>GC-V</u>
GC Column (1st):	RTX-CLP1

<u>V8883.D</u> <u>V8882.D</u> <u>V8881.D</u> <u>V8880.D</u> <u>V8879.D</u>

<u>8882.D</u>	<u>V8881.D</u>	<u>V8880.D</u>	<u>V8879.D</u>	

	h	RT (	OF STANI	DARDS		MEAN	RT WI	NDOW
Compound	2	50	100	200	300	RT	FROM	ТО
alpha-BHC	2.54	2.54	2.54	2.54	2.54	2.54	2.48	2.60
beta-BHC	2.83	2.83	2.83	2.83	2.83	2.83	2.77	2.89
gamma-BHC	2.77	2.77	2.77	2.77	2.77	2.77	2.71	2.83
delta-BHC	2.97	2.97	2.97	2.97	2.97	2.97	2.91	3.03
Heptachlor	3.13	3.14	3.14	3.14	3.14	3.14	3.06	3.22
Aldrin	3.38	3.39	3.39	3.39	3.39	3.39	3.31	3.47
Heptachlor epoxide	3.91	3.91	3.91	3.91	3.91	3.91	3.83	3.99
Endosulfan I	4.28	4.28	4.28	4.28	4.28	4.28	4.20	4.36
4,4'-DDE	4.21	4.22	4.22	4.22	4.22	4.22	4.12	4.32
Dieldrin	4.50	4.50	4.50	4.50	4.50	4.50	4.40	4.60
Endrin	4.73	4.73	4.73	4.73	4.73	4.73	4.63	4.83
Endosulfan II	4.95	4.95	4.95	4.95	4.95	4.95	4.85	5.05
4,4'-DDD	4.79	4.79	4.79	4.79	4.79	4.79	4.69	4.89
Endrin aldehyde	5.37	5.37	5.37	5.37	5.37	5.37	5.25	5.49
Endosulfan sulfate	5.82	5.82	5.83	5.83	5.83	5.83	5.71	5.95
4,4'-DDT	5.07	5.07	5.07	5.07	5.07	5.07	4.95	5.19
Endrin ketone	6.12	6.12	6.12	6.12	6.12	6.12	6.00	6.24
Methoxychlor	5.57	5.57	5.57	5.57	5.57	5.57	5.45	5.69
alpha-Chlordane	4.15	4.15	4.15	4.15	4.15	4.15	4.07	4.23
gamma-Chlordane	4.02	4.02	4.03	4.03	4.03	4.02	3.94	4.10
Chlordane 500 ppb			3.07				2.99	3.15
Chlordane {2}			3.50				3.42	3.58
Chlordane {3}			4.02				3.94	4.10
Chlordane {4}			4.13				4.05	4.21
Chlordane {5}			4.88				4.80	4.96
Toxaphene 25-500 ppb		4.59	4.59	4.59		4.59	4.47	4.71
Toxaphene {2}		4.94	4.94	4.94		4.94	4.82	5.06
Toxaphene {3}		5.06	5.06	5.06		5.06	4.94	5.18
Toxaphene {4}		5.28	5.28	5.28		5.28	5.16	5.40
Toxaphene {5}		5.72	5.72	5.72		5.72	5.60	5.84

# PESTICIDE INITIAL CALIBRATION SUMMARY

Date	Ano	lyzed:
Date	Апа	iyzeu:

Data File:

01/18/2022

# Instrument ID:GC-VGC Column (1st):RTX-CLP1

<u>V8883.D</u> <u>V8882.D</u> <u>V8881.D</u> <u>V8880.D</u> <u>V8879.D</u>

CALIBRATION FACTORS									
Compound	2	50	100	200	300	MEAN	%RSD		
alpha-BHC	80817	95889	101153	114810	108564	100247	12.99		
beta-BHC	43728	37059	37096	40018	36002	38781	8.11		
gamma-BHC	76551	86241	89923	101213	95045	89795	10.36		
delta-BHC	70685	79190	84544	96737	89007	84032	11.72		
Heptachlor	71988	75322	77759	86463	79897	78286	6.94		
Aldrin	83233	89950	93559	103411	98421	93715	8.27		
Heptachlor epoxide	79858	80027	82208	89759	84051	83181	4.88		
Endosulfan I	75521	77247	78985	86725	79970	79690	5.38		
4,4'-DDE	65626	71471	76769	87105	78730	75940	10.61		
Dieldrin	73361	80170	83239	92518	85376	82933	8.47		
Endrin	57278	62693	65133	73904	69069	65615	9.61		
Endosulfan II	67271	67311	70162	77208	69695	70329	5.78		
4,4'-DDD	56701	54907	58319	65040	56595	58312	6.77		
Endrin aldehyde	66350	56734	58513	62769	55055	59884	7.71		
Endosulfan sulfate	63368	58579	60561	66653	60008	61834	5.19		
4,4'-DDT	40188	48264	54184	63998	56054	52538	16.95		
Endrin ketone	79799	74591	76711	82137	72359	77119	5.09		
Methoxychlor	21538	21258	22335	24342	20313	21957	6.91		
alpha-Chlordane	80903	80607	82984	91476	85237	84241	5.28		
gamma-Chlordane	81327	82422	85074	94652	88313	86358	6.21		
Chlordane 500 ppb			1975						
Chlordane {2}			2588						
Chlordane {3}			8722						
Chlordane {4}			15366						
Chlordane {5}			2279						
Toxaphene 25-500 ppb		636	650	792		693	12.43		
Toxaphene {2}		1816	1913	1966		1898	3.99		
Toxaphene {3}		1437	1672	2038		1716	17.67		
Toxaphene {4}		1501	1648	1885		1678	11.54		
Toxaphene {5}		1430	1661	1888		1660	13.79		

#### PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed:

Data File:

01/18/2022

# Instrument ID:GC-VGC Column (2nd):RTX-CLP2

<u>V8883.C</u> <u>V8882.C</u> <u>V8881.C</u> <u>V8880.C</u> <u>V8879.C</u>

	RT OF STANDARDS						RT WI	NDOW
Compound	2	50	100	200	300	RT	FROM	ТО
alpha-BHC	2.90	2.90	2.90	2.90	2.90	2.90	2.84	2.96
beta-BHC	3.27	3.27	3.27	3.27	3.27	3.27	3.21	3.33
gamma-BHC	3.21	3.21	3.21	3.21	3.21	3.21	3.15	3.27
delta-BHC	3.54	3.54	3.54	3.54	3.54	3.54	3.48	3.60
Heptachlor	3.61	3.61	3.62	3.62	3.61	3.61	3.53	3.69
Aldrin	3.93	3.93	3.93	3.93	3.93	3.93	3.85	4.01
Heptachlor epoxide	4.48	4.48	4.48	4.48	4.48	4.48	4.40	4.56
Endosulfan I	4.88	4.88	4.88	4.88	4.88	4.88	4.80	4.96
4,4'-DDE	4.98	4.98	4.98	4.98	4.98	4.98	4.88	5.08
Dieldrin	5.16	5.16	5.16	5.16	5.16	5.16	5.06	5.26
Endrin	5.49	5.49	5.49	5.49	5.49	5.49	5.39	5.59
Endosulfan II	5.71	5.71	5.71	5.71	5.71	5.71	5.61	5.81
4,4'-DDD	5.59	5.59	5.59	5.59	5.59	5.59	5.49	5.69
Endrin aldehyde	6.07	6.07	6.07	6.07	6.07	6.07	5.95	6.19
Endosulfan sulfate	6.37	6.37	6.37	6.37	6.37	6.37	6.25	6.49
4,4'-DDT	5.93	5.93	5.93	5.93	5.93	5.93	5.81	6.05
Endrin ketone	6.97	6.97	6.97	6.97	6.97	6.97	6.85	7.09
Methoxychlor	6.68	6.68	6.68	6.68	6.68	6.68	6.56	6.80
alpha-Chlordane	4.82	4.82	4.82	4.82	4.82	4.82	4.74	4.90
gamma-Chlordane	4.67	4.67	4.67	4.67	4.67	4.67	4.59	4.75
Chlordane 500 ppb			3.48				3.40	3.56
Chlordane {2}			4.06				3.98	4.14
Chlordane {3}			4.67				4.59	4.75
Chlordane {4}			4.76				4.68	4.84
Chlordane {5}			4.82				4.74	4.90
Toxaphene 25-500 ppb		5.14	5.14	5.14		5.14	5.02	5.26
Toxaphene {2}		5.69	5.70	5.70		5.69	5.57	5.81
Toxaphene {3}		5.80	5.80	5.80		5.80	5.68	5.92
Toxaphene {4}		6.08	6.08	6.08		6.08	5.96	6.20
Toxaphene {5}		6.64	6.64	6.64		6.64	6.52	6.76

# PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed:	01/18/2022	Instrument ID:GC-VGC Column (2nd):RTX-CLP2	
Data File:	<u>V8883.C</u> <u>V8882.C</u> <u>V8881.C</u>	<u>V8880.C</u> <u>V8879.C</u>	
[	CALIBRATION	FACTORS	-

Compound	2	50	100	200	300	MEAN	%RSD
alpha-BHC	124060	118211	119898	129111	120394	122335	3.55
beta-BHC	57010	43823	43493	46030	41269	46325	13.40
gamma-BHC	112255	103729	104783	112487	104347	107520	4.13
delta-BHC	103789	95412	97881	105967	96290	99868	4.73
Heptachlor	95112	83227	82988	87584	80383	85859	6.73
Aldrin	115221	107089	107658	114043	106784	110159	3.74
Heptachlor epoxide	104440	90620	90375	94695	87518	93529	7.07
Endosulfan I	100414	85640	85464	89932	82348	88759	7.94
4,4'-DDE	93951	85206	88661	97059	87108	90397	5.47
Dieldrin	102594	91383	91319	97169	89013	94295	5.87
Endrin	75405	67480	67630	73602	68055	70434	5.36
Endosulfan II	91502	77245	77393	81756	77845	81148	7.49
4,4'-DDD	79199	63941	64970	69308	60426	67569	10.70
Endrin aldehyde	83960	60712	60432	62491	54649	64449	17.53
Endosulfan sulfate	75987	59479	59411	63708	57277	63172	11.93
4,4'-DDT	42675	45979	50150	57294	50708	49361	11.17
Endrin ketone	95876	75782	75849	77476	67302	78457	13.41
Methoxychlor	23155	22183	22554	24119	20583	22519	5.80
alpha-Chlordane	108121	91755	92153	98394	91571	96399	7.41
gamma-Chlordane	105038	94082	95244	102559	95409	98466	5.05
Chlordane 500 ppb			2472				
Chlordane {2}			2876				
Chlordane {3}			9116				
Chlordane {4}			10146				
Chlordane {5}			7340				
Toxaphene 25-500 ppb		1153	1253	1620		1342	18.34
Toxaphene {2}		1522	1846	1833		1734	10.57
Toxaphene {3}		2789	3195	3117		3033	7.11
Toxaphene {4}		1633	1938	1985		1852	10.33
Toxaphene {5}		1457	1766	1651		1625	9.60

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Date Analyzed:	01/18/2022	2		Instrument I	D:	<u>GC-V</u>
Data File:	<u>V8888.D</u>			GC Column (1	st):	<u>RTX-CLP1</u>
		RT WI	NDOW			
Compound	RT	FROM	то	Avg CF	CC CF	%D
alpha-BHC	2.54	2.48	2.60	100247	100023	0.22
beta-BHC	2.83	2.77	2.89	38781	35770	7.76
gamma-BHC	2.77	2.71	2.83	89795	91353	1.74
delta-BHC	2.97	2.91	3.03	84032	81642	2.84
Heptachlor	3.13	3.06	3.22	78286	79771	1.90
Aldrin	3.38	3.31	3.47	93715	92990	0.77
Heptachlor epoxide	3.91	3.83	3.99	83181	80384	3.36
Endosulfan I	4.28	4.20	4.36	79690	76374	4.16
4,4'-DDE	4.21	4.12	4.32	75940	73013	3.85
Dieldrin	4.50	4.40	4.60	82933	70379	15.14
Endrin	4.73	4.63	4.83	65615	61269	6.62
Endosulfan II	4.95	4.85	5.05	70329	67069	4.64
4,4'-DDD	4.79	4.69	4.89	58312	57494	1.40
Endrin aldehyde	5.37	5.25	5.49	59884	58053	3.06
Endosulfan sulfate	5.82	5.71	5.95	61834	58987	4.60
4,4'-DDT	5.07	4.95	5.19	52538	53378	1.60
Endrin ketone	6.11	6.00	6.24	77119	75776	1.74
Methoxychlor	5.57	5.45	5.69	21957	23221	5.75
alpha-Chlordane	4.15	4.07	4.23	84241	80826	4.05
gamma-Chlordane	4.02	3.94	4.10	86358	83363	3.47
Chlordane 500 ppb	3.07	2.99	3.15	1975	2102	6.44
Chlordane {2}	3.50	3.42	3.58	2588	2720	5.08
Chlordane {3}	4.02	3.94	4.10	8722	9253	6.10
Chlordane {4}	4.13	4.05	4.21	15366	16146	5.08
Chlordane {5}	4.88	4.80	4.96	2279	2411	5.81
Toxaphene 100 ppb	4.59	4.47	4.71	693	568	17.95
Toxaphene {2}	4.94	4.82	5.06	1898	1922	1.23
Toxaphene {3}	5.06	4.94	5.18	1716	1472	14.19
Toxaphene {4}	5.28	5.16	5.40	1678	1414	15.71
Toxaphene {5}	5.72	5.60	5.84	1660	1606	3.24

Date Analyzed:	<u>01/18/202</u>	2		Instrument I	D:	<u>GC-V</u>
Data File:	<u>V8888.C</u>			GC Column (2	nd):	RTX-CLP2
		RT WI	NDOW			
Compound	RT	FROM	то	Avg CF	CC CF	%D
alpha-BHC	2.90	2.84	2.96	122335	117185	4.21
beta-BHC	3.27	3.21	3.33	46325	41662	10.07
gamma-BHC	3.21	3.15	3.27	107520	105031	2.31
delta-BHC	3.54	3.48	3.60	99868	94194	5.68
Heptachlor	3.62	3.53	3.69	85859	82406	4.02
Aldrin	3.93	3.85	4.01	110159	105695	4.05
Heptachlor epoxide	4.48	4.40	4.56	93529	88384	5.50
Endosulfan I	4.88	4.80	4.96	88759	83206	6.26
4,4'-DDE	4.98	4.88	5.08	90397	85200	5.75
Dieldrin	5.16	5.06	5.26	94295	78479	16.77
Endrin	5.49	5.39	5.59	70434	64050	9.06
Endosulfan II	5.71	5.61	5.81	81148	75472	6.99
4,4'-DDD	5.59	5.49	5.69	67569	64315	4.82
Endrin aldehyde	6.07	5.95	6.19	64449	60163	6.65
Endosulfan sulfate	6.37	6.25	6.49	63172	58330	7.67
4,4'-DDT	5.93	5.81	6.05	49361	49676	0.64
Endrin ketone	6.97	6.85	7.09	78457	77170	1.64
Methoxychlor	6.68	6.56	6.80	22519	23012	2.19
alpha-Chlordane	4.82	4.74	4.90	96399	89990	6.65
gamma-Chlordane	4.67	4.59	4.75	98466	93098	5.45
Chlordane 500 ppb	3.48	3.40	3.56	2472	2626	6.26
Chlordane {2}	4.06	3.98	4.14	2876	3031	5.38
Chlordane {3}	4.67	4.59	4.75	9116	9772	7.19
Chlordane {4}	4.76	4.68	4.84	10146	10709	5.55
Chlordane {5}	4.82	4.74	4.90	7340	7754	5.64
Toxaphene 100 ppb	5.14	5.02	5.26	1342	1366	1.80
Toxaphene {2}	5.70	5.57	5.81	1734	2002	15.47
Toxaphene {3}	5.80	5.68	5.92	3033	3388	11.69
Toxaphene {4}	6.08	5.96	6.20	1852	1947	5.10
Toxaphene {5}	6.64	6.52	6.76	1625	1748	7.58

Date Analyzed:	03/01/2022	2		Instrument II	D:	<u>GC-V</u>
Data File:	<u>V9212.D</u>			GC Column (1	st):	RTX-CLP1
		RT WI	NDOW			
Compound	RT	FROM	ТО	Avg CF	CC CF	%D
alpha-BHC	2.54	2.48	2.60	100247	90487	9.74
beta-BHC	2.83	2.77	2.89	38781	32639	15.84
gamma-BHC	2.77	2.71	2.83	89795	80041	10.86
delta-BHC	2.98	2.91	3.03	84032	78465	6.63
Heptachlor	3.14	3.06	3.22	78286	75180	3.97
Aldrin	3.39	3.31	3.47	93715	81049	13.52
Heptachlor epoxide	3.92	3.83	3.99	83181	72475	12.87
Endosulfan I	4.29	4.20	4.36	79690	70924	11.00
4,4'-DDE	4.23	4.12	4.32	75940	64616	14.91
Dieldrin	4.51	4.40	4.60	82933	74198	10.53
Endrin	4.74	4.63	4.83	65615	63080	3.86
Endosulfan II	4.96	4.85	5.05	70329	61221	12.95
4,4'-DDD	4.81	4.69	4.89	58312	56180	3.66
Endrin aldehyde	5.39	5.25	5.49	59884	50256	16.08
Endosulfan sulfate	5.84	5.71	5.95	61834	56405	8.78
4,4'-DDT	5.08	4.95	5.19	52538	43628	16.96
Endrin ketone	6.13	6.00	6.24	77119	69318	10.12
Methoxychlor	5.59	5.45	5.69	21957	20319	7.46
alpha-Chlordane	4.16	4.07	4.23	84241	71950	14.59
gamma-Chlordane	4.03	3.94	4.10	86358	73775	14.57
Chlordane 500 ppb	3.07	2.99	3.15	1975	1715	13.18
Chlordane {2}	3.50	3.42	3.58	2588	2230	13.83
Chlordane {3}	4.02	3.94	4.10	8722	7303	16.26
Chlordane {4}	4.13	4.05	4.21	15366	12797	16.72
Chlordane {5}	4.88	4.80	4.96	2279	1886	17.23
Toxaphene 100 ppb	4.60	4.47	4.71	693	615	11.23
Toxaphene {2}	4.95	4.82	5.06	1898	1863	1.85
Toxaphene {3}	5.07	4.94	5.18	1716	1638	4.51
Toxaphene {4}	5.29	5.16	5.40	1678	1542	8.11
Toxaphene {5}	5.72	5.60	5.84	1660	1525	8.10

