

LABORATORIES OF OHIO, LLC
WORK ORDER 115782

DELIVERABLES

	<u>PAGE</u>
<i>Completeness Review Checklist</i>	2
<i>Cover Letter</i>	3
<i>Customer Chain-of-Custody/Receipt Information</i>	4
<u><i>pH</i></u>	
<i>Narrative/Sample Crosswalk</i>	6
<i>Sample Results</i>	8
<i>QC Summary</i>	9
<i>Bench Sheets</i>	10
<u><i>FLASHPOINT</i></u>	
<i>Narrative/Sample Crosswalk</i>	11
<i>Sample Results</i>	14
<i>QC Summary</i>	15
<i>Bench Sheets</i>	16
<u><i>METALS</i></u>	
<i>Narrative/Sample Crosswalk</i>	17
<i>Sample Results</i>	30
<i>QC Summary</i>	36
<i>Bench Sheets</i>	39
<u><i>PCB</i></u>	
<i>Narrative/Sample Crosswalk</i>	44
<i>Sample Results</i>	47
<i>QC Summary</i>	49
<i>Bench Sheets</i>	52
<u><i>VOLATILE</i></u>	
<i>Narrative/Sample Crosswalk</i>	54
<i>Sample Results</i>	60
<i>QC Summary</i>	67
<i>Bench Sheets</i>	77



LABORATORIES OF OHIO, LLC
an Affiliate of THE [REDACTED] GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

July 27, 2004

OHIO ENVIRONMENTAL PROTECTION AGENCY
Division of Hazardous Waste Management
ATTN: Mr.
PO Box 1049
Columbus, OH 43216

Dear Mr.

Please find enclosed the results of analysis and electronic deliverable for the following samples:

Site/Location:

Work Order No.: 115782

Samples No(s): See Sample Case Narrative

Date Received: June 25, 2004

Total No. of Pages: 155

This report shall not be reproduced except in full, without the written approval of [REDACTED]
Laboratories of Ohio, LLC.

The contents of this data package have been reviewed for technical compliance and project completeness. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or the Director's designee, as verified by the signature below.

We appreciate the opportunity to service your analytical needs. If you have any further questions, please feel free to contact us.

Sincerely,

[REDACTED SIGNATURE]
Project Manager

EC:dmr

Enclosures

[REDACTED]

00003

SAMPLE RECEIPT REVIEW

Date 6/25/04
 Client Ohio CPA
 Received by M. [Signature]

SAMPLE REVIEW CRITERIA		YES	NO	N/A	COMMENTS
1	Were shipping containers received intact and sealed? If no, notify the Project Manager	X			
2	Were chain of custody documents included?	X			
3	Shipping container temperature(s) checked?	X			
4	Is temperature documented on Chain of Custody		X		Temp: 6°C
5	Was shipping container temperature within specifications (4 +/- 2 C)? If no, notify Project Manager	X			
6	Are any of the samples from a client that is known to send radiological samples? If yes, complete radioactive receipt form.		X		
	Container at contact:				
	Container at 1 meter:				
	Samples at contact:				
	Packing material:				
7	Were chain of custody documents completed correctly? (ink signed, match containers)	X			
8	Were sample containers received intact and sealed? If no, notify the Project Manager.	X			
9	Were all sample containers properly labeled?	X			
10	Were correct sample containers received?				
11	Were organic samples checked for residual chlorine?				
12	Preserved samples checked for pH?				
13	Were samples preserved correctly? If no, notify Project Manager.	X			
14	Were samples received within holding time? If No, notify Project Manager.	X			
15	Were VOA vials free of headspace?				

PM(A) Review: IR Date 6-30-04

Samples out of specifications/ PM notification: Problem upon receipt:	Resolution of problems:
--	-------------------------

(ALL ACCEPTABLE)
 CIRCLE/INITIAL/DATE
MR 6/25/04

[Redacted] of Ohio, LLC [Redacted] Road, Suite 300, Cincinnati, Ohio, 45242

This form has been reviewed by [Redacted] Laboratories of Ohio's QA department, 9/13/03.