Date Analyzed:	03/01/202	2		Instrument I	D:	<u>GC-V</u>
Data File:	<u>V9212.C</u>			GC Column (2	nd):	RTX-CLP2
		RT WI	NDOW			
Compound	RT	FROM	ТО	Avg CF	CC CF	%D
alpha-BHC	2.90	2.84	2.96	122335	140982	15.24
beta-BHC	3.27	3.21	3.33	46325	50314	8.61
gamma-BHC	3.21	3.15	3.27	107520	124301	15.61
delta-BHC	3.55	3.48	3.60	99868	118913	19.07
Heptachlor	3.62	3.53	3.69	85859	100320	16.84
Aldrin	3.93	3.85	4.01	110159	123700	12.29
Heptachlor epoxide	4.49	4.40	4.56	93529	106143	13.49
Endosulfan I	4.89	4.80	4.96	88759	98050	10.47
4,4'-DDE	4.99	4.88	5.08	90397	99151	9.68
Dieldrin	5.17	5.06	5.26	94295	107912	14.44
Endrin	5.50	5.39	5.59	70434	84088	19.38
Endosulfan II	5.72	5.61	5.81	81148	90553	11.59
4,4'-DDD	5.60	5.49	5.69	67569	80214	18.72
Endrin aldehyde	6.08	5.95	6.19	64449	67647	4.96
Endosulfan sulfate	6.38	6.25	6.49	63172	73087	15.69
4,4'-DDT	5.94	5.81	6.05	49361	47573	3.62
Endrin ketone	6.98	6.85	7.09	78457	93998	19.81
Methoxychlor	6.69	6.56	6.80	22519	24392	8.32
alpha-Chlordane	4.83	4.74	4.90	96399	103125	6.98
gamma-Chlordane	4.68	4.59	4.75	98466	108518	10.21
Chlordane 500 ppb	3.48	3.40	3.56	2472	2750	11.27
Chlordane {2}	4.06	3.98	4.14	2876	3180	10.55
Chlordane {3}	4.67	4.59	4.75	9116	9930	8.93
Chlordane {4}	4.77	4.68	4.84	10146	11054	8.95
Chlordane {5}	4.82	4.74	4.90	7340	7676	4.59
Toxaphene 100 ppb	5.15	5.02	5.26	1342	1563	16.46
Toxaphene {2}	5.70	5.57	5.81	1734	2005	15.63
Toxaphene {3}	5.81	5.68	5.92	3033	3461	14.11
Toxaphene {4}	6.09	5.96	6.20	1852	2087	12.67
Toxaphene {5}	6.65	6.52	6.76	1625	1640	0.95

Date Analyzed:	03/01/202	2		Instrument I	D:	<u>GC-V</u>
Data File:	<u>V9231.D</u>			GC Column (1	st):	<u>RTX-CLP1</u>
		RT WI	NDOW			
Compound	RT	FROM	ТО	Avg CF	CC CF	%D
alpha-BHC	2.54	2.48	2.60	100247	90618	9.60
beta-BHC	2.83	2.77	2.89	38781	34452	11.16
gamma-BHC	2.77	2.71	2.83	89795	80886	9.92
delta-BHC	2.97	2.91	3.03	84032	78257	6.87
Heptachlor	3.14	3.06	3.22	78286	80206	2.45
Aldrin	3.39	3.31	3.47	93715	82510	11.96
Heptachlor epoxide	3.92	3.83	3.99	83181	74662	10.24
Endosulfan I	4.28	4.20	4.36	79690	72667	8.81
4,4'-DDE	4.22	4.12	4.32	75940	68756	9.46
Dieldrin	4.51	4.40	4.60	82933	76948	7.22
Endrin	4.73	4.63	4.83	65615	65816	0.31
Endosulfan II	4.96	4.85	5.05	70329	65076	7.47
4,4'-DDD	4.80	4.69	4.89	58312	63246	8.46
Endrin aldehyde	5.38	5.25	5.49	59884	54300	9.32
Endosulfan sulfate	5.83	5.71	5.95	61834	59225	4.22
4,4'-DDT	5.08	4.95	5.19	52538	44421	15.45
Endrin ketone	6.12	6.00	6.24	77119	73229	5.04
Methoxychlor	5.58	5.45	5.69	21957	22308	1.60
alpha-Chlordane	4.15	4.07	4.23	84241	73948	12.22
gamma-Chlordane	4.03	3.94	4.10	86358	75942	12.06

Date Analyzed:	03/01/202	2		Instrument I	D:	<u>GC-V</u>
Data File:	<u>V9231.C</u>			GC Column (2	nd):	RTX-CLP2
		RT WI	NDOW			
Compound	RT	FROM	ТО	Avg CF	CC CF	%D
alpha-BHC	2.91	2.84	2.96	122335	132587	8.38
beta-BHC	3.27	3.21	3.33	46325	48615	4.94
gamma-BHC	3.21	3.15	3.27	107520	117177	8.98
delta-BHC	3.55	3.48	3.60	99868	112839	12.99
Heptachlor	3.62	3.53	3.69	85859	102728	19.65
Aldrin	3.93	3.85	4.01	110159	113546	3.07
Heptachlor epoxide	4.49	4.40	4.56	93529	97768	4.53
Endosulfan I	4.89	4.80	4.96	88759	91851	3.48
4,4'-DDE	4.99	4.88	5.08	90397	95772	5.95
Dieldrin	5.17	5.06	5.26	94295	103040	9.27
Endrin	5.49	5.39	5.59	70434	83908	19.13
Endosulfan II	5.72	5.61	5.81	81148	90523	11.55
4,4'-DDD	5.60	5.49	5.69	67569	80675	19.40
Endrin aldehyde	6.08	5.95	6.19	64449	69214	7.39
Endosulfan sulfate	6.38	6.25	6.49	63172	74464	17.87
4,4'-DDT	5.94	5.81	6.05	49361	47560	3.65
Endrin ketone	6.98	6.85	7.09	78457	91567	16.71
Methoxychlor	6.69	6.56	6.80	22519	24838	10.30
alpha-Chlordane	4.82	4.74	4.90	96399	94998	1.45
gamma-Chlordane	4.68	4.59	4.75	98466	100152	1.71

# PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID:	Column: <u>RTX-CLP1/CLP2</u>						
Surrogate RT from initial calibration :							
TCMX	1 <u>2.16</u>	DCB 1	<u>7.20</u>	TCMX 2	<u>2.42</u>	DCB 2	<u>8.32</u>
	Lab	Date	Time	TCMX 1	DCB 1	TCMX 2	DCB 2
Client ID	Sample ID	Analyzed	Analyzed	RT #		# RT #	RT #
Pest	BLKS220225-05	03/01/2022	10:05	2.16	7.20	2.42	8.32
Pest	LCSS220225-05	03/01/2022	10:18	2.16	7.20	2.42	8.31
Pest	E22-01119-014MS	03/01/2022	10:31	2.16	7.20	2.42	8.31
Pest	E22-01119-014MSD	03/01/2022	10:43	2.16	7.20	2.42	8.31
SS-4/0-0	E22-01119-005	03/01/2022	10:56	2.16	7.20	2.42	8.31
SS-5/0-0	E22-01119-006	03/01/2022	11:08	2.16	7.20	2.42	8.31
SS-6/0-0	E22-01119-007	03/01/2022	11:21	2.16	7.20	2.42	8.31
SS-9/0-0	E22-01119-008	03/01/2022	11:33	2.16	7.20	2.42	8.31
SS-8/0-0	E22-01119-009	03/01/2022	11:46	2.16	7.20	2.42	8.31
SS-7/0-0	E22-01119-011	03/01/2022	11:59	2.16	7.20	2.42	8.31
SS-10/0-	E22-01119-012	03/01/2022	12:11	2.16	7.20	2.42	8.31
SS-11/0-	E22-01119-013	03/01/2022	12:24	2.16	7.20	2.42	8.31
SS-12/0-	E22-01119-014	03/01/2022	12:36	2.16	7.20	2.42	8.31
SS-1/0-0	E22-01119-001	03/01/2022	12:49	2.16	7.20	2.42	8.31
SS-2/0-0	E22-01119-002	03/01/2022	13:01	2.16	7.20	2.42	8.31
SS-3/0-0	E22-01119-004	03/01/2022	13:14	2.16	7.20	2.42	8.31
P-SB-2_4	E22-01112-001	03/01/2022	14:16	2.16	7.21	2.42	8.32
P-SB-1_5	E22-01112-003	03/01/2022	14:28	2.16	7.20	2.42	8.31
P-SB-1_7	E22-01112-004	03/01/2022	14:41	2.16	7.20	2.43	8.31
E-SB-1_4	E22-01112-005	03/01/2022	14:53	2.16	7.20	2.43	8.31
E-SB-1_6	E22-01112-006	03/01/2022	15:06	2.16	7.20	2.42	8.31
E-SB-2_4	E22-01112-007	03/01/2022	15:18	2.16	7.20	2.42	8.31
DUP02242	E22-01112-009	03/01/2022	15:31	2.16	7.20	2.42	8.31
SB-1/2.5	E22-01079-001	03/01/2022	15:44	2.16	7.20	2.42	8.31

Surrogate QC Limits TCMX = Tetrachloro-m-xylene DCB = Decachlorobiphenyl

 $(\pm 0.10 \text{ Minutes})$  $(\pm 0.10 \text{ Minutes})$ 

# Column to be used to flag recovery values

\* Values outside of QC limits

D Surrogate diluted out

M Matrix interference

Date Analyzed: 03/01/2022		ENDRIN/DDT_7517			
Data file: V9210.D	Tue Mar 01 08:07:35 2022			% Breakdown	
1st Column				DDT (1)	Endrin (1)
DDT (1)	5493230	Endrin (1)	9015360	12.39	6.28
DDD	726757	Endrin ketone	513397		
DDE	49774	Endrin aldehyde	90631		
2nd Column				DDT (2)	Endrin (2)
DDT (2)	6508140	Endrin (2)	11410300	14.80	6.12
DDD	1046580	Endrin ketone	596602		
DDE	83967	Endrin aldehyde	147720		

# PESTICIDE SAMPLE DATA

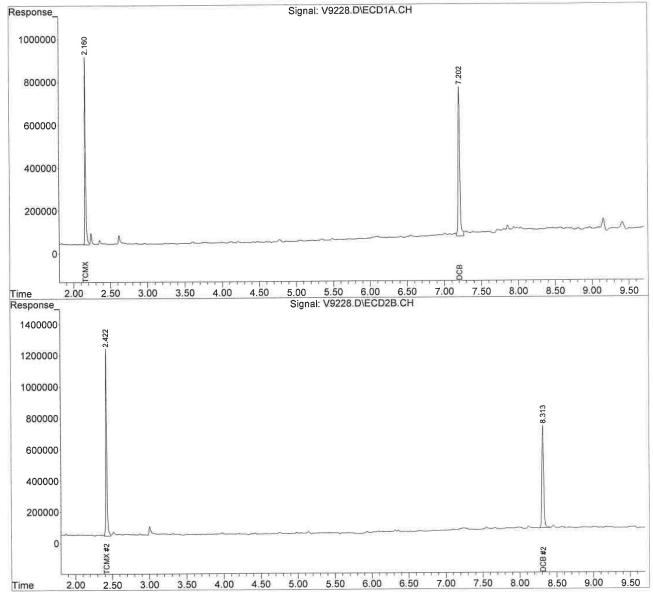
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9228.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 12:49 Operator : IM Sample : SS-1/0-0,E22-01119-001,S,15.70g,14.8,5 Misc : 220225-05 02/25/22 02/24/22 1 : 220225-05,02/25/22,02/24/22,1 Misc ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:59:59 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. : Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 \_\_\_\_\_ \_\_\_\_\_ System Monitoring Compounds1) S TCMX2.1612.4228764167 12666487132.543161.013Spiked Amount200.000Recovery=66.27%80.51%2) S DCB7.2028.3131111871010865118144.570163.469m/mSpiked Amount200.000Recovery=72.28%81.73% N.D. Target Compounds 0 0 N.D. Sum Chlordane 0.000 Average Chlordane N.D. 0 0 N.D. Sum Toxaphene 0.000 0.000 Average Toxaphene .....

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9228.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 12:49 Acq On Operator : IM : SS-1/0-0, E22-01119-001, S, 15.70g, 14.8, 5 Sample : 220225-05,02/25/22,02/24/22,1 Misc Sample Multiplier: 1 ALS Vial : 18 (Sig #1); 0 (Sig #2) Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:59:59 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #2 Phase: Signal #1 Phase : Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:51 2022

Signal #1 Info

:

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9229.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 13:01 Operator : IM Sample : SS-2/0-0,E22-01119-002,S,15.40g,14.8,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 13:30:43 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. . Signal #1 Phase : Signal #2 Phase: Signal #2 Info : Signal #1 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 \_\_\_\_\_ 

 System Monitoring Compounds

 1) S TCMX
 2.161
 2.423
 9659682
 14703731
 146.086
 186.910 #

 Spiked Amount
 200.000
 Recovery
 =
 73.04%
 93.45%

 2) S DCB
 7.202
 8.312
 12127489
 12296235
 157.687
 185.000m
 M

 Spiked Amount
 200.000
 Recovery
 =
 78.84%
 92.50%

 Target Compounds N.D. 0 0 N.D. Sum Chlordane 0.000 Average Chlordane 0 N.D. N.D. Sum Toxaphene 0 0.000 0.000 Average Toxaphene \_\_\_\_\_

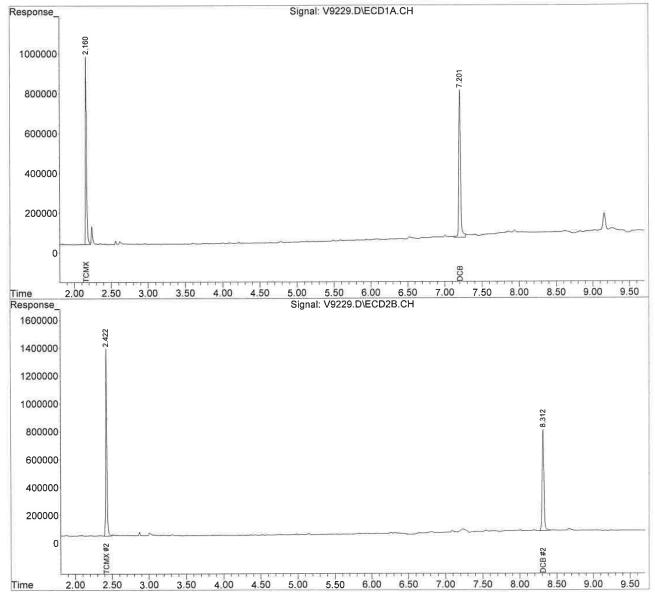
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:53 2022

Page: 1

(QT Reviewed) Quantitation Report

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9229.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 13:01 Operator : IM : SS-2/0-0,E22-01119-002,S,15.40g,14.8,5 Sample Misc : 220225-05,02/25/22,02/24/22,1 Sample Multiplier: 1 ALS Vial : 19 (Sig #1); 0 (Sig #2) Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 13:30:43 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. : Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info



VPST0118.M Tue Mar 01 13:54:55 2022

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9230.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 13:14 Operator : IM Sample : SS-3/0-0,E22-01119-004,S,15.47g,12.2,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 13:31:41 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. . Signal #2 Phase: Signal #1 Phase : Signal #1 Info : Signal #2 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 ----............ 

 System Monitoring Compounds

 1) S TCMX
 2.160
 2.422
 9864368
 15869758
 149.182
 201.732 #

 Spiked Amount
 200.000
 Recovery
 =
 74.59%
 100.87%

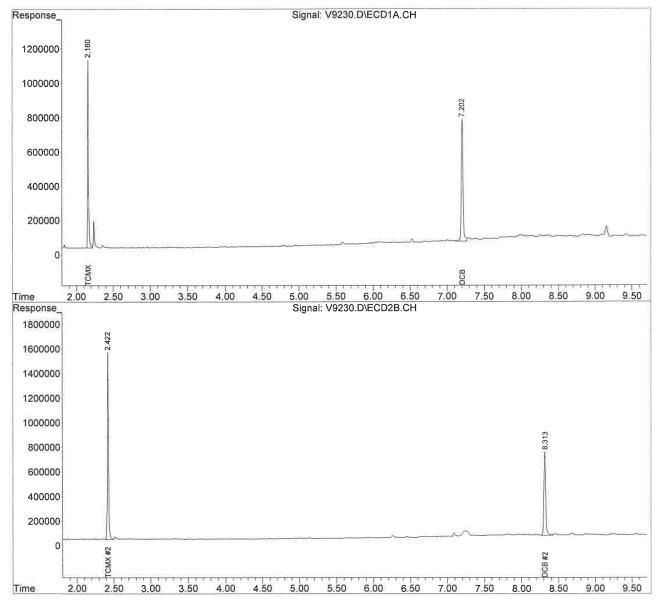
 2) S DCB
 7.203
 8.313
 11479122
 11737869
 149.257
 176.600

 Spiked Amount 200.000 Recovery = 74.63% 88.30% N.D. Target Compounds 0 0 N.D. Sum Chlordane 0.000 Average Chlordane N.D. 0 0 N.D. Sum Toxaphene 0.000 Average Toxaphene 0.000 

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9230.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 13:14 Acq On : IM Operator : SS-3/0-0, E22-01119-004, S, 15.47g, 12.2, 5 Sample Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 13:31:41 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration 6890 Scale Mode: Small noise peaks clipped Integrator: ChemStation Volume Inj. : Signal #1 Phase : Signal #2 Phase: Signal #1 Info : Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:59 2022

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Quantitation Report (QT Reviewed)

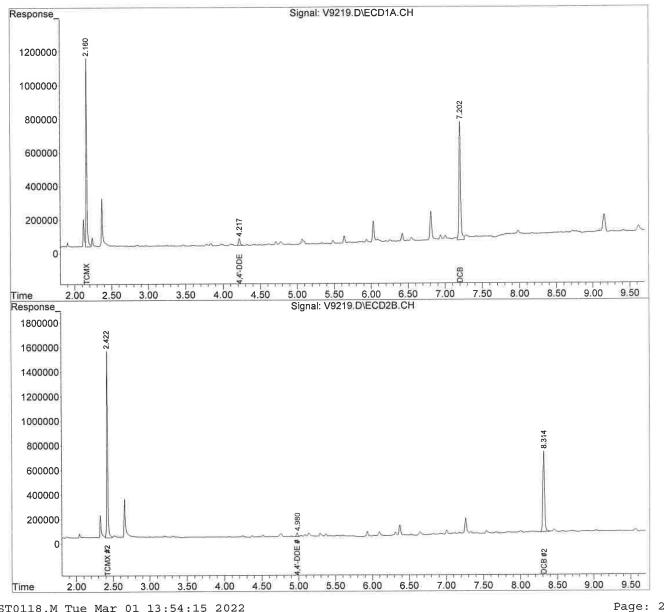
Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9219.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 10:56 Operator : IM Sample : SS-4/0-0,E22-01119-005,S,15.41g,17.8,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:56:48 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. : Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info : RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 Compound System Monitoring Compounds1) S TCMX2.1602.4221017464314905663153.874189.477Spiked Amount 200.000Recovery = 76.94%94.74%2) S DCB7.2028.3141092371110888847142.035163.826mSpiked Amount 200.000Recovery = 71.02%81.91% Target Compounds 4.217 4.980 672385 385791 8.854m m 4.268m# 11) T 4,4'-DDE 0 0 N.D. N.D. Sum Chlordane 0.000 0.000 Average Chlordane N.D. 0 0 N.D. Sum Toxaphene 0.000 0.000 Average Toxaphene \_\_\_\_\_

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:13 2022

(QT Reviewed) Quantitation Report

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9219.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 10:56 Acq On : IM Operator : SS-4/0-0,E22-01119-005,S,15.41g,17.8,5 Sample : 220225-05,02/25/22,02/24/22,1 Misc Sample Multiplier: 1 ALS Vial : 9 (Sig #1); 0 (Sig #2) Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:56:48 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration 6890 Scale Mode: Small noise peaks clipped Integrator: ChemStation Volume Inj. : Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9220.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 11:08 Acq On Operator : IM Sample : SS-5/0-0,E22-01119-006,S,15.76g,10.5,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:50:23 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. : Signal #1 Phase : Signal #2 Phase: Signal #1 Info : Signal #2 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 \_\_\_\_\_ System Monitoring Compounds1) S TCMX2.1602.422969767314310921146.661181.917Spiked Amount 200.000Recovery = 73.33%90.96%2) S DCB7.2038.3131082654612830984140.772193.046 #Spiked Amount 200.000Recovery = 70.39%96.52% Target Compounds N.D. 0 0 N.D. Sum Chlordane 0.000 Average Chlordane N.D. 0 0 N.D. Sum Toxaphene 0.000 0.000 Average Toxaphene 

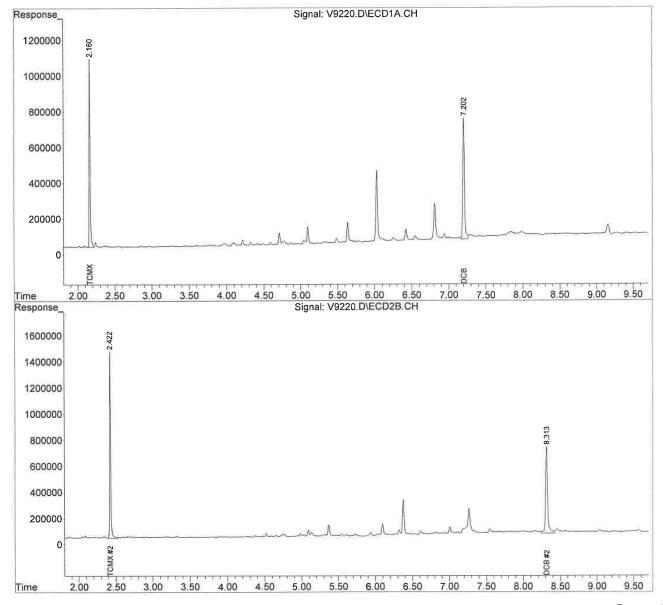
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:17 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9220.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 11:08 Operator : IM : SS-5/0-0, E22-01119-006, S, 15.76g, 10.5, 5 Sample Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:50:23 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. 1 Signal #1 Phase :

Signal #1 Phase : Signal #1 Info : Signal #2 Phase: Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:19 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9221.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 11:21 Operator : IM Sample : SS-6/0-0,E22-01119-007,S,15.47g,10.2,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:50:57 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj 🛛 : Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 System Monitoring Compounds1) S TCMX2.1602.4229917558 14460240149.986183.815Spiked Amount200.000Recovery=74.99%91.91%2) S DCB7.2028.31410882861 11652121141.504175.309Spiked Amount200.000Recovery=70.75%87.65% N.D. Target Compounds 0 0 N.D. Sum Chlordane 0.000 Average Chlordane 0 N.D. N.D. Sum Toxaphene 0 0.000 0.000 Average Toxaphene \_\_\_\_\_\_

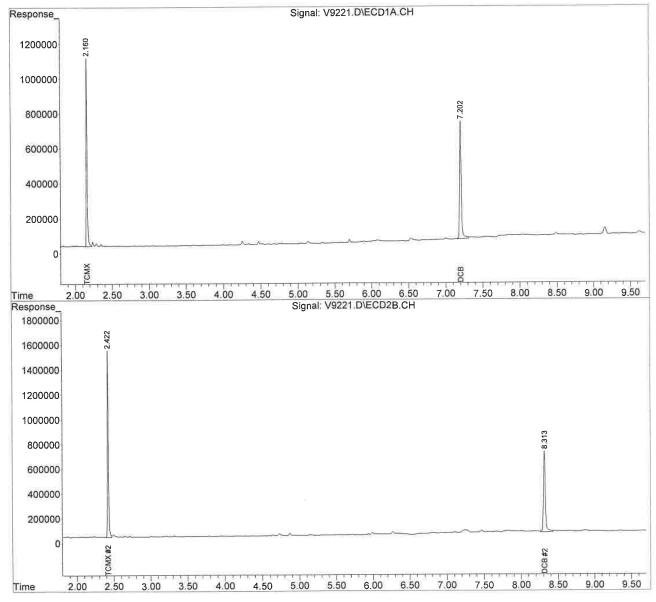
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:21 2022

Quantitation Report (QT Reviewed)

Signal #2 Info :

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9221.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 11:21 Acq On Operator : IM : SS-6/0-0,E22-01119-007,S,15.47g,10.2,5 Sample 220225-05,02/25/22,02/24/22,1 Misc ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:50:57 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #2 Phase: Signal #1 Phase :



VPST0118.M Tue Mar 01 13:54:23 2022

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Signal #1 Info

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Quantitation Report (QT Reviewed)

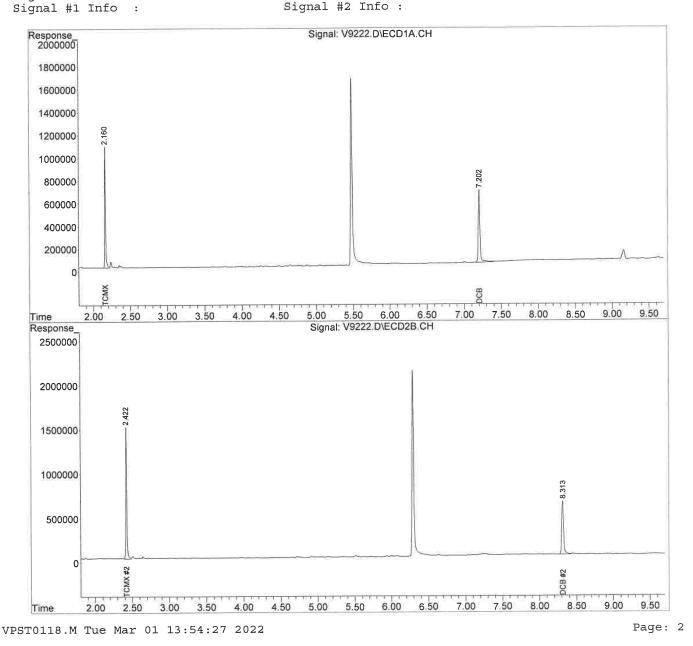
Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9222.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 11:33 Operator : IM Sample : SS-9/0-0,E22-01119-008,S,15.49g,11.5,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:51:42 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. : Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 System Monitoring Compounds1) S TCMX2.1602.4229491939 14477117143.550184.029 #Spiked Amount 200.000Recovery = 71.78%92.01%2) S DCB7.2028.31310379328 10642487134.957m160.119Spiked Amount 200.000Recovery = 67.48%80.06% N.D. Target Compounds 0 0 N.D. Sum Chlordane 0.000 Average Chlordane 0 N.D. N.D. 0 Sum Toxaphene 0.000 0.000 Average Toxaphene \_\_\_\_\_\_

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:25 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9222.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 11:33 Acq On : IM Operator Sample : SS-9/0-0,E22-01119-008,S,15.49g,11.5,5 220225-05,02/25/22,02/24/22,1 Misc Sample Multiplier: 1 ALS Vial : 12 (Sig #1); 0 (Sig #2) Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:51:42 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration 6890 Scale Mode: Small noise peaks clipped Integrator: ChemStation Volume Inj. : Signal #2 Phase: Signal #1 Phase :



Quantitation Report (QT Reviewed)

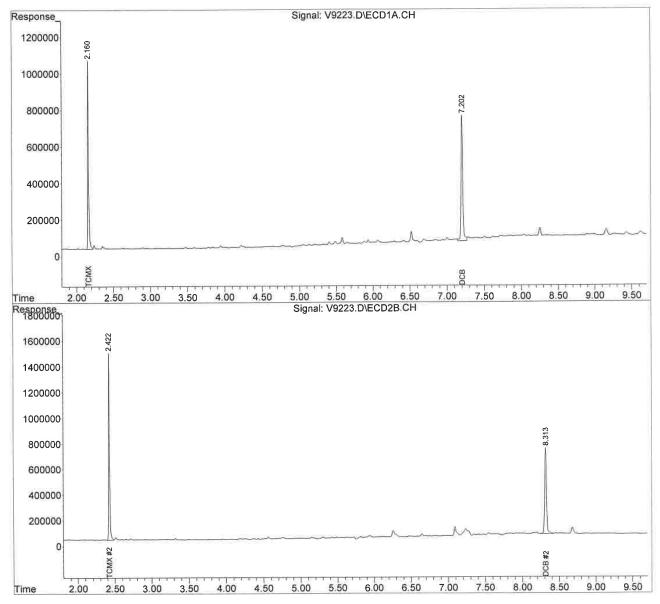
Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9223.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acg On : 01 Mar 2022 11:46 Operator : IM Sample : SS-8/0-0,E22-01119-009,S,15.29g,15.4,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:52:29 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. . Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 System Monitoring Compounds1) S TCMX2.1602.4229485797 14018932143.457178.205Spiked Amount 200.000Recovery = 71.73%89.10%2) S DCB7.2028.31311017129 11323607143.250170.367mSpiked Amount 200.000Recovery = 71.63%85.18% N.D. Target Compounds 0 0 N.D. Sum Chlordane 0.000 Average Chlordane 0 N.D. N.D. 0 Sum Toxaphene 0.000 0.000 Average Toxaphene 

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:29 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9223.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 11:46 Operator : IM : SS-8/0-0,E22-01119-009,S,15.29g,15.4,5 Sample : 220225-05,02/25/22,02/24/22,1 Misc Sample Multiplier: 1 ALS Vial = 13 (Sig #1); 0 (Sig #2) Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:52:29 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #2 Phase: Signal #1 Phase : Signal #1 Info : Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:31 2022

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Quantitation Report (QT Reviewed)

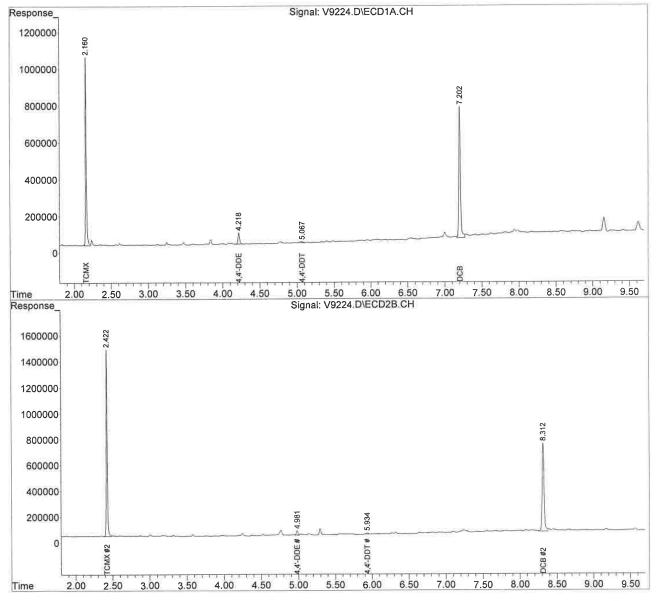
Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9224.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 11:59 Operator : IM Sample : SS-7/0-0,E22-01119-011,S,15.25g,21.5,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1							
Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 13:53:43 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped							
Volume Inj. : Signal #1 Phase : Signal #2 Phase: Signal #1 Info : Signal #2 Info :							
Compound RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2		
System Monitoring Compounds 1) S TCMX 2.161 Spiked Amount 200.000 2) S DCB 7.203 Spiked Amount 200.000	2.422 8.313	9754432 1 Recovery 11215473 1 Recovery	4215914 / = 1927415 / =	147.519 73.76% 145.829 72.91%	180.709 90.35% 179.451 89.73%		
Target Compounds 11) T 4,4'-DDE 4.218 18) T 4,4'-DDT 5.068 Sum Chlordane Average Chlordane	4.981 5.934	122138	154371	13.306 2.325 N.D. 0.000	3.127m#		
Sum Toxaphene Average Toxaphene		0	0		N.D. 0.000		

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:33 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9224.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 11:59 Acq On Operator : IM Sample : SS-7/0-0, E22-01119-011, S, 15.25g, 21.5, 5 220225-05,02/25/22,02/24/22,1 Misc ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 13:53:43 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #2 Phase: Signal #1 Phase : Signal #1 Info Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:35 2022

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Quantitation Report (QT Reviewed)

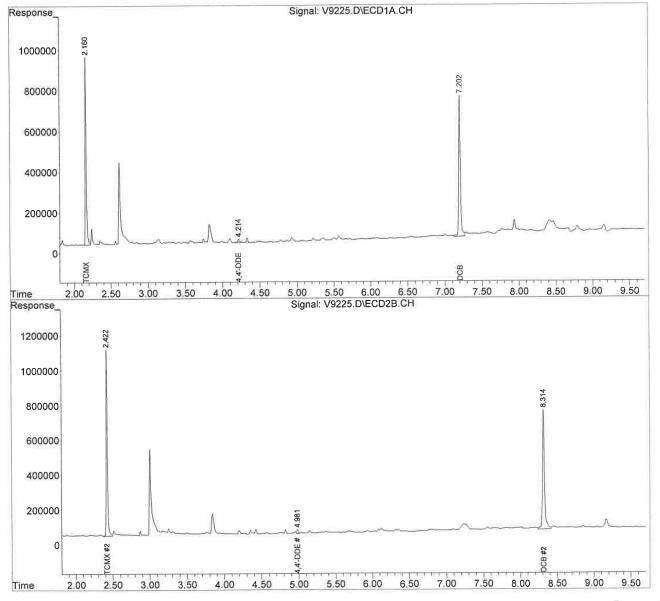
Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9225.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acg On : 01 Mar 2022 12:11 Operator : IM Sample : SS-10/0-,E22-01119-012,S,15.39g,11.5,5 Misc : 220225-05,02/25/22,02/24/22,1 ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:57:55 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. . Signal #2 Phase: Signal #1 Phase : Signal #1 Info : Signal #2 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 System Monitoring Compounds1) S TCMX2.1612.4229161229 11982716138.548152.321Spiked Amount 200.000Recovery =69.27%76.16%2) S DCB7.2038.31510909837 12893215141.855193.982 #Spiked Amount 200.000Recovery =70.93%96.99% Target Compounds 4.214 4.981 302742 353794 3.987 3.914 0 0 N.D. N.D. 0.000 0.000 11) T 4,4'-DDE Sum Chlordane Average Chlordane N.D. 0 0 N.D. Sum Toxaphene 0.000 0.000 Average Toxaphene 

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:37 2022

(QT Reviewed) Quantitation Report

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9225.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 12:11 : IM Operator : SS-10/0-,E22-01119-012,S,15.39g,11.5,5 Sample : 220225-05,02/25/22,02/24/22,1 Misc Sample Multiplier: 1 ALS Vial : 15 (Sig #1); 0 (Sig #2) Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:57:55 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration 6890 Scale Mode: Small noise peaks clipped Integrator: ChemStation Volume Inj. : Signal #2 Phase: Signal #1 Phase : Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:39 2022

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Signal #1 Info :

Quantitation Report (QT Reviewed)

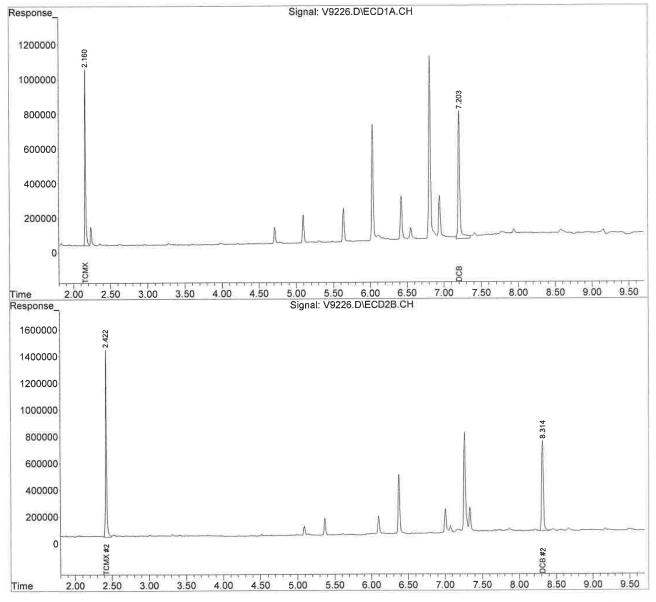
Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9226.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 12:24 Operator : IM Sample : SS-11/0-,E22-01119-013,S,15.60g,10.6,5 Misc : 220225-05 02/25/02 02/04/04 02 : 220225-05,02/25/22,02/24/22,1 Misc ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:58:33 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. . Signal #1 Phase 😨 Signal #2 Phase: Signal #2 Info : Signal #1 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 \_\_\_\_\_ System Monitoring Compounds1) S TCMX2.1612.423972743314728736147.111187.228 #Spiked Amount200.000Recovery =73.56%93.61%2) S DCB7.2038.3141273127611261313165.538169.430mSpiked Amount200.000Recovery =82.77%84.72% Target Compounds N.D. 0 0 N.D. Sum Chlordane 0.000 0.000 Average Chlordane 0 N.D. 0 N.D. Sum Toxaphene 0.000 0.000 Average Toxaphene 

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:41 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9226.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 12:24 Acq On Operator : IM : SS-11/0-, E22-01119-013, S, 15.60g, 10.6, 5 Sample : 220225-05,02/25/22,02/24/22,1 Misc ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:58:33 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration 6890 Scale Mode: Small noise peaks clipped Integrator: ChemStation Volume Inj. : Signal #1 Phase : Signal #2 Phase: Signal #1 Info : Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:43 2022

Page: 2

Quantitation Report (QT Reviewed)

Data Path :: C:\msdchem\1\data\22-03-01\ Data File : V9227.D Signal(s) 🖲 Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 12:36 Operator : IM Sample : SS-12/0-, E22-01119-014, S, 15.40g, 10.9, 5 : 220225-05,02/25/22,02/24/22,1 Misc ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:59:13 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #1 Phase : Signal #2 Phase: Signal #2 Info : Signal #1 Info : Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 \_\_\_\_\_ 

 System Monitoring Compounds

 1) S TCMX
 2.160
 2.422
 9891070 15736597
 149.586
 200.040 #

 Spiked Amount
 200.000
 Recovery
 =
 74.79%
 100.02%

 2) S DCB
 7.202
 8.313
 12034980
 12294881
 156.484
 184.980m

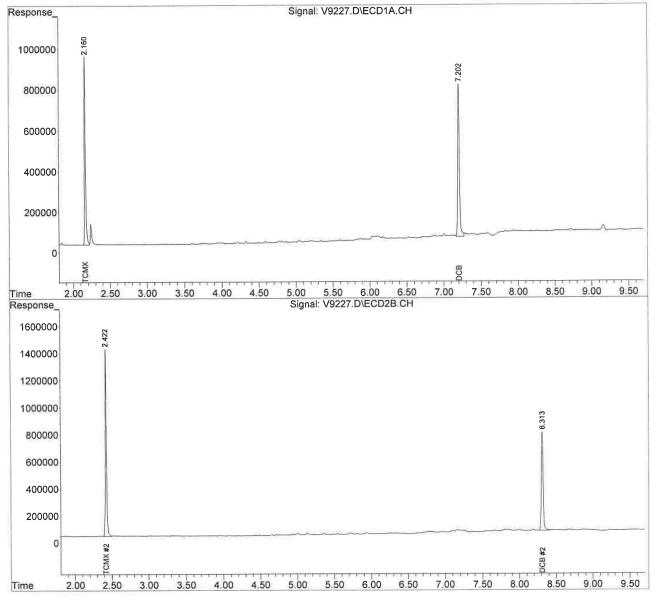
 Spiked Amount 200.000 Recovery = 78.24% 92.49% N.D. Target Compounds 0 0 N.D. Sum Chlordane 0.000 Average Chlordane N.D. 0 N.D. 0 Sum Toxaphene 0.000 0.000 Average Toxaphene 

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:45 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9227.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH : 01 Mar 2022 12:36 Acq On Operator : IM : SS-12/0-,E22-01119-014,S,15.40g,10.9,5 Sample : 220225-05,02/25/22,02/24/22,1 Misc Sample Multiplier: 1 ALS Vial : 17 (Sig #1); 0 (Sig #2) Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 12:59:13 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #2 Phase: Signal #1 Phase : Signal #2 Info : Signal #1 Info .