**Ohio GenChem Narrative
Ohio Environmental Protection Agency (OEPA)
Work Order 115782
SDG 115782**

Method/Analysis Information

Procedure: Soil and Waste pH method 9045C
Analytical Method: SW846 9045C
Analytical Batch Number: 345466

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C:

Sample ID	Client ID
115782011	002
1200654437	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with INORG8 REV# 13.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The WetChem: General analysis was performed on a Accumet 25 pH Meter.

Initial Calibration

The instrument was properly calibrated.

Quality Control (QC) Information**Laboratory Control Sample (LCS) Recovery**

The recovery for the laboratory control sample was within the required acceptance limits.

Quality Control

All samples are analyzed in duplicate.

Sample Duplicate Acceptance

The Relative Percent Difference(s) between the sample(s) and duplicate(s) for this batch (was) within the required acceptance limits.

Technical Information

assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

Samples were analyzed as soon as possible.

The following samples from this sample group were accidentally analyzed outside of the method specified holding time.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Reanalysis

No samples in this sample group were reprepared and/or reanalyzed for any reason other than dilutions.

Miscellaneous Information**Additional Comments**

No additional comments are needed for this SDG.

Review Validation:

Level 1 Initial HA Date 7/2/04

LABORATORIES OF OHIO, LLC

QC Summary

Report Date: July 2, 2004
Page 1 of 1

Client : Ohio Environmental Protection
Agency
P.O. Box 1049
Columbus, Ohio

Contact:

Workorder: 115782

Paramname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlt	Date Time
WetChem: General									
Batch 345466									
QC1200654437	LCS								
pH	6.87		6.75	SU		98	(96%-104%)	HB1	06/30/04 15:26

Notes:

The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

HA 7/2/04

00009

Sample #	pH	Temp ^o C	Time	pH	Temp ^o C	Time
PH 9045C date 6/30/04						
LS: SWC.DH0629-01						
115320000	6.996	20.2	1517	6.986	20.3	1518
115320001	6.754	23.4	1526	6.749	25.1	1528
115320002	5.922	21.6	1541	5.917	22.7	1542
115321009	5.800	21.3	1549	5.760	21.4	1550
115321011	5.758	21.4	1550	5.763	21.4	1557
115321011	5.751	21.2	1559	5.760	21.2	1602
115782611 2.66	8.055	21.9	1649	8.103 2.66	22.0	1651
CCV	6.951	20.7	1630	6.951	21.0	1638
CCV	6.971	21.0	1654	6.979	21.1	1655

HB
6/30/04

MA 7/1/04

Continued on Page _____

Read and Understood By


 Signed

6/30/04
 Date

Matt Mance
 Signed

7-1-04
 Date

00010

**Ohio GenChem Narrative
Ohio Environmental Protection Agency (OEPA)
Work Order 115782
SDG 115782**

Method/Analysis Information

Procedure: Ignitability (Flash Point Determination) EPA Method 1010

Analytical Method: SW846 1010

Analytical Batch Number: 350989

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 1010:

Sample ID	Client ID
115782005	014
115782006	016
115782007	018
115782011	002
1200667723	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with INORG30 REV# 11.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this

00011

"Method/Analysis Information" section.

Calibration Information

The WetChem: General analysis was performed on a Koehler Flashpoint.

Initial Callbration

The instrument was properly calibrated.

Calibration Verification Information (CCV)

Not required.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery

The recovery for the laboratory control sample was within the required acceptance limits.

Quality Control

All samples are analyzed in duplicate.

Sample Duplicate Acceptance

The Relative Percent Difference(s) between the sample(s) and duplicate(s) for this batch (was) within the required acceptance limits.

Technical Information

assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples from this sample group were analyzed within the required holding time for this method.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Reanalysis

No samples in this sample group were reprepmed and/or reanalyzed for any reason other than duplicates.

Miscellaneous Information

Nonconformance Reports

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

00017

Additional Comments

No additional comments are needed for this SDG.