VPST0118.M Tue Mar 01 13:54:47 2022

#### PESTICIDES

Lab ID: BLKS220225-05 Client ID: Pest Date Received: NA Date Extracted: 02/25/2022 Date Analyzed: 03/01/2022 Data file: V9215.D GC Column: RTX-CLP1/CLP2 Sample wt/vol: 15.21g Matrix-Units: Soil-mg/Kg Dilution Factor: 1 % Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000658	0.000165
beta-BHC	ND		0.000658	0.000165
gamma-BHC (Lindane)	ND		0.000658	0.000165
delta-BHC	ND		0.000658	0.000165
Heptachlor	ND		0.000658	0.000165
Aldrin	ND		0.000658	0.000165
Heptachlor epoxide	ND		0.000658	0.000165
Endosulfan I	ND		0.000658	0.000165
4,4'-DDE	ND		0.000658	0.000165
Dieldrin	ND		0.000658	0.000165
Endrin	ND		0.000658	0.000165
Endosulfan II	ND		0.000658	0.000165
4,4'-DDD	ND		0.000658	0.000165
Endrin aldehyde	ND		0.000658	0.000165
Endosulfan sulfate	ND		0.000658	0.000165
4,4'-DDT	ND		0.000658	0.000165
Endrin ketone	ND		0.000658	0.000165
Methoxychlor	ND		0.000658	0.000165
alpha-Chlordane	ND		0.000658	0.000165
gamma-Chlordane	ND		0.000658	0.000165
Toxaphene	ND		0.00823	0.00329
Endosulfan (I and II)	ND		0.000658	0.000165
Chlordane (alpha and gamma)	ND		0.000658	0.000165

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9215.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 10:05 Operator : IM Sample : Pest, BLKS220225-05, S, 15.21g, 0, 5 : 220225-05,02/25/22,NA,1 Misc ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 10:17:26 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #1 Phase : Signal #2 Phase: Signal #2 Info : Signal #1 Info 👔 Compound RT#1 RT#2 Resp#1 Resp#2 ng#1 ng#2 . . . . . \_\_\_\_\_ System Monitoring Compounds 

 1) S TCMX
 2.160
 2.422
 10938059
 15958808
 165.420
 202.864

 Spiked Amount
 200.000
 Recovery
 =
 82.71%
 101.43%

 2) S DCB
 7.204
 8.315
 11227801
 11715765
 145.989
 176.267

 Spiked Amount
 200
 000
 Recovery
 =
 72.98%
 88.13%

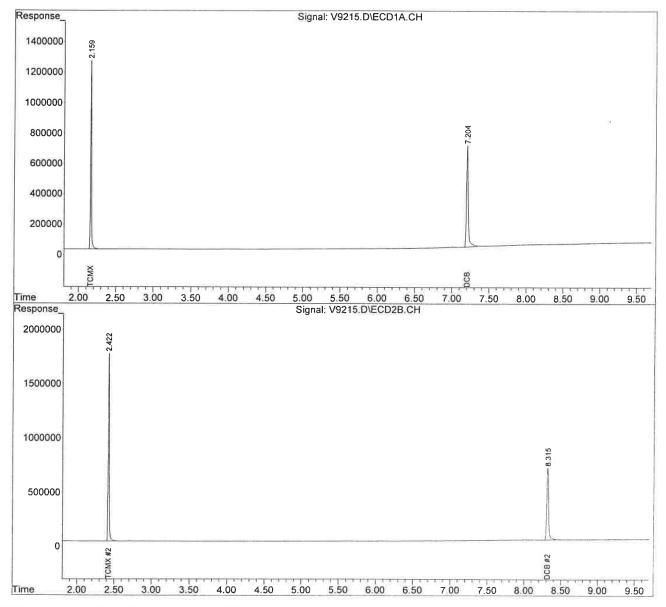
 Spiked Amount 200.000 Recovery = 72.99% 88.13% Target Compounds 0 N.D. N.D. 0.000 0.000 0 Sum Chlordane Average Chlordane 0 N.D. N.D. 0 0.000 Sum Toxaphene 0.000 Average Toxaphene 

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

VPST0118.M Tue Mar 01 13:54:09 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\22-03-01\ Data File : V9215.D Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH Acq On : 01 Mar 2022 10:05 Operator : IM Sample : Pest, BLKS220225-05, S, 15.21g, 0, 5 : 220225-05,02/25/22,NA,1 Misc ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1 Integration File signal 1: EVENTS.E Integration File signal 2: EVENTS2.E Quant Time: Mar 01 10:17:26 2022 Quant Method : C:\MSDCHEM\1\METHODS\VPST0118.M Quant Title : QLast Update : Tue Mar 01 09:39:29 2022 Response via : Initial Calibration Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped Volume Inj. Signal #1 Phase : Signal #2 Phase: Signal #1 Info Signal #2 Info :



VPST0118.M Tue Mar 01 13:54:10 2022

:

Page: 2

METALS

METALS QC SUMMARY

### INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 113

SDG #:

E22-00932, E22-01119

Units: ppb (ug/L) Matrix: Soil Method: 6020B/7471B 3/2/22 02:55 3/1/22 23:30 3/2/22 00:45 3/2/22 01:50 ICV & CCV ICV CCV CCV CCV Ture Value FOUND % R FOUND % R FOUND % R FOUND % R ANALYTE 27.3 109 25.8 103 25.0 106 25.9 104 26.6 Aluminum 109 106 Antimony 25.0 27.4 110 27.0 108 27.2 26.4 106 25.8 103 25.0 106 26.1 104 26.6 26.5 Arsenic 110 26.6 106 25.0 27.5 110 26.9 108 27.5 Barium 25.1 100 26.7 107 26.1 104 25.0 106 Beryllium 26.5 107 104 25.0 27.1 108 26.6 106 26.8 26.0 Cadmium 100 250 265 261 104 251 273 109 106 Calcium 106 104 25.0 27.4 110 27.1 108 26.6 26.0 Chromium 103 106 25.7 107 107 26.5 Cobalt 25.0 26.7 26.8 25.0 26.7 107 26.2 105 27.4 110 26.9 108 Copper 109 262 105 261 104 272 Iron 250 265 106 107 26.0 104 25.0 26.5 106 26.2 105 26.8 Lead 256 102 107 265 106 250 273 109 268 Magnesium 108 26.4 106 108 26.7 107 26.9 Manganese 25.0 26.9 104 107 26.6 106 25.9 Nickel 25.0 26.8 26.6 106 253 101 264 264 106 250 270 108 106 Potassium 108 Selenium 25.0 26.8 107 26.5 106 26.6 106 27.0 107 26.2 105 26.8 107 26.8 25.0 110 Silver 27.4 104 266 106 270 108 260 Sodium 250 270 108 103 26.1 104 26.2 105 25.7 25.0 26.4 106 Thallium 108 27.2 109 26.3 105 Vanadium 25.0 27.1 108 26.9 97.6 102 26.5 106 24.4 25.0 26.1 104 25.6 Zinc

		3/2/22 09:17		3/2/22	09:51	3/2/22	3/2/22 09:59		
	ICV & CCV	IC	V	CC	CV	00	V		
ANALYTE	Ture Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Mercury	5.00	5.26	105	5.35	107	5.35	107		

## **INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 113

SDG #: E22-00932, E22-01119

	Matrix: Soil			Method:	6020B/7	471B	Units:	ppb (ug/L	)
		3/2/22	03:25	3/2/22	18:57	3/2/22	20:12	3/2/22	21:17
	ICV & CCV	CC	CV V	IC	V	CC	V	CC	V
ANALYTE	Ture Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	25.0	25.9	104	25.6	102	27.1	108	26.6	106
Antimony	25.0	26.7	107	26.7	107	27.4	110	27.4	110
Arsenic	25.0	25.9	104	26.8	107	26.7	107	26.8	107
Barium	25.0	26.7	107	26.8	107	26.5	106	26.3	105
Beryllium	25.0	26.6	106	26.6	106	27.2	109	25.9	104
Cadmium	25.0	26.2	105	26.6	106	26.8	107	26.9	108
Calcium	250	251	100	268	107	262	105	263	105
Chromium	25.0	25.9	104	26.7	107	26.8	107	27.1	108
Cobalt	25.0	25.9	104	26.4	106	26.7	107	26.7	107
Copper	25.0	26.9	108	26.9	108	26.9	108	26.8	107
Iron	250	262	105	257	103	257	103	271	108
Lead	25.0	26.0	104	27.4	110	26.9	108	27.0	108
Magnesium	250	261	104	264	106	270	108	269	108
Manganese	25.0	26.5	106	26.9	108	26.9	108	26.9	108
Nickel	25.0	26.0	104	26.6	106	26.6	106	26.9	108
Potassium	250	254	102	272	109	265	106	266	106
Selenium	25.0	25.8	103	27.0	108	25.6	102	25.8	103
Silver	25.0	26.4	106	26.8	107	27.2	109	26.9	108
Sodium	250	265	106	267	107	271	108	271	108
Thallium	25.0	25.8	103	26.3	105	26.6	106	26.4	106
Vanadium	25.0	26.5	106	26.5	106	26.6	106	26.4	106
Zinc	25.0	24.2	96.8	26.5	106	26.1	104	26.7	107

### **INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 113

SDG #: E22-00932, E22-01119

Matrix: Soil

Method: 6020B/7471B

Units: ppb (ug/L)

	1	3/2/22		1					
	ICV & CCV	C	×	ļ,					_
ANALYTE	Ture Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	25.0	26.6	106						
Antimony	25.0	26.7	107						
Arsenic	25.0	26.4	106						
Barium	25.0	25.9	104						
Beryllium	25.0	27.3	109						
Cadmium	25.0	26.4	106						
Calcium	250	247	98.8						
Chromium	25.0	26.7	107						
Cobalt	25.0	26.7	107						
Copper	25.0	27.1	108						
Iron	250	255	102						
Lead	25.0	26.2	105						
Magnesium	250	264	106						
Manganese	25.0	26.5	106						
Nickel	25.0	27.0	108						
Potassium	250	260	104						
Selenium	25.0	24.9	99.6						
Silver	25.0	26.5	106						
Sodium	250	264	106						
Thallium	25.0	25.8	103						
Vanadium	25.0	26.2	105						
Zinc	25.0	26.6	106						

# METALS QUALITY CONTROL INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 113

SDG #: E22-00932, E22-01119

Matrix:	Soil		Method:	Units: ppb (ug/L)			
		3/1/22 23:45	3/2/22 0:50	3/2/22 1:55	3/2/22 3:00	3/2/22 3:30	3/2/22 19:12
ANALYTE	ICB & CCB True Value	ICB	ССВ	ССВ	ССВ	ССВ	ICB
Aluminum	2.50	ND	ND	ND	ND	ND	ND
Antimony	0.200	ND	ND	ND	ND	ND	ND
Arsenic	0.048	ND	ND	ND	ND	ND	ND
Barium	0.250	ND	ND	ND	ND	ND	ND
Beryllium	0.091	ND	ND	ND	ND	ND	ND
Cadmium	0.039	ND	ND	NÐ	ND	ND	ND
Calcium	18.2	ND	ND	ND	ND	ND	ND
Chromium	0.441	ND	ND	ND	ND	ND	ND
Cobalt	0.150	ND	ND	ND	ND	ND	ND
Copper	0.357	ND	ND	ND	ND	ND	ND
Iron	15.0	ND	ND	ND	ND	ND	ND
Lead	0.250	ND	ND	ND	ND	ND	ND
Magnesium	15.0	ND	ND	ND	ND	ND	ND
Manganese	0.412	ND	ND	ND	ND	ND	ND
Nickel	0.350	ND	ND	ND	ND	ND	ND
Potassium	22.7	ND	ND	ND	ND	ND	ND
Selenium	1.50	ND	ND	ND	ND	ND	ND
Silver	0.267	ND	ND	ND	ND	ND	ND
Sodium	34.7	ND	ND	ND	ND	ND	ND
Thallium	0.250	ND	ND	ND	ND	ND	ND
Vanadium	0.235	ND	ND	ND	ND	ND	ND
Zinc	1.32	ND	ND	ND	ND	ND	ND

		3/2/22 9:22	3/2/22 9:54	3/2/22 10:02	
ANALYTE	ICB & CCB True Value	ICB	ССВ	ССВ	
Mercury	0.200	ND	ND	ND	

# METALS QUALITY CONTROL INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 113

SDG #: E22-00932, E22-01119

	÷							
Matrix:	Soil		Method: 6020B/7471B					
		3/2/22 20:17	3/2/22 21:22	3/2/22 21:43				
ANALYTE	ICB & CCB True Value	ССВ	ССВ	ССВ				
Aluminum	2.50	ND	ND	ND				
Antimony	0.200	ND	ND	ND				
Arsenic	0.048	ND	ND	ND				
Barium	0.250	ND	ND	ND				
Beryllium	0.091	ND	ND	ND				
Cadmium	0.039	ND	ND	ND				
Calcium	18.2	ND	ND	ND				
Chromium	0.441	ND	ND	ND				
Cobalt	0.150	ND	ND	ND				
Copper	0.357	ND	ND	ND				
Iron	15.0	ND	ND	ND				
Lead	0.250	ND	ND	ND				
Magnesium	15.0	ND	ND	ND				
Manganese	0.412	ND	ND	ND				
Nickel	0.350	ND	ND	ND				
Potassium	22.7	ND	ND	ND				
Selenium	1.50	ND	ND	ND				
Silver	0.267	ND	ND	ND				
Sodium	34.7	ND	ND	ND				
Thallium	0.250	ND	ND	ND				
Vanadium	0.235	ND	ND	ND				
Zinc	1.32	ND	ND	ND				

### METALS CALIBRATION CURVE RELATIVE ERROR 2022 PG113 March 1, 2022 22:57 Method: 6020B

		Low Level			Mid Level	
	Expected Conc.	Calculated Conc.	% Difference	Expected Conc.	Calculated Conc.	% Difference
Be	0.5	0.501	0.200	25	26	4.00
В	0.5	0.45	10.0	25	24.8	0.800
Na	50	54	8.00	500	531	6.20
Mg	50	53.2	6.40	500	529	5.80
AI	5	5.12	2.40	25	25.6	2.40
Si	50	56.6	13.2	2500	2640	5.60
к	50	56.4	12.8	500	533	6.60
Са	50	53.1	6.20	500	516	3.20
Ti	0.5	0.536	7.20	25	25.2	0.800
V	0.5	0.53	6.00	25	25.8	3.20
Cr	0.5	0.455	9.00	25	25.6	2.40
Mn	0.5	0.446	10.8	25	25.7	2.80
Fe	50	52.2	4.40	500	529	5.80
Co	0.5	0.504	0.800	25	25.4	1.60
Ni	0.5	0.469	6.20	25	25.1	0.400
Cu	0.5	0.487	2.60	25	25.1	0.400
Zn	0.5	0.472	5.60	25	25.3	1.20
As	0.5	0.468	6.40	25	25.6	2.40
Se	5	5.04	0.800	25	25.6	2.40
Мо	0.5	0.491	1.80	25	25.8	3.20
Ag	0.4	0.381	4.75	25	26.1	4.40
Cd	0.5	0.524	4.80	25	25.9	3.60
Sn	0.5	0.466	6.80	25	25.8	3.20
Sb	0.5	0.512	2.40	25	25.9	3.60
Ba	0.5	0.499	0.200	25	26	4.00
ТІ	0.5	0.528	5.60	25	25.5	2.00
Pb	0.5	0.514	2.80	25	25.9	3.60

% Difference = ((calculated conc. - expected conc.) / expected conc.) \* 100 Low Level's Control Limits: (+) or (-) 20% Difference Mid Level's Control Limits: (+) or (-) 10% Difference

### METALS CALIBRATION CURVE RELATIVE ERROR 2022 PG113 March 2, 2022 18:25 Method: 6020B

		Low Level			Mid Level	
	Expected Conc.	Calculated Conc.	% Difference	Expected Conc.	Calculated Conc.	% Difference
Be	0.5	0.529	5.80	25	26.2	4.80
В	0.5	0.472	5.60	25	24.5	2.00
Na	50	52.8	5.60	500	500	0
Mg	50	52.4	4.80	500	502	0.400
AI	5	4.57	8.60	25	25.5	2.00
Si	50	53.9	7.80	2500	2650	6.00
к	50	51.9	3.80	500	499	0.200
Ca	50	52.8	5.60	500	497	0.600
Ti	0.5	0.482	3.60	25	24.8	0.800
v	0.5	0.529	5.80	25	25.3	1.20
Cr	0.5	0.505	1.00	25	25.1	0.400
Mn	0.5	0.489	2.20	25	25.6	2.40
Fe	50	50.4	0.800	500	499	0.200
Со	0.5	0.531	6.20	25	25.2	0.800
Ni	0.5	0.526	5.20	25	24.9	0.400
Cu	0.5	0.581	16.2	25	24.8	0.800
Zn	0.5	0.535	7.00	25	25.1	0.400
As	0.5	0.523	4.60	25	25	0
Se	5	5.37	7.40	25	26.2	4.80
Мо	0.5	0.495	1.00	25	25.7	2.80
Ag	0.4	0.389	2.75	25	25.6	2.40
Cd	0.5	0.532	6.40	25	25.9	3.60
Sn	0.5	0.457	8.60	25	25.6	2.40
Sb	0.5	0.523	4.60	25	25.8	3.20
Ba	0.5	0.534	6.80	25	26.1	4.40
TI	0.5	0.527	5.40	25	25.6	2.40
Pb	0.5	0.544	8.80	25	26.2	4.80

% Difference = ((calculated conc. - expected conc.) / expected conc.) \* 100 Low Level's Control Limits: (+) or (-) 20% Difference Mid Level's Control Limits: (+) or (-) 10% Difference

E22-01119

### METALS CALIBRATION CURVE RELATIVE ERROR 2022 PG113 March 2, 2022 Method: 7471B

	Low Level			Mid Level		
	Expected Conc.	Calculated Conc.	% Difference	Expected Conc.	Calculated Conc.	% Difference
Hg	0.25	0.219	12.4	5	4.56	8.8

% Difference = ((calculated conc. - expected conc.) / expected conc.) \* 100 Low Level's Control Limits: (+) or (-) 20% Difference Mid Level's Control Limits: (+) or (-) 10% Difference

RSD = relative standard deviation

Page 1 of 1

FINALIZED 03/17/2022

E22-01119

## METALS QUALITY CONTROL BLANK RESULTS SUMMARY

Batch (Page) #: 113

E22-00932, E22-01119

Associated Lab - Case for Blank: -

Matrix: Soil

#### Method: 6020B/7471B

Unit: ppm (mg/kg)

	3/2/2	2 0:25
	BLKS22	20301-01
ANALYTE	TRUE	FOUND
Aluminum	2.50	ND
Antimony	0.200	ND
Arsenic	0.048	ND
Barium	0.250	ND
Beryllium	0.091	ND
Cadmium	0.039	ND
Calcium	18.2	ND
Chromium	0.441	ND
Cobalt	0.150	ND
Copper	0.357	ND
Iron	15.0	ND
Lead	0.250	ND
Magnesium	15.0	ND
Manganese	0.412	ND
Nickel	0.350	ND
Potassium	22.7	ND
Selenium	1.50	ND
Silver	0.267	ND
Sodium	34.7	ND
Thallium	0.250	ND
Vanadium	0.235	ND
Zinc	1.32	ND

	3/2/22 9:24					
	BLKS220301-01					
ANALYTE	TRUE	FOUND				
Mercury	0.010	ND				

Associated samples for BLKS220301-01

00932-002~003,005~006,012~014; 01119-001~002,004
01119-005~009,011~014

# METALS QUALITY CONTROL ICP-MS ICSAB RESULTS SUMMARY

Instrument: Batch (Page) #:

:: Agilent7900 :: 113

SDG #: E2

E22-00932, E22-01119

Matrix: Aqueous

Concentration/Units: ppb (µg/L)

		3/1/2	22 23:50			3/1/	22 23:55	
		IC	SA 1		ICSAB 1			
Interferents	True Value	Result	% Recovery	Control Limit % R	True Value	Result	% Recovery	Control Limit % R
Aluminum	100000	93800	93.8	80-120	100000	98100	98.1	80-120
Calcium	100000	90200	90.2	80-120	100000	94800	94.8	80-120
Iron	100000	96000	96.0	80-120	100000	99400	99.4	80-120
Magnesium	100000	93500	93.5	80-120	100000	97800	97.8	80-120
Molybdenum	2000	2050	103	80-120	2000	2200	110	80-120
Potassium	100000	89700	89.7	80-120	100000	93800	93.8	80-120
Sodium	100000	96300	96.3	80-120	100000	101000	101	80-120
Titanium	2000	1980	99.0	80-120	2000	2070	104	80-120

		IC	SA 1		10	CSAB 1	
Analytes	Limit	Result	Control Limit	True Value	Result	% Recovery	Control Limit % R
Antimony	1	0.175	< 1				
Arsenic	1	0.382	< 1	20	21.1	106	80-120
Barium	1	0.860	< 1				
Beryllium	1	0.016	< 1				
Boron	10	2.92	< 10				
Cadmium	1	0.799	< 1	20	22.0	110	80-120
Chromium	1	0.206	< 1	20	20.1	101	80-120
Cobalt	1	0.454	< 1	20	19.7	98.5	80-120
Copper	1	0.685	< 1	20	19.1	95.5	80-120
Lead	1	0.613	< 1				
Manganese	1	0.885	< 1	20	21.5	108	80-120
Nickel	1	0.483	< 1	20	19.3	96.5	80-120
Selenium	7	0.097	< 7				
Silver	0.8	0.070	< 0.8	20	22.6	113	80-120
Thallium	1	0.018	< 1				
Tin	1	0.041	< 1				
Vanadium	1	ND	< 1				
Zinc	10	0.882	< 10	20	19.5	97.5	80-120

Control Limit of ICS A = 2X Instrument RL of analyte

#### E22-01119

## METALS QUALITY CONTROL ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7900 Batch (Page) #: 113

SDG #: E22-00932, E22-01119

Matrix: Aqueous

Concentration/Units: ppb (µg/L)

	251	3/2/2	22 19:17			3/2/:	22 19:22	
		10	SA 2		ICSAB 2			
Interferents	True Value	Result	% Recovery	Control Limit % R	True Value	Result	% Recovery	Control Limit % R
Aluminum	100000	98800	98.8	80-120	100000	104000	104	80-120
Calcium	100000	90700	90.7	80-120	100000	94800	94.8	80-120
Iron	100000	95100	95.1	80-120	100000	98000	98.0	80-120
Magnesium	100000	93300	93.3	80-120	100000	97500	97.5	80-120
Molybdenum	2000	2230	112	80-120	2000	2290	115	80-120
Potassium	100000	88600	88.6	80-120	100000	93400	93.4	80-120
Sodium	100000	95900	95.9	80-120	100000	100000	100	80-120
Titanium	2000	2080	104	80-120	2000	2160	108	80-120

		IC	SA 2		IC	CSAB 2	
Analytes	Limit	Result	Control Limit	True Value	Result	% Recovery	Control Limit % R
Antimony	1	0.185	< 1			_	
Arsenic	1	0.392	< 1	20	22.2	111	80-120
Barium	1	0.972	< 1				
Beryllium	1	0.015	< 1				
Boron	10	4.10	< 10				
Cadmium	1	0.868	< 1	20	22.7	114	80-120
Chromium	1	0.297	< 1	20	21.3	107	80-120
Cobalt	1	0.462	< 1	20	20.8	104	80-120
Copper	1	0.886	< 1	20	20.2	101	80-120
Lead	1	0.664	< 1				
Manganese	1	0.883	< 1	20	22.4	112	80-120
Nickel	1	0.530	< 1	20	20.5	103	80-120
Selenium	7	0.321	< 7				
Silver	0.8	0.082	< 0.8	20	23.4	117	80-120
Thallium	1	0.033	< 1				
Tin	1	0.031	< 1				
Vanadium	1	ND	< 1				
Zinc	10	1.07	< 10	20	20.7	104	80-120

Control Limit of ICS A = 2X Instrument RL of analyte

## METALS QUALITY CONTROL LABORATORY CONTROL SAMPLE

Batch (Page) #:

SDG #: E22-00932, E22-01119

Matrix: Soil

113

Method: 6020B/7471B

Unit: ppm (mg/kg)

		3/2/22 1:00		
		LCSS220301-01		Control Limit
ANALYTE	TRUE	FOUND	% Recovery	% Recovery
Aluminum	200	209	105	80-120
Antimony	40.0	42.0	105	80-120
Arsenic	40.0	42.6	107	80-120
Barium	40.0	42.7	107	80-120
Beryllium	40.0	41.1	103	80-120
Cadmium	40.0	41.8	105	80-120
Calcium	200	215	108	80-120
Chromium	40.0	43.1	108	80-120
Cobalt	40.0	41.2	103	80-120
Copper	40.0	40.7	102	80-120
Iron	200	211	106	80-120
Lead	40.0	42.4	106	80-120
Magnesium	200	214	107	80-120
Manganese	40.0	41.6	104	80-120
Nickel	40.0	42.4	106	80-120
Potassium	200	240	120	80-120
Selenium	40.0	40.3	101	80-120
Silver	40.0	45.5	114	80-120
Sodium	200	219	110	80-120
Thallium	40.0	42.0	105	80-120
Vanadium	40.0	41.7	104	80-120
Zinc	40.0	41.3	103	80-120

		3/2/22 9:27		
		LCSS220301-01		Control Limit
ANALYTE	TRUE	FOUND	% Recovery	% Recovery
Mercury	0.500	0.463	92.6	80-120

Associated Sample for LCSS220301-01

00932-002~003,005~006,012~014; 01119-001~002,004

01119-005~009,011~014

FINALIZED 03/17/2022

## LOW LEVEL INITIAL CALIBRATION VERIFICATION

## Batch (Page) #: 113

SDG #: E22-00932, E22-01119

Matrix: Soil Method: 6020B/7471B Units: ppb (ug/L) 3/2/22 19:02 3/1/22 23:35 LLICV LLICV LLICV True Value FOUND % R FOUND % R FOUND % R ANALYTE FOUND % R 0.500 97.2 92.6 0.486 0.463 Aluminum 0.500 0.509 102 0.516 103 Antimony 0.510 102 0.500 0.524 105 Arsenic 0.500 0.491 98.2 0.504 101 Barium 0.500 0.496 103 99.2 0.513 Beryllium 0.500 100 0.531 106 0.501 Cadmium 50.0 55.3 111 47.7 95.4 Calcium 92.6 0.428 85.6 0.500 0.463 Chromium Cobalt 0.500 0.508 102 0.526 105 0.544 109 0.500 91.8 Copper 0.459 50.0 52.1 104 48.8 97.6 Iron 0.519 104 0.500 0.508 102 Lead 50.0 53.0 106 49.4 98.8 Magnesium 0.500 0.445 89.0 Manganese 0.431 86.2 0.500 0.470 94.0 0.513 103 Nickel 50.0 55.5 111 50.0 100 Potassium 0.500 0.535 107 0.587 117 Selenium 0.500 0.510 102 0.538 108 Silver Sodium 50.0 50.9 102 48.7 97.4 0.500 0.508 102 0.515 103 Thallium 0.489 97.8 0.520 104 Vanadium 0.500 0.500 94.4 0.459 91.8 0.472 Zinc

		3/2/22	09:19						
	LLICV	LLI	CV						
ANALYTE	True Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Mercury	0.250	0.217	86.8						

(1) Control Limits: 80-120

### MID LEVEL INITIAL CALIBRATION VERIFICATION

Batch (Page) #: 113

SDG #: E22-00932, E22-01119

	Matrix: Soil		;	Method:	6020B/7	471B	Units	ppb (ug/L	)
		3/1/22	23:40	3/2/22	19:07				
	MLICV	MLI	CV	MLI	CV				
ANALYTE	True Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	25.0	24.4	97.6	26.7	107				
Antimony	25.0	25.7	103	25.4	102				
Arsenic	25.0	25.6	102	25.2	101				
Barium	25.0	25.8	103	25.9	104				
Beryllium	25.0	26.1	104	25.7	103				
Cadmium	25.0	25.5	102	25.3	101				
Calcium	500	521	104	504	101				
Chromium	25.0	25.6	102	25.4	102				
Cobalt	25.0	25.4	102	25.2	101				
Соррег	25.0	25.2	101	24.7	98.8				
Iron	500	535	107	506	101				
Lead	25.0	25.7	103	25.9	104				
Magnesium	500	529	106	505	101				
Manganese	25.0	25.6	102	25.6	102				
Nickel	25.0	25.5	102	25.0	100				
Potassium	500	530	106	504	101				
Selenium	25.0	25.6	102	25.6	102				
Silver	25.0	25.5	102	25.2	101				
Sodium	500	529	106	499	99.8				
Thallium	25.0	25.1	100	25.3	101				
Vanadium	25.0	25.6	102	25.4	102				
Zinc	25.0	25.2	101	25.6	102				

## LINEAR DYNAMIC RANGE VERIFICATION

Batch (Page) #: 113

SDG #: E22-00932, E22-01119

	Matrix: Soil			Method:	6020B/7	471B	Units	ppb (ug/L)	)
		3/2/22	00:00	3/2/22	19:27				
	LDR	LD	R	LC	R				
ANALYTE	True Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	12500	12400	99.2	12700	102				
Antimony	2500	2410	96.4	2420	96.8				
Arsenic	2500	2420	96.8	2450	98.0				
Barium	2500	2310	92.4	2510	100				
Beryllium	2500	2360	94.4	2430	97.2				
Cadmium	2500	2350	94.0	2370	94.8				
Calcium	50000	50700	101	49400	98.8				
Chromium	2500	2390	95.6	2460	98.4				
Cobalt	2500	2360	94.4	2420	96.8				
Copper	2500	2290	91.6	2350	94.0				
Iron	50000	49200	98.4	47600	95.2				
Lead	2500	2530	101	2740	110				
Magnesium	50000	48400	96.8	47100	94.2				
Manganese	2500	2390	95.6	2440	97.6				
Nickel	2500	2340	93.6	2400	96.0				
Potassium	50000	45800	91.6	48200	96.4				
Selenium	2500	2430	97.2	2480	99.2				
Silver	500	458	91.6	458	91.6				
Sodium	50000	49600	99.2	48400	96.8				
Thallium	2500	2480	99.2	2670	107				
Vanadium	2500	2450	98.0	2530	101				
Zinc	2500	2330	93.2	2390	95.6				

## METALS QUALITY CONTROL SPIKE SAMPLE RECOVERY

Batch (Page) #: 113

SDG #: E22-00932, E22-01119

	Matrix:	Soil	Method:	<u>6020B/7471B</u>		Unit:	ppm (mg/kg
	E22-0	0932-003MS	E22	-00932-003	%	Spike	Control
ANALYTE	Ma	trix Spike		Sample	Recovery	Added	Limit %R
Aluminum	15100	3/2/22 20:32	13900	3/2/22 20:02	NC	209	80-120
Antimony	41.3	3/2/22 1:05	ND	3/2/22 0:30	98.6	41.9	80-120
Arsenic	42.5	3/2/22 1:05	1.86	3/2/22 0:30	97.0	41.9	80-120
Barium	129	3/2/22 1:05	84.1	3/2/22 0:30	107	41.9	80-120
Beryllium	39.5	3/2/22 1:05	0.602	3/2/22 0:30	92.8	41.9	80-120
Cadmium	40.9	3/2/22 1:05	ND	3/2/22 0:30	97.6	41.9	80-120
Calcium	1560	3/2/22 1:05	1290	3/2/22 0:30	NC	209	80-120
Chromium	59.1	3/2/22 1:05	17.1	3/2/22 0:30	100	41.9	80-120
Cobalt	45.7	3/2/22 1:05	6.17	3/2/22 0:30	94.3	41.9	80-120
Copper	54.8	3/2/22 1:05	14.4	3/2/22 0:30	96.4	41.9	80-120
Iron	16700	3/2/22 1:05	15700	3/2/22 0:30	NC	209	80-120
Lead	49.3	3/2/22 1:05	7.94	3/2/22 0:30	98.7	41.9	80-120
Magnesium	3410	3/2/22 1:05	3030	3/2/22 0:30	NC	209	80-120
Manganese	251	3/2/22 1:05	204	3/2/22 0:30	112	41.9	80-120
Mercury	0.469	3/2/22 9:35	ND	3/2/22 9:30	83.0	0.565	80-120
Nickel	53.1	3/2/22 1:05	12.2	3/2/22 0:30	97.6	41.9	80-120
Potassium	2090	3/2/22 1:05	1800	3/2/22 0:30	NC	209	80-120
Selenium	41.6	3/2/22 1:05	1.99	3/2/22 19:52	94.5	41.9	80-120
Silver	44.7	3/2/22 1:05	ND	3/2/22 0:30	107	41.9	80-120
Sodium	784	3/2/22 1:05	543	3/2/22 0:30	115	209	80-120
Thallium	40.7	3/2/22 1:05	ND	3/2/22 0:30	97.1	41.9	80-120
Vanadium	63.4	3/2/22 1:05	22.3	3/2/22 0:30	98.1	41.9	80-120
Zinc	67.2	3/2/22 1:05	26.8	3/2/22 0:30	96.4	41.9	80-120

%R = Percent Recovery

NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

Associated samples for E22-00932-003

00932-002~003,005~006,012~014; 01119-001~002,004 01119-005~009,011~014

## METALS QUALITY CONTROL DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 113 SDG #: E22-00932, E22-01119

Matrix: Soil

Method: 6020B/7471B

Unit: ppm (mg/kg)

	E22-	00932-003	E22-00	932-003DUP		Control
ANALYTE	S	Sample	D	uplicate	RPD	Limit
Aluminum	13900	3/2/22 20:02	14100	3/2/22 20:22	1.43	20
Antimony	ND	3/2/22 0:30	ND	3/2/22 0:35	NC	NA
Arsenic	1.86	3/2/22 0:30	1.90	3/2/22 0:35	2.13	20
Barium	84.1	3/2/22 0:30	87.5	3/2/22 0:35	3.96	20
Beryllium	0.602	3/2/22 0:30	0.636	3/2/22 0:35	5.49	20
Cadmium	ND	3/2/22 0:30	ND	3/2/22 0:35	NC	NA
Calcium	1290	3/2/22 0:30	1320	3/2/22 0:35	2.30	20
Chromium	17.1	3/2/22 0:30	17.5	3/2/22 0:35	2.31	20
Cobalt	6.17	3/2/22 0:30	6.31	3/2/22 0:35	2.24	20
Copper	14.4	3/2/22 0:30	14.8	3/2/22 0:35	2.74	20
Iron	15700	3/2/22 0:30	16200	3/2/22 0:35	3.13	20
Lead	7.94	3/2/22 0:30	8.32	3/2/22 0:35	4.67	20
Magnesium	3030	3/2/22 0:30	3140	3/2/22 0:35	3.57	20
Manganese	204	3/2/22 0:30	210	3/2/22 0:35	2.90	20
Mercury	ND	3/2/22 9:30	ND	3/2/22 9:32	NC	NA
Nickel	12.2	3/2/22 0:30	12.5	3/2/22 0:35	2.43	20
Potassium	1800	3/2/22 0:30	1870	3/2/22 0:35	3.81	20
Selenium	1.99	3/2/22 19:52	1.94	3/2/22 19:57	2.54	20
Silver	ND	3/2/22 0:30	ND	3/2/22 0:35	NC	NA
Sodium	543	3/2/22 0:30	562	3/2/22 0:35	3.44	20
Thallium	ND	3/2/22 0:30	ND	3/2/22 0:35	NC	NA
Vanadium	22.3	3/2/22 0:30	23.0	3/2/22 0:35	3.09	20
Zinc	26.8	3/2/22 0:30	27.9	3/2/22 0:35	4.02	20

NA = Not Applicable

NC = Non-calculable RPD due to result (s) less than the detection limit.