Review Validation:

Level 1 Initial CMA Date 7-26-04

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection
Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 26, 2004

Contact:
Project:

Page 1 of 1

Client Sample ID: 002
Sample ID: 115782011
Matrix: Oil
Collect Date: 24-JUN-04 09:30
Receive Date: 25-JUN-04
Collector: Client

Project: OHEP00304
Client ID: OHEPA001

Client Desc.: Oil

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
General Analysis											
SW1010 Closedcup Flash Pt 200 Flashpoint-200		138	68.0	68.0	Fahrenheit	1	HB1	07/21/04	0915	350989	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 1010	
2	SW846 9045C	

Notes:

The Qualifiers in this report are defined as follows :

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- P The concentration between the confirmation column and the primary column is >40 RPD for EPA methods 8081A, 8082 & 608.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with Laboratories of Ohio, LLC standard operating procedures. Please direct any questions to your Project Manager, [REDACTED]

Reviewed by

1912 7-26-04

00014

LABORATORIES OF OHIO, LLC

QC Summary

Report Date: July 26, 2004
Page 1 of 1

Client : Ohio Environmental Protection
Agency
P.O. Box 1049
Columbus, Ohio

Contact:

Workorder: 115782

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anst	Date	Time
-----------	-----	--------	------	----	-------	------	------	-------	------	------	------

WetChem: General

Batch 350989

QC1200667723 LCS
Flashpoint-200

77.0

77.7 Fahrenheit

101 (95%-105%) HB1 07/21/04 09:15

Notes:

The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- P The concentration between the confirmation column and the primary column is >40 RPD for EPA methods 8081A, 8082 & 608.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

19na 7-26-04

00015

Method 1010 Sample Run Log

Analyst: Holly Bricker

Date: 7/21/04

Sample ID#	Client ID#	Result	Start Time	End Time
1200667713	LCS	77	10:15 am	
1200667714	LCS	78		
115781886	Form. X1	142		
115781887	Form. X2	145		
115781888	Form. X3	143		
115781888D	Dup.	144		12:20 pm
1200667723	LCS	77	1:40 pm	
1200667724	LCS	77		
115782005	BR549	>200		
115782006	R2D2	148		
115782007	Dy4U	177		
115782011	002	138		
115782011D	Dup.	138		4:05 pm

Signed: ~~Holly Bricker~~
QC Review: ~~Holly Bricker~~

Date: 7/21/04
Date: 7/25/04

0002-1800

**Ohio Metals
Ohio Environmental Protection Agency (OEPA)
Work Order 115782
SDG 115782**

Method/Analysis Information

Procedure:	ICP Analysis according to EPA Method 6010B
Analytical Method:	SW846 6010B
Prep Method:	SW846 3010A
Ohio SW846 1311 Metals TCLP Leaching Solids Method:	SW846 1311
Analytical Batch Number:	346202
Prep Batch Number:	346201
Ohio SW846 1311 Metals TCLP Number:	Batch 345991

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 6010B:

Sample ID	Client ID
115782001	028
115782002	RO-2
115782003	001
115782006	016
1200655630	TCLP Blank (TB)
1200656091	Method Blank (MB)

00017

1200656095	Laboratory Control Sample (LCS)
1200656092	115782006(016) Sample Duplicate (DUP)
1200656093	115782006(016) Matrix Spike (MS)
1200656094	115782006(016) Matrix Spike Duplicate (MSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with INORG1 REV# 13.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Metals: ICP analysis was performed on a Thermo Jarrell-Ash Enviro I ICAP 61E.

Instrument Calibration

The instrument calibrations are conducted using the method and instrument manufacturer s specifications. All initial calibration requirements have been met for this SDG.

Initial Calibration (ICV) Requirements

All initial calibration verification requirements have been met for this SDG.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Blank Acceptance

The tumble blank contained Barium RL but <5% of the TCLP regulatory limit. The method blank showed no contamination above the MDLs for parameters of interest.

LCS/LCSD Recovery Statement

The laboratory control sample (LCS) met the acceptance criteria for percent recovery (%R) for all applicable analytes.

Quality Control (QC) Sample Statement

The following sample was selected as the quality control (QC) sample for this batch: 115782006 (016).

Matrix Spike Recovery Statement

The percent recovery (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Matrix Spike Duplicate Recovery Statement

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

MSD RPD Statement

The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20%.

Duplicate RPD Statement

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit(RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Technical Information

● assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Time Specifications

All the samples were prepared and/or analyzed within the required holding time period.

Preparation/Analytical Method Verification

All procedures performed in association with this SDG followed the Standard Operating Procedure (SOP) guidelines. All samples in this SDG were prepared in accordance with the referenced SW-846 procedures.

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. No sample dilutions were needed in this SDG.

Re-prep/Re-analysis

No samples in this SDG required redigestion and/or reanalysis.

Miscellaneous Information**Additional Comments**

No additional comments are needed for this sample group.

Method/Analysis Information

Procedure:	ICP Analysis according to EPA Method 6010B
Analytical Method:	SW846 6010B
Prep Method:	SW846 3050B
Analytical Batch Number:	346537
Prep Batch Number:	346534

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 6010B:

Sample ID	Client ID
115782011	002
1200656824	Method Blank (MB)
1200656828	Laboratory Control Sample (LCS)
1200656825	115782011(002) Sample Duplicate (DUP)
1200656826	115782011(002) Matrix Spike (MS)
1200656827	115782011(002) Matrix Spike Duplicate (MSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with INORG1 REV# 13.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Metals: ICP analysis was performed on a Thermo Jarrell-Ash Enviro I ICAP 61E.

Instrument Calibration

The instrument calibrations are conducted using the method and instrument manufacturer s specifications. All initial calibration requirements have been met for this SDG.

Initial Calibration (ICV) Requirements

All initial calibration verification requirements have been met for this SDG.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Blank Acceptance

The method blank showed no contamination above the MDL for any parameters of interest except for Arsenic which was detected MDL but <1/2RL.

LCS/LCSD Recovery Statement

The laboratory control sample (LCS) met the acceptance criteria for percent recovery (%R) for all applicable analytes.

Quality Control (QC) Sample Statement

The following sample was selected as the quality-control (QC) sample for this batch: 115782011 (002).

Matrix Spike Recovery Statement

The percent recovery (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Matrix Spike Duplicate Recovery Statement

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

MSD RPD Statement

The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20%.

Duplicate RPD Statement

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit(RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Technical Information

assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Time Specifications

All the samples were prepared and/or analyzed within the required holding time period.

Preparation/Analytical Method Verification

All procedures performed in association with this SDG followed the Standard Operating Procedure (SOP) guidelines. All samples in this SDG were prepared in accordance with the referenced SW-846 procedures.

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. No sample dilutions were needed in this SDG.

expressed as days expire at midnight on the day of expiration.

Holding Time Specifications

All the samples were prepared and/or analyzed within the required holding time period.

Preparation/Analytical Method Verification

All procedures performed in association with this SDG followed the Standard Operating Procedure (SOP) guidelines. All samples in this SDG were prepared in accordance with the referenced SW-846 procedures.

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. No sample dilutions were needed in this SDG.

Re-prep/Re-analysis

No samples in this SDG required redigestion and/or reanalysis.

Miscellaneous Information

Additional Comments

No additional comments are needed for this sample group.

Method/Analysis Information

Procedure:	Mercury by Cold Vapor Method 7470A
Analytical Method:	SW846 7470A
Prep Method:	SW846 7470A Prep
Ohio SW846 1311 Metals TCLP Leaching Solids Method:	SW846 1311
Analytical Batch Number:	346229
Prep Batch Number:	346228
Ohio SW846 1311 Metals TCLP Leaching Solids Batch Number:	345991

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846

00023

7470A:

Sample ID	Client ID
115782001	028
115782002	RO-2
115782003	001
115782006	016
1200655630	TCLP Blank (TB)
1200656155	Method Blank (MB)
1200656161	Laboratory Control Sample (LCS)
1200656156	115782001(028) Sample Duplicate (DUP)
1200656158	115782001(028) Matrix Spike (MS)
1200656159	115782001(028) Matrix Spike Duplicate (MSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with INORG3 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Metals: Mercury analysis was performed on a PSA Mercury Analyzer.

Instrument Calibration

The instrument calibrations are conducted using the method and instrument manufacturer s specifications. All initial calibration requirements have been met for this SDG.

Initial Calibration (ICV) Requirements

All initial calibration verification requirements have been met for this SDG.

00024

ICSA/ICSAB Statement

ICSA and ICSAB analysis does not apply to this method.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information**Blank Acceptance**

The method blank associated with this SDG showed no contamination.

LCS/LCSD Recovery Statement

The laboratory control sample (LCS) met the acceptance criteria for percent recovery (%R) for all applicable analytes.

Quality Control (QC) Sample Statement

A DUP, MS and MSD were run on sample 115782001.