Associated samples for E22-00932-003

00932-002~003,005~006,012~014; 01119-001~002,004 01119-005~009,011~014

## METALS QUALITY CONTROL SERIAL DILUTIONS

Batch (Page) #: 113 SDG #: E22-00932, E22-01119

Unit: ppm (mg/kg) Method: 6020B/7471B Matrix: Soil E22-00932-003MS % Control E22-00932-003SD Difference Limit %D Serial Dilution ANALYTE Matrix Spike 3/2/22 20:27 1.32 ±20 Aluminum 15100 3/2/22 20:32 15300 0.485 ±20 Antimony 41.3 3/2/22 1:05 41.1 3/2/22 0:55 Arsenic 42.5 3/2/22 1:05 44.0 3/2/22 0:55 3.47 ±20 ±20 129 128 0.778 Barium 3/2/22 0:55 3/2/22 1:05 40.5 3/2/22 0:55 2.50 ±20 Beryllium 3/2/22 1:05 39.5 ±20 0.244 41.0 3/2/22 0:55 Cadmium 40.9 3/2/22 1:05 1540 1.29 ±20 Calcium 3/2/22 1:05 3/2/22 0:55 1560 59.6 0.842 ±20 Chromium 59.1 3/2/22 1:05 3/2/22 0:55 1.30 ±20 46.3 3/2/22 0:55 Cobalt 45.7 3/2/22 1:05 Copper 54.8 3/2/22 1:05 54.4 3/2/22 0:55 0.733 ±20 1.19 ±20 3/2/22 0:55 Iron 16700 3/2/22 1:05 16900 49.3 3/2/22 1:05 49.4 3/2/22 0:55 0.203 ±20 Lead 3410 0.293 ±20 3/2/22 1:05 3420 3/2/22 0:55 Magnesium 251 3/2/22 1:05 255 3/2/22 0:55 1.58 ±20 Manganese ±20 Nickel 53.1 3/2/22 1:05 54.0 3/2/22 0:55 1.68 2170 3/2/22 0:55 3.76 ±20 Potassium 2090 3/2/22 1:05 ±20 41.7 3/2/22 0:55 0.240 Selenium 41.6 3/2/22 1:05 44.5 3/2/22 0:55 0.448 ±20 Silver 44.7 3/2/22 1:05 ±20 783 0.128 Sodium 784 3/2/22 1:05 3/2/22 0:55 Thallium 40.7 3/2/22 1:05 40.6 3/2/22 0:55 0.246 ±20 ±20 0.158 Vanadium 63.4 3/2/22 1:05 63.5 3/2/22 0:55 3/2/22 0:55 3.08 ±20 Zinc 67.2 3/2/22 1:05 69.3

%D = Percent Difference

Associated samples for E22-00932-003

00932-002~003,005~006,012~014; 01119-001~002,004 01119-005~009,011~014

#### METALS INTERNAL STANDARD AREA SUMMARY 2022 PG113 March 1, 2022 Method: 6020B

	ISTD	Sc-45 [2]		Ge-72 [	1]	In-115 [		Bi-209 [2]		
003CALB.d	BLANK	175937	7	31366		204271		145401		
		Area Count	% Rec							
	Lower Limit	1231564	70	21956	70	1429898	70	1017809	70	
	Upper Limit	2287190	130	40776	130	2655526	130	1890217	130	
004CALS.d	STD 1	1731903	98	31084	99	2025988	99	1427205	98	
005CALS.d	STD 2	1673653	95	30369	97	1956269	96	1386131	95	
006CALS.d	STD 3	1738397	99	30873	98	2044356	100	1442018	99	
007CALS.d	STD 4	1657020	94	30205	96	1942160	95	1426516	98	
008CALS.d	STD 5	1773845	101	31817	101	2119785	104	1541622	106	
009CALS.d	STD 6	1687314	96	29403	94	2006584	98	1470990	101	
011_ICV.d	ICV	1586876	90	28409	91	1874852	92	1346224	93	_
012LCCV.d	LLICV	1671775	95	30044	96	1982967	97	1407491	97	
013 LQV.d	MLICV	1662110	94	29760	95	1966276	96	1446885	100	
014_ICB.d	ICB	1600362	91	28263	90	1870109	92	1328439	91	
015ICSA.d	ICSA	1594667	91	28435	91	1846437	90	1308682	90	
016ICSB.d	ICSAB	1589863	90	29852	95	1806279	88	1223409	84	
017 LRS.d	LDR	1873006	106	32096	102	2335053	114	1460697	100	
022SMPL.d	BLKS220301-01	1605535	91	29335	94	1848291	90	1247869	86	
023SMPL.d	E22-00932-003	1777844	101	30383	97	1951153	96	1367095	94	
024SMPL.d	E22-00932-003DUP	1723152	98	29733	95	1892010	93	1323117	91	
026_CCV.d	CCV	1637859	93	29760	95	1926278	94	1345735	93	
027 CCB.d	ССВ	1610831	92	28578	91	1867961	91	1291724	89	
028SMPL.d	E22-00932-003SD	1650516	94	28995	92	1922431	94	1354371	93	
029SMPL.d	LCSS220301-01	1569626	89	27667	88	1850736	91	1301115	89	
030SMPL.d	E22-00932-003MS	1676734	95	28250	90	1850889	91	1327238	91	
033SMPL.d	E22-00932-002	1671031	95	28904	92	1856159	91	1314340	90	
034SMPL.d	E22-00932-005	1769526	101	29558	94	1973346	97	1382249	95	
035SMPL.d	E22-00932-006	1711508	97	29145	93	1872476	92	1310214	90	
036SMPL.d	E22-00932-012	1677524	95	29150	93	1907883	93	1320740	91	
037SMPL.d	E22-00932-013	1743582	99	30412	97	2715683	133	1742285	120	A
039 CCV.d	CCV	1532712	87	26787	85	1867632	91	1385304	95	
040 CCB.d	ССВ	1508803	86	25896	83	1822926	89	1334685	92	
041SMPL.d	E22-00932-014	1602908	91	26951	86	2568307	126	1836199	126	
042SMPL.d	E22-01119-001	1487660	85	25806	82	1831979	90	1388625	96	
043SMPL.d	E22-01119-002	1520556	86	26024	83	1856088	91	1413243	97	
044SMPL.d	E22-01119-004	1483222	84	25588	82	1814439	89	1394587	96	
045SMPL.d	E22-01119-005	1522130	87	26271	84	1869747	92	1417255	97	
046SMPL.d	E22-01119-006	1516007	86	26177	83	1852080	91	1421198	98	
047SMPL.d	E22-01119-007	1571594	89	26525	85	1921778	94	1454383	100	ľ
048SMPL.d	E22-01119-008	1542784	88	26622	85	1899202	93	1422500	98	T
049SMPL.d	E22-01119-009	1521368	86	26143	83	1868791	91	1403051	96	
050SMPL.d	E22-01119-011	1542457	88	26586	85	1890468	93	1425941	98	
052 CCV.d	CCV	1541853	88	26676	85	1895430	93	1402868	96	
053 CCB.d	CCB	1457852	83	25347	81	1779432	87	1317194	91	
054SMPL.d	E22-01119-012	1545782	88	26795	85	1898544	93	1436184	99	
055SMPL.d	E22-01119-013	1476321	84	25566	82	1815015	89	1368287	94	
056SMPL.d	E22-01119-014	1520101	86	26256	84	1852757	91	1407480	97	
058 CCV.d	FINAL CCV	1530417	87	26389	84	1882050	92	1399441	96	T

A\* in last column indicates the analysis has failed QC criteria

Sample Limits = 70-130% of reference Standard (CAL BLANK L1) QC Sample Limits = 70-130% of reference Standard (CAL BLANK L1) [1] = [ He ]; [2] = [ No Gas ]

Ge-72 [1] = Mg,AI,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se

Sc-45 [2] = Be,B,Na,Si; In-115 [2] = Mo,Ag,Cd,Sn,Sb,Ba; Bi-209 [2] = Tl,Pb

E22-01119

#### METALS INTERNAL STANDARD AREA SUMMARY 2022 PG113 March 1, 2022 Method: 6020B

	ISTD	Sc-45 [	2]	Ge-72 [	1]	in-115 [	2]	Bi-209 [	[2]
003CALB.d	BLANK	1759377		31366		2042712		1454013	
		Area Count	% Rec						
	Lower Limit	1231564	70	21956	70	1429898	70	1017809	70
	Upper Limit	2287190	130	40776	130	2655526	130	1890217	130
059_CCB.d	FINAL CCB	1558358	89	26285	84	1889600	93	1398636	96

A\* in last column indicates the analysis has failed QC criteria Sample Limits = 70-130% of reference Standard (CAL BLANK L1) QC Sample Limits = 70-130% of reference Standard (CAL BLANK L1) [1] = [ He ]; [2] = [ No Gas ]

Ge-72 [1] = Mg,Al,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se Sc-45 [2] = Be,B,Na,Si; In-115 [2] = Mo,Ag,Cd,Sn,Sb,Ba; Bi-209 [2] = TI,Pb

#### METALS INTERNAL STANDARD AREA SUMMARY 2022 PG113 March 2, 2022 Method: 6020B

	ISTD	Sc-45 [	2]	Ge-72 [	1]	In-115 [	2]	Bi-209 [	
003CALB.d	BLANK	201363		35830		2300429		1555852	
		Area Count	% Rec						
	Lower Limit	1409542	70	25081	70	1610300	70	1089096	70
	Upper Limit	2617722	130	46579	130	2990558	130	2022608	130
004CALS.d	STD 1	1934087	96	32202	90	2226683	97	1501009	96
005CALS.d	STD 2	1858803	92	33394	93	2137093	93	1455134	94
006CALS.d	STD 3	2002721	99	37339	104	2294195	100	1536750	99
007CALS.d	STD 4	1911166	95	34843	97	2194275	95	1499148	96
008CALS.d	STD 5	1919521	95	34582	97	2247174	98	1533402	99
009CALS.d	STD 6	2017563	100	34617	97	2322106	101	1599902	103
011_ICV.d	ICV	1800260	89	32639	91	2088569	91	1379755	89
012LCCV.d	LLICV	1938316	96	35450	99	2240951	97	1491669	96
013 LQV.d	MLICV	1929712	96	34909	97	2241940	97	1518522	98
014 ICB.d	ICB	1790668	89	32154	90	2066496	90	1365161	88
015ICSA.d	ICSA	1742978	87	32696	91	1967163	86	1301033	84
016ICSB.d	ICSAB	1797898	89	32904	92	1977293	86	1243100	80
017 LRS.d	LDR	2005343	100	36190	101	2444620	106	1459729	94
022SMPL.d	E22-00932-003	1893849	94	33685	94	2071574	90	1395921	90
023SMPL.d	E22-00932-003DUP	1872294	93	33149	93	2036430	89	1353131	87
024SMPL.d	E22-00932-003	1852302	92	33042	92	2129353	93	1418746	91
026 CCV.d	CCV	1791364	89	32507	91	2074690	90	1402009	90
027 CCB.d	ССВ	1784490	89	32289	90	2060337	90	1378204	89
028SMPL.d	E22-00932-003DUP	1819286	90	33042	92	2080436	90	1409665	91
029SMPL.d	E22-00932-003SD	1811615	90	33083	92	2109212	92	1406726	90
030SMPL.d	E22-00932-003MS	1836166	91	33046	92	2105435	92	1424905	92
033SMPL.d	E22-00932-002	1825743	91	32443	91	2108753	92	1391281	89
034SMPL.d	E22-00932-005	1788057	89	32502	91	2057875	89	1377340	89
035SMPL.d	E22-00932-006	1788913	89	32651	91	2045919	89	1355296	87
036SMPL.d	E22-00932-013	1831760	91	33190	93	2194982	95	1458361	94
037SMPL.d	E22-00932-013	1955389	97	34100	95	2971826	129	1839988	118
039_CCV.d	CCV	1758782	87	31197	87	2089747	91	1460586	94
040_CCB.d	ССВ	1752317	87	30928	86	2070071	90	1437833	92
041SMPL.d	E22-00932-014	1785763	89	30743	86	2183918	95	1558613	100
043 CCV.d	FINAL CCV	1775449	88	31287	87	2130587	93	1508530	97
044 CCB.d	FINAL CCB	1723534	86	30996	87	2073767	90	1442553	93

Note: Internal standards failed no effected data was reported from this analysis

A\* in last column indicates the analysis has failed QC criteria Sample Limits = 70-130% of reference Standard (CAL BLANK L1)

[1] = [ He ]; [2] = [ No Gas ]

Ge-72 [1] = Mg,Al,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se

QC Sample Limits = 70-130% of reference Standard (CAL BLANK L1)

Sc-45 [2] = Be,B,Na,Si; In-115 [2] = Mo,Ag,Cd,Sn,Sb,Ba; Bi-209 [2] = TI,Pb

SPLP METALS SPLP METALS QC SUMMARY

### **INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 130

SDG #: E22-01119, E22-01112

	Matrix: SPLP			Method:	1312/602	20B/7470/	Units:	ppb (ug/L	.)
		3/10/22	2 07:20	3/10/22	2 08:35	3/10/22	2 09:40	3/10/22	2 16:59
	ICV & CCV	IC	V	CC	CV V	CC	CV .	IC	:V
ANALYTE	Ture Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	25.0	26.3	105	27.2	109	26.7	107	25.9	104
Beryllium	25.0	25.4	102	26.9	108	26.5	106	25.1	100
Lead	25.0	25.7	103	25.6	102	25.7	103	25.4	102

## **INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 130

SDG #: E22-01119, E22-01112

Matrix: SPLP

Method: 1312/6020B/7470/ Units: ppb (ug/L)

i		3/10/22	2 18:14						
	ICV & CCV	CC	CV .						
ANALYTE	Ture Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	25.0	26.0	104						
Beryllium	25.0	24.6	98.4						
Lead	25.0	25.7	103						

# METALS QUALITY CONTROL INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 130

SDG #: E22-01119, E22-01112

Matrix: SPLP

Method: 1312/6020B/7470A

Units: ppb (ug/L)

		3/10/22 7:34	3/10/22 8:40	3/10/22 9:44	3/10/22 17:14	3/10/22 18:19	
ANALYTE	ICB & CCB True Value	ICB	ССВ	ССВ	ICB	ССВ	
Arsenic	0.150	ND	ND	ND	ND	ND	
Beryllium	0.073	ND	ND	ND	ND	ND	
Lead	0.250	ND	ND	ND	ND	ND	

### METALS CALIBRATION CURVE RELATIVE ERROR 2022 PG130 March 10, 2022 06:52 Method: 6020B

		Low Level			Mid Level	
	Expected Conc.	Calculated Conc.	% Difference	Expected Conc.	Calculated Conc.	% Difference
Be	0.5	0.44	12.0	25	24.3	2.80
В	0.5	0.411	17.8	25	22.8	8.80
Na	50	45.7	8.60	500	503	0.600
Mg	50	49.4	1.20	500	507	1.40
AI	5	4.96	0.800	25	26.1	4.40
Si	50	43.6	12.8	2500	2550	2.00
к	50	50.3	0.600	500	506	1.20
Ca	50	40.3	19.4	500	497	0.600
Ti	0.5	0.593	18.6	25	25.7	2.80
V	0.5	0.511	2.20	25	25.5	2.00
Cr	0.5	0.47	6.00	25	25.4	1.60
Mn	0.5	0.483	3.40	25	25.7	2.80
Fe	50	47.7	4.60	500	506	1.20
Co	0.5	0.477	4.60	25	25.3	1.20
Ni	0.5	0.47	6.00	25	25.4	1.60
Cu	0.5	0.436	12.8	25	25	0
Zn	0.5	0.459	8.20	25	25.1	0.400
As	0.5	0.452	9.60	25	25.5	2.00
Se	5	4.6	8.00	25	24.9	0.400
Мо	0.5	0.472	5.60	25	24.6	1.60
Ag	0.5	0.474	5.20	25	24	4.00
Cd	0.5	0.476	4.80	25	24.6	1.60
Sn	0.5	0.45	10.0	25	24.6	1.60
Sb	0.5	0.467	6.60	25	24.4	2.40
Ва	0.5	0.456	8.80	25	25.1	0.400
TI	0.5	0.464	7.20	25	24.7	1.20
Pb	0.5	0.462	7.60	25	24.6	1.60

% Difference = ((calculated conc. - expected conc.) / expected conc.) \* 100 Low Level's Control Limits: (+) or (-) 20% Difference Mid Level's Control Limits: (+) or (-) 10% Difference

#### METALS CALIBRATION CURVE RELATIVE ERROR 2022 PG130 March 10, 2022 16:31 Method: 6020B

		Low Level			Mid Level	
	Expected Conc.	Calculated Conc.	% Difference	Expected Conc.	Calculated Conc.	% Difference
Be	0.5	0.487	2.60	25	24	4.00
В	0.5	0.437	12.6	25	22.5	10.0
Na	50	49.5	1.00	500	505	1.00
Mg	50	51.9	3.80	500	507	1.40
AI	5	4.6	8.00	25	24.6	1.60
Si	50	47.4	5.20	2500	2420	3.20
к	50	59.2	18.4	500	505	1.00
Ca	50	51.1	2.20	500	507	1.40
Ti	0.5	0.593	18.6	25	25.6	2.40
V	0.5	0.549	9.80	25	24.5	2.00
Cr	0.5	0.516	3.20	25	24.8	0.800
Mn	0.5	0.449	10.2	25	24.7	1.20
Fe	50	51.3	2.60	500	505	1.00
Co	0.5	0.488	2.40	25	24.6	1.60
Ni	0.5	0.493	1.40	25	24.3	2.80
Cu	0.5	0.522	4.40	25	24.2	3.20
Zn	0.5	0.408	18.4	25	24.4	2.40
As	0.5	0.497	0.600	25	24.4	2.40
Se	5	4.96	0.800	25	23.9	4.40
Мо	0.5	0.494	1.20	25	24.6	1.60
Ag	0.5	0.492	1.60	25	24.1	3.60
Cd	0.5	0.53	6.00	25	24.4	2.40
Sn	0.5	0.485	3.00	25	24.7	1.20
Sb	0.5	0.497	0.600	25	24.6	1.60
Ba	0.5	0.497	0.600	25	24.8	0.800
ТІ	0.5	0.492	1.60	25	24.5	2.00
Pb	0.5	0.495	1.00	25	24.6	1.60

% Difference = ((calculated conc. - expected conc.) / expected conc.) \* 100 Low Level's Control Limits: (+) or (-) 20% Difference Mid Level's Control Limits: (+) or (-) 10% Difference E22-01119

## METALS QUALITY CONTROL BLANK RESULTS SUMMARY

Batch (Page) #: 130

Associated Lab \_\_\_\_\_E22-01112, E22-01119

Case for Blank: ----

Matrix: SPLP

Method: 1312/6020B/7470A

Unit: ppb (µg/L)

	3/10/	22 8:24
	BLKP2	20309-01
ANALYTE	TRUE	FOUND
Arsenic	0.600	ND
Beryllium	0.291	ND
Lead	1.00	ND

Associated samples for BLKP220309-01

01112-003,005,007; 01119-005

E22-01119

# METALS QUALITY CONTROL TUMBLE BLANK RESULTS SUMMARY

Batch (Page) #: 130 Associated Lab E22-01119 Case:

Matrix: SPLP

Method: 1312/6020B/7470A

Unit: ppb (µg/L)

	3/10/	22 8:14
	SPLP2	20307-01
ANALYTE	TRUE	FOUND
Arsenic	0.6	ND
Beryllium	0.291	ND
Lead	1	ND

Associated samples for SPLP220307-01

01119-005, 01119-005DUP, 01119-005MS

# **METALS QUALITY CONTROL ICP-MS ICSAB RESULTS SUMMARY**

Instrument: Agilent7900 Batch (Page) #:

130

SDG #: E22-01119, E22-01112

Matrix: Aqueous

Concentration/Units: ppb (µg/L)