The following sample was selected as the quality control (QC) sample for this batch: 115782001 (Trailer 028).

Matrix Spike Recovery Statement

The MS recovery associated with this SDG passed.

Matrix Spike Duplicate Recovery Statement

The MSD recovery associated with this SDG passed.

MSD RPD Statement

The RPD between the MS and the MSD associated with this SDG passed.

Duplicate RPD Statement

The RPD between the sample and the duplicate associated with this SDG passed.

Technical Information

■ assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Time Specifications

All the samples were prepared and/or analyzed within the required holding time period.

Preparation/Analytical Method Verification

00025

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. No sample dilutions were needed in this SDG.

Re-prep/Re-analysis

No samples in this SDG required redigestion and/or reanalysis.

Miscellaneous Information**Nonconformance Documentation**

Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments

No additional comments are needed for this sample group.

Method/Analysis Information

Procedure:	Mercury by Cold Vapor 7471A
Analytical Method:	SW846 7471A
Prep Method:	SW846 7471A Prep
Analytical Batch Number:	344889
Prep Batch Number:	344887

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 7471A:

Sample ID	Client ID
115782011	002
1200653094	Method Blank (MB)
1200653100	Laboratory Control Sample (LCS)

00026

1200653095	115320001(02) Sample Duplicate (DUP)
1200653097	115320001(02) Matrix Spike (MS)
1200653098	115320001(02) Matrix Spike Duplicate (MSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with INORG60 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Metals: Mercury analysis was performed on a PSA Mercury Analyzer.

Instrument Calibration

The instrument calibrations are conducted using the method and instrument manufacturer s specifications. All initial calibration requirements have been met for this SDG.

Initial Calibration (ICV) Requirements

All initial calibration verification requirements have been met for this SDG.

ICSA/ICSAB Statement

ICSA and ICSAB analysis does not apply to this method.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Blank Acceptance

The method blank associated with this SDG showed no contamination.

LCS/LCSD Recovery Statement

00027

The laboratory control sample (LCS) met the acceptance criteria for percent recovery (%R) for all applicable analytes.

Quality Control (QC) Sample Statement

A DUP,MS and MSD were run on sample 115320001.

The following sample was selected as the quality control (QC) sample for this batch: 115320001 (02).

Matrix Spike Recovery Statement

The MS recovery associated with this SDG passed.

Matrix Spike Duplicate Recovery Statement

The MSD recovery associated with this SDG passed.

MSD RPD Statement

The RPD between the MS and the MSD associated with this SDG passed.

Duplicate RPD Statement

The RPD between the sample and the duplicate associated with this SDG passed.

Technical Information

assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Time Specifications

All the samples were prepared and/or analyzed within the required holding time period.

Preparation/Analytical Method Verification

All procedures performed in association with this SDG followed the Standard Operating Procedure (SOP) guidelines. All samples in this SDG were prepared in accordance with the referenced SW-846 procedures.

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. No sample dilutions were needed in this SDG.

Re-prep/Re-analysis

No samples in this SDG required redigestion and/or reanalysis.

Miscellaneous Information

Nonconformance Documentation

Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:

NCR 123629 was generated due to Failed Recovery for LCS/MS/PS (rounds to 80%).

Additional Comments

No additional comments are needed for this sample group.

Review Validation:

Level 1 Initial MA Date 7/21/09

00029

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company: Ohio Environmental Protection Agency
 Address: P.O. Box 1049
 Columbus, Ohio 43216

Report Date: July 21, 2004

Contact:
 Project:

Page 1 of 2

Client Sample ID:	028	Project:	OHEP00304
Sample ID:	115782001	Client ID:	OHEPA001
Matrix:	Aqueous	Client Desc.:	
Collect Date:	23-JUN-04 15:45		
Receive Date:	25-JUN-04		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
ICP Analysis											
<i>TCLP Metals by 6010 Solids</i>											
Arsenic	U	ND	0.0204	0.100	mg/L	1	JML	07/06/04	1634	346202	1
Barium		0.169	0.0006	0.010	mg/L	1					
Cadmium		0.787	0.0026	0.010	mg/L	1					
Chromium	J	0.0165	0.005	0.025	mg/L	1					
Lead	U	ND	0.0161	0.100	mg/L	1					
Selenium	U	ND	0.0189	0.080	mg/L	1					
Silver	U	ND	0.0032	0.025	mg/L	1					
Mercury Analysis											
<i>TCLP Hg Solids</i>											
Mercury	U	ND	0.000079	0.0002	mg/L	1	MAK	07/06/04	1228	346229	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 1311	SW846 1311 Metals TCLP Leaching Solids	TUI	07/01/04	1530	345991
SW846 3010A	Metals Leachase Digestion SW846 3010A	TUI	07/02/04	1400	346201
SW846 7470A Prep	EPA 7470A Mercury Prep TCLP Liquids	PSI	07/06/04	0730	346228