		3/10	)/22 7:40			3/10	)/22 7:45				
		IC	CSA 1		ICSAB 1						
Interferents	True Value	Result	% Recovery	Control Limit % R	True Value	Result	% Recovery	Control Limit % R			
Aluminum	100000	96100	96.1	80-120	100000	95500	95.5	80-120			
Calcium	100000	99500	99.5	80-120	100000	99900	99.9	80-120			
Iron	100000	94200	94.2	80-120	100000	93500	93.5	80-120			
Magnesium	100000	93000	93.0	80-120	100000	91200	91.2	80-120			
Molybdenum	2000	2050	103	80-120	2000	2180	109	80-120			
Potassium	100000	87900	87.9	80-120	100000	88500	88.5	80-120			
Sodium	100000	94900	94.9	80-120	100000	93100	93.1	80-120			
Titanium	2000	2070	104	80-120	2000	2060	103	80-120			

		ICS	A 1		IC	CSAB 1	
Analytes	Limit	Result	Control Limit	True Value	Result	% Recovery	Control Limit % R
Antimony	1	0.163	< 1				
Arsenic	1	0.376	< 1	20	20.4	102	80-120
Barium	1	0.848	< 1				
Beryllium	1	0.013	< 1	T I			
Boron	10	3.79	< 10				
Cadmium	1	0.590	< 1	20	20.7	104	80-120
Chromium	1	0.249	< 1	20	19.4	97.0	80-120
Cobalt	1	0.425	< 1	20	18.6	93.0	80-120
Copper	1	0.611	< 1	20	18.2	91.0	80-120
Lead	1	0.557	< 1				
Manganese	1	0.372	< 1	20	21.0	105	80-120
Nickel	1	0.516	< 1	20	18.4	92.0	80-120
Selenium	10	ND	< 10				
Silver	1	0.071	< 1	20	21.4	107	80-120
Thallium	1	0.018	< 1	_			
Tin	1	0.044	< 1				
Vanadium	1	0.048	< 1				
Zinc	10	1.19	< 10	20	19.5	97.5	80-120

Control Limit of ICS A = 2X Instrument RL of analyte

## **METALS QUALITY CONTROL ICP-MS ICSAB RESULTS SUMMARY**

Instrument: Agilent7900 Batch (Page) #: 130 SDG #: E22-01119, E22-01112

Matrix: Aqueous

Concentration/Units: ppb (µg/L)

		3/10/	/22 17:19			3/10/	/22 17:24			
		10	SA 2		ICSAB 2					
Interferents	True Value	Result	% Recovery	Control Limit % R	True Value	Result	% Recovery	Control Limit % R		
Aluminum	100000	93600	93.6	80-120	100000	93300	93.3	80-120		
Calcium	100000	100000	100	80-120	100000	100000	100	80-120		
Iron	100000	94600	94.6	80-120	100000	94700	94.7	80-120		
Magnesium	100000	90000	90.0	80-120	100000	90100	90.1	80-120		
Molybdenum	2000	2110	106	80-120	2000	2130	107	80-120		
Potassium	100000	87200	87.2	80-120	100000	87200	87.2	80-120		
Sodium	100000	96700	96.7	80-120	100000	96500	96.5	80-120		
Titanium	2000	2040	102	80-120	2000	2050	103	80-120		

		ICS	A 2		IC	CSAB 2	
Analytes	Limit	Result	Control Limit	True Value	Result	% Recovery	Control Limit % R
Antimony	1	0.163	< 1				
Arsenic	1	0.359	< 1	20	20.4	102	80-120
Barium	1	0.870	< 1				
Beryllium	1	0.00575	< 1				
Boron	10	2.97	< 10				
Cadmium	1	0.873	< 1	20	20.9	105	80-120
Chromium	1	0.347	< 1	20	19.4	97.0	80-120
Cobalt	1	0.422	< 1	20	18.7	93.5	80-120
Copper	1	0.789	< 1	20	18.4	92.0	80-120
Lead	1	0.611	< 1				
Manganese	1	0.388	< 1	20	20.8	104	80-120
Nickel	1	0.500	< 1	20	18.4	92.0	80-120
Selenium	10	ND	< 10				
Silver	1	0.075	< 1	20	21.1	106	80-120
Thallium	1	0.031	< 1				
Tin	1	0.049	< 1				
Vanadium	1	ND	< 1				
Zinc	10	1.05	< 10	20	18.7	93.5	80-120

Control Limit of ICS A = 2X Instrument RL of analyte

### METALS QUALITY CONTROL LABORATORY CONTROL SAMPLE

Batch (Page) #: 130

SDG #: \_\_\_\_\_E22-01112, E22-01119

Matrix: SPLP

Method: 1312/6020B/7470A

Unit: ppb (µg/L)

		3/10/22 17:59		
		LCSP220309-01		Control Limit
ANALYTE	TRUE	FOUND	% Recovery	% Recovery
Arsenic	400	390	97.5	80-120
Beryllium	400	381	95.3	80-120
Lead	400	406	102	80-120

Associated Sample for LCSP220309-01

### METALS QUALITY CONTROL

### LOW LEVEL INITIAL CALIBRATION VERIFICATION

Batch (Page) #: 130

SDG #: E22-01119, E22-01112

Matrix: SPLP

Method: 1312/6020B/7470/ Units: ppb (ug/L)

		3/10/22	2 07:24	3/10/22	17:04				
	LLICV	LLI	CV	LLI	CV				
ANALYTE	True Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	0.531	106	0.494	98.8				
Beryllium	0.500	0.481	96.2	0.478	95.6				
Lead	0.500	0.490	98.0	0.501	100				

(1) Control Limits: 80-120

### **METALS QUALITY CONTROL**

### MID LEVEL INITIAL CALIBRATION VERIFICATION

Batch (Page) #: 130

SDG #: E22-01119, E22-01112

Matrix: SPLP

Method: 1312/6020B/7470/ Units: ppb (ug/L)

		3/10/22	2 07:30	3/10/22	2 17:09				
	MLICV	ML	MLICV		MLICV				
ANALYTE	True Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	25.0	25.7	103	24.9	99.6				
Beryllium	25.0	25.8	103	24.4	97.6				
Lead	25.0	24.9	99.6	24.6	98.4				

(1) Control Limits: 90-110

### **METALS QUALITY CONTROL**

### LINEAR DYNAMIC RANGE VERIFICATION

Batch (Page) #: 130

SDG #: E22-01119, E22-01112

Matrix: SPLP

Method: 1312/6020B/7470/ Units: ppb (ug/L)

		3/10/22	2 07:50	3/10/22	2 17:29				
	LDR	LDR LDR							
ANALYTE	True Value	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	2500	2390	95.6	2500	100				
Beryllium	2500	2460	98.4	2510	100				
Lead	2500	2530	101	2530	101				

(1) Control Limits: 90-110

## **METALS QUALITY CONTROL** SPIKE SAMPLE RECOVERY

Batch (Page) #: 130 SDG #: E22-01112, E22-01119

Matrix: <u>SPLP</u> Method: <u>1312/6020B/7470A</u>

Unit: ppb (µg/L)

	E22-0*	1119-005MS	19-005MS E22-0		%	Spike	Control
ANALYTE	Ma	trix Spike	Sample		Recovery	Added	Limit %R
Arsenic	401	3/10/22 18:04	ND 3/10/22 8:45		100	400	80-120
Beryllium	384	3/10/22 18:04	ND	3/10/22 8:45	96.0	400	80-120
Lead	439	3/10/22 18:04	ND	3/10/22 8:45	110	400	80-120

%R = Percent Recovery

NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

Associated samples for E22-01119-005

# METALS QUALITY CONTROL DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 130 SDG #: E22-01112, E22-01119

 Matrix:
 SPLP
 Method:
 1312/6020B/7470A
 Unit:
 ppb (µg/L)

	E22-	01119-005	E22-01	119-005DUP		Control
ANALYTE	5	Sample		uplicate	RPD	Limit
Arsenic	ND 3/10/22 8:45		ND	3/10/22 8:50	NC	NA
Beryllium	ND	3/10/22 8:45	ND	3/10/22 8:50	NC	NA
Lead	ND	3/10/22 8:45	ND	3/10/22 8:50	NC	NA

NA = Not Applicable

NC = Non-calculable RPD due to result (s) less than the detection limit.

Associated samples for E22-01119-005

# **METALS QUALITY CONTROL** SERIAL DILUTIONS

Batch (Page) #: 130 SDG #: E22-01112, E22-01119

Matrix: <u>SPLP</u> Method: <u>1312/6020B/7470A</u>

Unit: ppb (µg/L)

	E22-01119-005MS		E22-0 <sup>-</sup>	1119-005SD	%	Control
ANALYTE	Matrix Spike		Seri	al Dilution	Difference	Limit %D
Arsenic	401 3/10/22 18:04		410	3/10/22 17:54	2.22	±20
Beryllium	384	3/10/22 18:04	401	3/10/22 17:54	4.33	±20
Lead	439	3/10/22 18:04	422	3/10/22 17:54	3.95	±20

%D = Percent Difference

Associated samples for E22-01119-005

E22-01119

### METALS INTERNAL STANDARD AREA SUMMARY 2022 PG130 March 10, 2022 Method: 1312/6020B

	ISTD	Sc-45 [	2]	Ge-72 [	1]	ln-115 [	2]	Bi-209	[2]	
003CALB.d	BLANK	116657	5	21701		199058	9	154576	3	
		Area Count	% Rec							
	Lower Limit	816602	70	15191	70	1393412	70	1082034	70	
	Upper Limit	1516548	130	28211	130	2587766	130	2009492	130	
004CALS.d	STD 1	1182390	101	21794	100	2035120	102	1559147	101	
005CALS.d	STD 2	1153267	99	20859	96	1989559	100	1537519	99	
006CALS.d	STD 3	1148015	98	21177	98	1982074	100	1558022	101	
007CALS.d	STD 4	1168921	100	21473	99	1998805	100	1580671	102	
008CALS.d	STD 5	1149461	99	21387	99	1988765	100	1615040	104	
010_ICV.d	ICV	1109291	95	20477	94	1897871	95	1496225	97	
011LCCV.d	LLICV	1118798	96	20942	97	1905934	96	1495084	97	
012_LQV.d	MLICV	1146052	98	21039	97	1961727	99	1571176	102	
013_ICB.d	ICB	1100598	94	20282	93	1870881	94	1473253	95	
014ICSA.d	ICSA	1167142	100	20587	95	1870615	94	1437976	93	
015ICSB.d	ICSAB	1146968	98	21483	99	1801945	91	1356785	88	
016_LRS.d	LDR	1270136	109	22302	103	2240243	113	1457308	94	
021SMPL.d	SPLP220307-01	1153609	99	21043	97	1914247	96	1477296	96	
022SMPL.d	SPLP220308-01	1145731	98	21352	98	1907764	96	1465273	95	
023SMPL.d	BLKP220309-01	1174884	101	19486	90	1950625	98	1495627	97	
025_CCV.d	CCV	1144272	98	20273	93	1929235	97	1503378	97	
026_CCB.d	CCB	1141356	98	20513	95	1898266	95	1469130	95	_
027SMPL.d	E22-01119-005	1245285	107	21561	99	2064891	104	1593245	103	
028SMPL.d	E22-01119-005DUP	1152109	99	20622	95	1917671	96	1479515	96	
029SMPL.d	E22-01119-005SD	1154205	99	20671	95	1915717	96	1492427	97	
030SMPL.d	LCSP220309-01	1123727	96	20191	93	1895810	95	1486967	96	
031SMPL.d	E22-01119-005MS	1209804	104	20937	96	2010158	101	1567303	101	
034SMPL.d	E22-01112-003	1276544	109	22194	102	2143666	108	1681314	109	
035SMPL.d	E22-01112-005	1127839	97	20232	93	1887989	95	1477705	96	
036SMPL.d	E22-01112-007	1131497	97	20200	93	1890238	95	1477817	96	
038_CCV.d	CCV	1138348	98	20558	95	1937096	97	1521800	98	
039_CCB.d	ССВ	1033713	89	20414	94	1698389	85	1332307	86	

A\* in last column indicates the analysis has failed QC criteria Sample Limits = 70-130% of reference Standard (CAL BLANK L1) QC Sample Limits = 70-130% of reference Standard (CAL BLANK L1) [1] = [ He ]; [2] = [ No Gas ] Ge-72 [1] = Mg,Al,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se Sc-45 [2] = Be,B,Na,Si; In-115 [2] = Mo,Ag,Cd,Sn,Sb,Ba; Bi-209 [2] = TI,Pb

#### METALS INTERNAL STANDARD AREA SUMMARY 2022 PG130 March 10, 2022 Method: 1312/6020B

	ISTD	Sc-45 [	2]	Ge-72 [	1]	ln-115 [	2]	Bi-209 [	2]	
003CALB.d	BLANK	139158	8	22604		205324	9	182089	4	
		Area Count	% Rec							
	Lower Limit	974112	70	15823	70	1437274	70	1274626	70	
	Upper Limit	1809064	130	29385	130	2669224	130	2367162	130	
004CALS.d	STD 1	1395446	100	22143	98	2055403	100	1820261	100	_
005CALS.d	STD 2	1412212	101	22061	98	2070724	101	1832888	101	
006CALS.d	STD 3	1424323	102	22637	100	2098036	102	1872114	103	
007CALS.d	STD 4	1428353	103	23105	102	2123395	103	1912551	105	
008CALS.d	STD 5	1386276	100	22076	98	2082303	101	1901352	104	
010_ICV.d	ICV	1355042	97	21665	96	2015922	98	1810587	99	
011LCCV.d	LLICV	1352069	97	21694	96	2019989	98	1769389	97	
012_LQV.d	MLICV	1393546	100	22388	99	2082994	101	1872487	103	
013_ICB.d	ICB	1460882	105	24401	108	2128263	104	1911183	105	
014ICSA.d	ICSA	1302895	94	21358	94	1852977	90	1621401	89	_
015ICSB.d	ICSAB	1318842	95	21633	96	1863788	91	1610684	88	
016_LRS.d	LDR	1408844	101	21725	96	2202710	107	1690781	93	
021SMPL.d	E22-01119-005SD	1306056	94	21829	97	1980590	96	1771524	97	
022SMPL.d	LCSP220309-01	1455151	105	24096	107	2191109	107	1943694	107	
023SMPL.d	E22-01119-005MS	1177641	85	19876	88	1804397	88	1595408	88	
025_CCV.d	CCV	1315240	95	21569	95	1995887	97	1770691	97	
026 CCB.d	ССВ	1515969	109	24910	110	2255791	110	1991111	109	

A\* in last column indicates the analysis has failed QC criteria Sample Limits = 70-130% of reference Standard (CAL BLANK L1) QC Sample Limits = 70-130% of reference Standard (CAL BLANK L1) [1] = [ He ]; [2] = [ No Gas ]

Ge-72 [1] = Mg,Al,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se

Sc-45 [2] = Be,B,Na,Si; In-115 [2] = Mo,Ag,Cd,Sn,Sb,Ba; Bi-209 [2] = TI,Pb

### GENERAL ANALYTICAL CHEMISTRY

### GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

# INITIAL & CONTINUING CALIBRATION VERIFICATION

# Final pH of SPLP SVOC and/or Metals Leachate

Batch: AP119-0019	Date & Time: 03/08/2022 11:10
Method: SW 9040C	Analyst: Andrew Palerrmo

	True Value	Result (mg/L)	% REC
ICV220308	7.00	7.01	100
CCV220308	7.00	7.01	100

The ICV (Initial Calibration Verification) sample doubles as the LCS.

NJDEP FORM M-9A (12/94)

Certified for NJDEP, NY(DOH) NJ ID# 14751 NY ID# 11402

# General Chemistry Quality Control

# Final pH of SPLP SVOC and/or Metals Leachate

Matrix: Aqueous Unit: SU Batch: AP119-0019 Method: SW 9040C

### Date: 03/08/2022

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
SAMPLE	E22-01119-005	6.52	NA	NA	NA	NA	NA
ICV	ICV220308	7.01	7	NA	NA	100	90-110
DUP	E22-01119-005DUP	6.53	NA	0.153	20	NA	NA

The above blank result applies to the follow samples:

E22-01119-005

See "Initial & Continuing Calibration Verification" page for ICV results. The ICV (Initial Calibration Verification) sample doubles as the LCS.

NA - Not Applicable

ND - Not Detected

NC - Non calculable RPD due to value less than the detection limit

### SAMPLE TRACKING

agrated Analytical Laboratories LLC Randolp	Randolph, NJ 07869			Ŝ	Chain of Custody Record	<b>USU</b>	с Л	ecora					Web: www.ialonline.com	b1-44
Customer Information	u		Reporting	ng Information	ion	4.	"Rush TAT Charge	D *Surchage n	Deliverables "Surchage may apply for regulatory	S r regulatory		EDDs	Concentrations Expected:	pecteo
Company: Melick-Tully & 1	Asc.		Check here if s	ame as "Cust	if same as "Customer Information"	1	24 hr - 100%	NJ, CT, PA	4	NY	X	NJ SRP	- Low Med	High
Address: 117 Canal Rd.		REPORT TO:	Max	I Lev		48	48 hr - 75% 72 hr - 50%	C (Level I)		ASP Category	ź	NYSDEC EQUIS	Known Hazard:	ä
So. Bound Brook	N() 08880 /	Address:	SA	76		5 di 5 di	96 hr - 35% 5 day - 25%	Reduced (Level II/III)	_		🔲 lab ap	lab approved custom EDD	L YES	ov V
35	(e- 3400		1			6-9	6-9 day - 10%	C Regulatory/ Full* (Level IV)		ASP Category B*	ž	NO EDD REQ'D	Describe:	
Project Manager: Rat Lev		Attn:						Turn-Around Time (TAT)	d Time (	rat)		Regu	Regulatory Requirement	
Email Address(es):		INVOICE TO:	Linda	Duna	,	Stan	lard (10 bus	Standard (10 business days) Verbal	erbal			New Jersey	New York	
mather, levegza.com		Address:	SA	ME		(onty	Kusn/date needed		STD- 1	week	. –	GWQS	AWQS (TOGS Table 1)	e 1)
Project Name: Baller - Houch	(Victory)			1		Harc	Copy: St	Hard Copy: Standard 3 week		Other - call for price		2017 SRS/IGW	GWEL (TOGS Table 5)	\$ <b>5</b> )
Project Location (State): N)		Attn:					etroleum F	Petroleum Hydrocarbons - Selection is REQUIRED	s - Selecti	on is REQUI		K 2021 SRS/MGW	Dart 375-6.8(a) - Unrestricted	stricted
Bottle Order #:	-	PO #					NJ EPH-DRC	NJ EPH-DRO - Category 1	TAT for PHC, it other than 2 w	C, if t weeks :		Ecological	Tart 375-6.8(b) - Restricted	ricted
"Report to"/"Invoice To" same as above		Quote #					NJ EPH-C40	NJ EPH-C40 - Category 2		CT ETPH		DW	CP-51 Table 2 or 3 (selection required)	election
Sampled by:	/ 1		Samp	Sample Matrix			NJ EPH-Frac	NJ EPH-Fractionated - Cat 2		DRO-8015		🗆 SPLP	Other States / Criteria	iteria
COMPLETED BY IAI .	د	DW - Drinking Water WW - Waste Water	5	01-0il		10		ANALYTICAL PARAMETERS (please note	RAMETER:	S (please not	e if contingent	rent)	Pennsylvania Act 2	5
	Equipment Rental	GW - Groundwater SW - Surface Wate		SED - Sediment SOL - Solid (specify)	ent specify)	a	An	L					CT RCSA 22a-133k1-k3	k1-k3
SAMPLE INFORMATION		LtQ - Liquid (specify) M - Multiphasic		SL - Sludge W - Wine		Yes		la					TSCA PCBs	
Cliant ID	Denth (# only)	Sampling	Buj	Matriv	_	16:5/H		d					OTHER Regulatory Requirements specify in comments	uirement
		Date	Time		containers "	-							Sample Specific Notes:	fotes:
1-55	0-0.5	2/44/2	-	S		-	アメ	×						
55-2	5.0-0		8:20	_	-	2 >	x x	×						
55-20	1.0-1.5		8:25			3 H	H	H						
55-3	0-0.5	_	8:35		_	4	א א	×						
12-55			9:05			X	×	×						
55-52			9:10			× v	×	×						
55-6			9:25		-	X	*	x						
55-9	1	_	04:6	-	1	x	X	×						
Samples previously analyzed by IAL?	Preservative Code:	Container		Pres	Preservative (use code)	C (apo	2	7					FOR LAB USE ONLY	
YES / NO		Code:		Contair	Container Type (use code)	ode)	٥	Δ	_					
		A = Amber Glass B = Plastic C = Vial	Special Ins H-	h=HOLD	Special Instructions/QC Requirements & Comments: H-7 HoLN	nts & Com	nents:							
processed and the turnaround time to (TAT) will not start until any		E = Glass	-										Cooler Temp:	°
-i	Carder (check one	T = Terracore	Rolla	inquisibly by (	NUM NUM	(MTA)	C/U4	1/12 13:00	0	Raceived t	oy (Signatur	ceived by (Signature and Company)	2 at his	16:20
BY EXECUTING THIS COC, THE CLIENT HAS READ AND		<u>ل</u>		1	2		2/24	21: 11 70/1	2	allar 2			2/12/2	111
AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).		S***											~	
	-# Kinyapti						_		-					

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Contact Us: 973-361-4252 Web: www.lalonline.com	Concentrations Expected:	Med High	Known Hazard:	D TES AT NO		Regulatory Requirement	New York	AWQS (TOGS Table 1)	GWEL (TOGS Table 5)	N	Part 375-6.8(b) - Restricted	CP-51 Table 2 or 3 (selection required)	Other States / Criteria	Pennsylvania Act 2	CT RCSA 22a-133k1-k3	TSCA PCBs	OTHER Regulatory Requirements - specify in comments	Sample Specific Notes:								FOR LAB USE ONLY		spG#: 1119	Cooler Temp: 4 °C	Date	00-91 12/20	L11/22/12/2			PAGE: 2 of 2
	EDDs	NJ SRP	NYSDEC EQuIS	lab approved custom EDD	NO EDD REQ'D	Regu	New Jersey	🗆 GWQS	2017 SRS/IGW	X 2021 SRS/MGW	🔲 Ecological		🗆 SPLP	ingent)																by (Signature and Company)	l				
ecord	Deliverables "Surchage may apply for regulatory	NJ, CT, PA NY K	Results Only     ASP Category	•	Regulatory/ Full* ASP Category (Level IV) B*	Time	Standard (10 business days) Verbal	1) STD - / week	andard 3 week Other - call for price	Petroleum Hydrocarbons - Selection is REQUIRED	NJ EPH-DRO - Category 1 TAT for PHC, It bithor than 2 weeks :	- Category 2 CT ETPH	NJ EPH-Fractionated - Cat 2 DRO-8015	ANALYTICAL PARAMETERS (please note if contingent	Le	ad			×	T	x	X	×	×	×				1	Time Received	22   5,00 Mond V	in 1111 AMARTIN			; NY (11402); PA (68-00773).
stody Re	••Rush TAT Charge	24 hr - 100%	48 hr - 75%	96 hr - 35%	5 day - 25% 6-9 day - 10%		Standard (10 busi	Rush/date needed	Hard Copy: Standard 3 week	Petroleum H	D NJ EPH-DRO	NJ EPH-C40 - Category 2	O NJ EPH-Fract	TC	Ars	eni Pest	ic Geid	bs	ダメ	HH	××	X X	x x	×. ×	H H	2	A	Comments:		T Date	1AJ UN	1 hah			(PH-0699); NJ (14751);
Chain of Custody Record	Reporting Information	Check here if same as "Customer Information"	Matt Lar	Christ	1		L'al Dure.	8406	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Sample Matrix	Nater OI - Oil			# Buj	Time Matrix containers IAL#	9.45 5 1 9	9:50 1 1 10	10:00	10:15 1 12	10:25 1 13	10:40 1 1/4	10:45 1 1 15	Preservative (use code)	Container Type (use code)	Special Instructions/QC Requirements & Comments	ANDH=H	Rejirfoylished by (Signature and Compar	C/ rywar W	2 hunt 1			Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).
l Labs			REPORT TO:	Address:		Attn:	INVOICE TO:	Address:		Attn:	PO#	Quote #		DW - Drinking Water	GW - Groundwater SW - Surface Wate	LIQ - Liquid (specify) M - Multinhasic	$\vdash$	Date	21/42/2	_						Container		A = Amber Glass B = Plastic	C = Vial		one):	nurier	FedEx/UPS***		
Integrated Analytical Labs 273 Franklin Road Rengened Analytical Labs Randolph, NJ 07869	Customer Information	Company: Malich-Tull. & Acel.	11.01	2 1 0 1	N N	aer: M.H. Per	Email Address(es):	mather. leved zaicon	Project Name: Butlor - How 11 (V. Bac)	on (State): N	Bottle Order #:	"Report to"/"Invoice To" same as above		compression decan radice	COMPLETED BT IAL. Field Samiling Fourinment Rental	INFO.		Client ID Depth (ft only)	558 0-0.5	55-8D 1.015	50-0 L-55	22-10	11-55	22-12	SS-12D 1:5-2.0	Samples previously analyzed by IAL?	YES / NO	egibly and fill out	completely. Samples cannot be 3=HNO3 processed and the turnaround time 4=MeOH	ų.	Carrier	BY EXECUTING THIS COC, BY EXECUTING THIS COC, THE CLIENT HAS READ AND		(found on rear of pink copy).	LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Mar 09, 2022 @ 12:52



# PROJECT INFORMATION RU

### RUSH

E22-01119: BOHLER-HOWELL (VICTORY)

To: Matthew Lev

Melick Tully & Associates Fax: 732-427-4257 CELL EMail: matthew.lev@gza.com

#### Report To

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Melick Tully & Associates 117 Canal Road South Bound Brook, NJ 08880 Attn: Matthew Lev

### <u>Bill To</u>

Melick Tully & Associates 117 Canal Road South Bound Brook, NJ 08880 Attn: Matthew Lev

Report Format	<b>P.O.</b> #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Reduced		Feb 24, 2022 @ 17:17	NA	Mar 11, 2022	Mar 18, 2022 *

\* Any Conditional or Hold status will delay final hardcopy report sent date.

Diskette Req. SRP TXT

Criteria Requirement: NJ MGW 2021

Lab ID	Client Sample ID	Depth	Sampling Time	<u>Matrix</u>	<u>Unit</u>	Field pH/Temp
01119-001	SS-1	0/0.5	02/24/22@08:05	Soil	mg/Kg (pp	m)
01119-002	2 SS-2	0/0.5	02/24/22@08:20	Soil	mg/Kg (pp	m)
01119-003	SS-2D	1.0/1.5	02/24/22@08:25	Soil	mg/Kg (pp	m)
01119-004	SS-3	0/0.5	02/24/22@08:35	Soil	mg/Kg (pp	m)
01119-005	5 SS-4	0/0.5	02/24/22@09:05	Soil	mg/Kg (pp	m)
01119-006	5 SS-5	0/0.5	02/24/22@09:10	Soil	mg/Kg (pp	m)
01119-007	7 SS-6	0/0.5	02/24/22@09:25	Soil	mg/Kg (pp	em)
01119-008	3 SS-9	0/0.5	02/24/22@09:40	Soil	mg/Kg (pp	om)
01119-009	9 SS-8	0/0.5	02/24/22@09:45	Soil	mg/Kg (pp	
01119-010	) SS-8D	1.0/1.5	02/24/22@09:50	Soil	mg/Kg (pp	om)
01119-011	SS-7	0/0.5	02/24/22@10:00	Soil	mg/Kg (pp	om)
01119-012	2 SS-10	0/0.5	02/24/22@10:15	Soil	mg/Kg (pp	om)
01119-013	3 SS-11	0/0.5	02/24/22@10:25	Soil	mg/Kg (pp	
01119-014	4 SS-12	0/0.5	02/24/22@10:40	Soil	mg/Kg (pp	
01119-015	5 SS-12D	1.5/2.0	02/24/22@10:45	Soil	mg/Kg (pr	om)
				* No Cert =	IAL does not hold ce	rtification for this test/met
Sample #	Test	Status	Analytical N	Method	TAT	Holding Time Expire
	TOL Destisides	Analy	e 8081B		RUSH 1 WK	0/10/0000
001	TCL Pesticides	Analy.	C 0001D			3/10/2022
001	Lead - Pb	Analy		A CONTRACTOR	RUSH 1 WK	3/10/2022 8/23/2022
001		, ,	ze 6020B		RUSH I WK RUSH I WK	0110120
001	Lead - Pb	Analy	ze 6020B ze 6020B			8/23/2022
	Lead - Pb Arsenic - As	Analy: Analy:	ze 6020B ze 6020B ze 8081B		RUSH 1 WK	8/23/2022 8/23/2022
	Lead - Pb Arsenic - As TCL Pesticides	Analy: Analy: Analy:	ze 6020B ze 6020B ze 8081B ze 6020B		RUSH 1 WK RUSH 1 WK	8/23/2022 8/23/2022 3/10/2022
	Lead - Pb Arsenic - As TCL Pesticides Lead - Pb	Analy: Analy: Analy: Analy:	Zee         6020B           zee         6020B           zee         8081B           zee         6020B           zee         6020B		RUSH 1 WK RUSH 1 WK RUSH 1 WK	8/23/2022 8/23/2022 3/10/2022 8/23/2022

273 Franklin Road Randolph, NJ 07869 Phone: 973 361 4252 www.ialonline.com



IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Page 1 of 3



Mar 09, 2022 @ 12:52

# PROJECT INFORMATION

RUSH

1

Comple #			LER-HOWE	TAT	Holding Time Expire
Sample # 003	Arsenic - As	Status Cancel	6020B	RUSH 1 WK	8/23/2022
004	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
1122010	Lead - Pb	Analyze	6020B	RUSH I WK	8/23/2022
	Arsenic - As	Analyze	6020B	RUSH I WK	8/23/2022
005	TCL Pesticides	Analyze	8081B	RUSH I WK	3/10/2022
The Sul	Arsenic - As	Analyze	6020B	RUSH I WK	8/23/2022
1000	SPLP Lead - Pb	Analyze	1312/6020B	RUSH I WK	8/23/2022
	Lead - Pb	Analyze	6020B	RUSH I WK	8/23/2022
	Weight of soil for SPLP SVOC and/or Metals Leachate	Analyze	1312	RUSH I WK	3/10/2022
	Final pH of SPLP SVOC and/or Metals Leachate	Analyze	9040C	RUSH 1 WK	3/10/2022
	SPLP SVOC and/or Metals Leachate volume	Analyze	1312	RUSH 1 WK	3/10/2022
006	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
	Lead - Pb	Analyze	6020B	RUSH 1 WK	8/23/2022
	Arsenic - As	Analyze	6020B	RUSH 1 WK	8/23/2022
007	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
	Lead - Pb	Analyze	6020B	RUSH 1 WK	8/23/2022
	Arsenic - As	Analyze	6020B	RUSH 1 WK	8/23/2022
008	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
	Arsenic - As	Analyze	6020B	RUSH 1 WK	8/23/2022
	Lead - Pb	Analyze	6020B	RUSH I WK	8/23/2022
009	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
	Arsenic - As	Analyze	6020B	RUSH 1 WK	8/23/2022
	Lead - Pb	Analyze	6020B	RUSH 1 WK	8/23/2022
010	TCL Pesticides	Cancel	8081B	RUSH 1 WK	3/10/2022
	Lead - Pb	Cancel	6020B	RUSH 1 WK	8/23/2022
	Arsenic - As	Cancel	6020B	RUSH 1 WK	8/23/2022
011	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
	Lead - Pb	Analyze	6020B	RUSH I WK	8/23/2022
	Arsenic - As	Analyze	6020B	RUSH 1 WK	8/23/2022
012	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
	Arsenic - As	Analyze	6020B	RUSH 1 WK	8/23/2022
	Lead - Pb	Analyze	6020B	RUSH 1 WK	8/23/2022
013	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
	Lead - Pb	Analyze	6020B	RUSH 1 WK	8/23/2022
	Arsenic - As	Analyze	6020B	RUSH 1 WK	8/23/2022
014	TCL Pesticides	Analyze	8081B	RUSH 1 WK	3/10/2022
1					

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Lead - Pb

Lead - Pb

Arsenic - As

Arsenic - As

**TCL** Pesticides



6020B

6020B

8081B

6020B

6020B

Analyze

Analyze

Cancel

Cancel

Cancel

Page 2 of 3

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773),

RUSH 1 WK

015

8/23/2022

8/23/2022

3/10/2022

8/23/2022

8/23/2022

Mar 09, 2022 @ 12:52



# **PROJECT INFORMATION**

## RUSH

# E22-01119: BOHLER-HOWELL (VICTORY)

#### **Project Notes:**

REV 1 taken by kim on 03/04/2022 05:57 REV 01 DUE 3/11

PER MATT LEV, ANALYZE SAMPLE 005 FOR SPLP LEAD.

ORIGINAL RESULTS EMAILED 3/4.

#### REV 2 taken by melissa on 03/09/2022 12:51

As per Matthew Lev, cancel TCL Pesticides for sample # 3,10,15, Arsenic - As for sample # 3,10,15, Lead - Pb for sample # 3,10,15

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FINALIZED 03/17/2022



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CASE NO: E 22 01119	CLIENT: Melick - Tully
COOLER TEMPERATURE: 2° - 6°C:	✓ ( See Chain of Custody) Comments
KEY ✓ = YES/NA	VOA received: Encore IGW - Methanol (check one) Terra Core No Preservative
<ul> <li>✓ Bottles Intact</li> <li>✓ no-Missing Bottles</li> <li>✓ no-Extra Bottles</li> </ul>	
	be analyzed by this laboratory past the holding time. This includes but is not limited to
the following tests: pH, Temperature, Free Residual Chlori ADDITIONAL COMMENTS: SAMPLE(S) VERIFIED BY: INITIAL	DATE 2/24/22
CORRECTIVE ACTION REQUIRED	
If COC is <b>NOT</b> clear, <u>STOP</u> until you ge	et client to authorize/clarify work.
CLIENT NOTIFIED: YES PROJECT CONTACT: SUBCONTRACTED LAB: DATE SHIPPED: ADDITIONAL COMMENTS:	Date/ Time: NO
VERIFIED/TAKEN BY: INITIAL	DATE 228 Rev 2 2/11/2021

Labo	oratory	Custoa	ly Chroi	iicle		
IAL Case No.		Client	Melick Tu	lly & Associate	25	
E22-01119						
		Project	BOHLER	HOWELL (VI	CTORY)	
	Re	ceived On	2/24/2022	<u>@17:17</u>		
epartment: GC			Prep. Date	Analyst	Analysis Date	Analyst
	01119-001	Soil	2/25/22	Archimede	3/ 1/22	Iwona
	-002	"	2/25/22	Archimede	3/ 1/22	Iwona
	-004		2/25/22	Archimede	3/ 1/22	Iwona
	-005		2/25/22	Archimede	3/ 1/22	Iwona
	-006		2/25/22	Archimede	3/ 1/22	Iwona
	-007	n	2/25/22	Archimede	3/ 1/22	Iwona
	-008	n	2/25/22	Archimede	3/ 1/22	Iwona
	-009		2/25/22	Archimede	3/ 1/22	Iwona
	-011		2/25/22	Archimede	3/ 1/22	Iwona
	-012		2/25/22	Archimede	3/ 1/22	Iwona
	-013		2/25/22	Archimede	3/ 1/22	Iwona
	-014	ж	2/25/22	Archimede	3/ 1/22	Iwona
epartment: Metals			Prep. Date	Analyst	Analysis Date	Analysi
rsenic - As	-001	Soil	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-002	n.	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-004	H	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-005		3/ 1/22	Adrienne	3/ 2/22	Danielle
	-006	<b>.</b>	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-007		3/ 1/22	Adrienne	3/ 2/22	Daniell
	-008		3/ 1/22	Adrienne	3/ 2/22	Danielle
	-009	(10)	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-011	m	3/ 1/22	Adrienne	3/ 2/22	Daniell
	-012		3/ 1/22	Adrienne	3/ 2/22	Daniell
	-013		3/ 1/22	Adrienne	3/ 2/22	Daniell
	-014		3/ 1/22	Adrienne	3/ 2/22	Daniell
ead - Pb	-001	Soil	3/ 1/22	Adrienne	3/ 2/22	Daniell
	-002	"	3/ 1/22	Adrienne	3/ 2/22	Daniell
	-004		3/ 1/22	Adrienne	3/ 2/22	Danielle
	-005	"	3/ 1/22	Adrienne	3/ 2/22	Daniell
	-006		3/ 1/22	Adrienne	3/ 2/22	Daniell
	-007		3/ 1/22	Adrienne	3/ 2/22	Daniell
	-008		3/ 1/22	Adrienne	3/ 2/22	Daniell
No. With the Stationary of the Stationary Stationary Stationary	-009		3/ 1/22	Adrienne	3/ 2/22	Daniell
	-011	H	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-012	и и	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-013	- // <b>"</b>	3/ 1/22	Adrienne	3/ 2/22	Danielle
	-014		3/ 1/22	Adrienne	3/ 2/22	Danielle
PLP Lead - Pb	-005	Soil	3/ 9/22	Adrienne	3/10/22	Danielle
Department: Wet Chemistry			Prep. Date	<u>Analyst</u>	Analysis Date	<u>Analysi</u>
inal pH of SPLP SVOC and/or Metals	-005	Soil	n/a	n/a	3/ 8/22	Andrew 1

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Mar 14, 2022 @ 11:01

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

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Labo	oratory	Custod	y Chron	nicle		
IAL Case No. E22-01119	Client Melick Tully & Associates					
	Project BOHLER-HOWELL (VICTORY)					
	<b>Received On</b>		2/24/2022@17:17			
SPLP SVOC and/or Metals Leachate volume	-005	Soil	n/a	n/a	3/ 7/22	Andrew P.
Weight of soil for SPLP SVOC and/or Metals Leachate	-005	Soil	n/a	n/a	3/ 7/22	Andrew P.

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Mar 14, 2022 @ 11:01

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

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