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 6010B	
2	SW846 7470A	

Notes:

The Qualifiers in this report are defined as follows :

- Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier—please see case narrative, data summary package or contact your Project Manager for details.

00030

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection
 Agency
 Address : P.O. Box 1049
 Columbus, Ohio 43216

Report Date: July 21, 2004

Contact:
 Project:

Page 1 of 2

Client Sample ID: RO-2
 Sample ID: 115782002
 Matrix: Misc Solid
 Collect Date: 24-JUN-04 11:10
 Receive Date: 25-JUN-04
 Collector: Client

Project: OHEP00304
 Client ID: OHEPA001

Client Desc.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
ICP Analysis											
<i>TCLP Metals by 6010 Solids</i>											
Arsenic	U	ND	0.0204	0.100	mg/L	1	JML	07/06/04	1650	346202	1
Barium		2.65	0.0006	0.010	mg/L	1					
Cadmium		0.387	0.0026	0.010	mg/L	1					
Chromium		0.486	0.005	0.025	mg/L	1					
Lead		0.296	0.0161	0.100	mg/L	1					
Selenium	J	0.0356	0.0189	0.080	mg/L	1					
Silver	J	0.00358	0.0032	0.025	mg/L	1					
Mercury Analysis											
<i>TCLP Hg Solids</i>											
Mercury		0.00073	0.000079	0.0002	mg/L	1	MAK	07/06/04	1240	346229	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 1311	SW846 1311 Metals TCLP Leaching Solids	TU1	07/01/04	1530	345991
SW846 3010A	Metals Leachate Digestion SW846 3010A	TU1	07/02/04	1400	346201
SW846 7470A Prep	EPA 7470A Mercury Prep TCLP Liquids	PS1	07/06/04	0730	346228

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 6010B	
2	SW846 7470A	

Notes:

The Qualifiers in this report are defined as follows :

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

00032

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 21, 2004

Contact:
Project:

Page 2 of 2

Client Sample ID: RO-2
Sample ID: 115782002

Project: OHEP00304
Client ID: OHEPA001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	-------------	------	-------	--------

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with Laboratories of Ohio, LLC standard operating procedures. Please direct any questions to your Project Manager.

MA 7/21/04

Reviewed by

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 21, 2004

Contact:
Project:

Page 1 of 2

Client Sample ID: 002
Sample ID: 115782011
Matrix: Oil
Collect Date: 24-JUN-04 09:30
Receive Date: 25-JUN-04
Collector: Client

Project: OHEP00304
Client ID: OHEPA001

Client Desc.: Oil

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
ICP Analysis											
<i>6010/3050 ICP SCAN Metals Soil</i>											
Arsenic	U	ND	1.69	9.23	mg/kg	1	JML	07/15/04	1031	346537	1
Barium	U	ND	0.175	1.38	mg/kg	1					
Cadmium	U	ND	0.129	0.923	mg/kg	1					
Chromium	U	ND	1.10	3.69	mg/kg	1					
Lead	U	ND	3.84	9.23	mg/kg	1					
Selenium	U	ND	1.93	9.23	mg/kg	1					
Silver	U	ND	0.563	2.31	mg/kg	1					
Mercury Analysis											
<i>7471 Cold Vapor Hg in Solid</i>											
Mercury	U	ND	0.00309	0.00995	mg/kg	1	MAX	06/30/04	1228	344889	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	SW846 3050BS Prep Solids	TU1	07/07/04	1425	346534
SW846 7471A Prep	EPA 7471A Mercury Prep Solids	PS1	06/30/04	0805	344887

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 6010B	
2	SW846 7471A	

Notes:

The Qualifiers in this report are defined as follows :

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- P The concentration between the confirmation column and the primary column is >40 RPD for EPA methods 8081A, 8082 & 608.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

00034

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection
Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 21, 2004

Contact:
Project:

Page 2 of 2

Client Sample ID: 002
Sample ID: 115782011

Project: OHEP00304
Client ID: OHEPA001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with Laboratories of Ohio, LLC standard operating procedures. Please direct any questions to your Project Manager,

WAL 7/21/04

Reviewed by

00035

LABORATORIES OF OHIO, LLC

QC Summary

Report Date: August 13, 2004

Page 1 of 7

Client : Ohio Environmental Protection
Agency
P.O. Box 1049
Columbus, Ohio

Contact:

Workorder: 115782

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals: ICP											
Batch 346202											
QC1200656092 115782006 DUP											
Arsenic		U	ND	U	ND	mg/L	N/A	(+/-0.100)	JML	07/06/04	16:37
Barium			0.0621		0.0612	mg/L	2	(0%-20%)			
Cadmium		U	ND	U	ND	mg/L	N/A	(+/-0.010)			
Chromium		U	ND	U	ND	mg/L	N/A	(+/-0.025)			
Lead		U	ND	U	ND	mg/L	N/A	(+/-0.100)			
Selenium		U	ND	U	ND	mg/L	N/A	(+/-0.080)			
Silver		U	ND	U	ND	mg/L	N/A	(+/-0.025)			
QC1200656095 LCS											
Arsenic	1.00				0.984	mg/L	98	(80%-120%)		07/06/04	16:30
Barium	1.00				1.01	mg/L	101	(80%-120%)			
Cadmium	0.500				0.488	mg/L	98	(80%-120%)			
Chromium	0.500				0.492	mg/L	98	(80%-120%)			
Lead	2.00				1.92	mg/L	96	(80%-120%)			
Selenium	0.500				0.462	mg/L	92	(80%-120%)			
Silver	0.500				0.447	mg/L	89	(80%-120%)			
QC1200656091 MB											
Arsenic				U	ND	mg/L				07/06/04	16:26
Barium				U	ND	mg/L					
Cadmium				U	ND	mg/L					
Chromium				U	ND	mg/L					
Lead				U	ND	mg/L					
Selenium				U	ND	mg/L					
Silver				U	ND	mg/L					
QC1200656093 115782006 MS											
Arsenic	1.00	U	ND		0.971	mg/L	97	(75%-125%)		07/06/04	16:41
Barium	1.00		0.0621		0.981	mg/L	92	(75%-125%)			
Cadmium	0.500	U	ND		0.477	mg/L	95	(75%-125%)			
Chromium	0.500	U	ND		0.483	mg/L	97	(75%-125%)			
Lead	2.00	U	ND		1.90	mg/L	94	(75%-125%)			
Selenium	0.500	U	ND		0.502	mg/L	100	(75%-125%)			
Silver	0.500	U	ND		0.440	mg/L	88	(75%-125%)			
QC1200656094 115782006 MSD											
Arsenic	1.00	U	ND		0.988	mg/L	2	99	(0%-20%)	07/06/04	16:45
Barium	1.00		0.0621		0.990	mg/L	1	93	(0%-20%)		
Cadmium	0.500	U	ND		0.484	mg/L	1	97	(0%-20%)		
Chromium	0.500	U	ND		0.479	mg/L	1	96	(0%-20%)		
Lead	2.00	U	ND		1.93	mg/L	2	96	(0%-20%)		
Selenium	0.500	U	ND		0.498	mg/L	1	100	(0%-20%)		
Silver	0.500	U	ND		0.447	mg/L	2	89	(0%-20%)		
QC1200655630 TB											
Arsenic				U	ND	mg/L				07/06/04	16:23
Barium					0.0233	mg/L					

00036

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 2 of 7

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals: ICP										
Batch	346202									
Cadmium			U	ND	mg/L					
Chromium			U	ND	mg/L				JML	07/06/04 16:23
Lead			U	ND	mg/L					
Selenium			U	ND	mg/L					
Silver			U	ND	mg/L					
Batch	346537									
QC1200656825 115782011 DUP										
Arsenic		U	ND	U	ND	mg/kg	N/A	(+/-9.86)	JML	07/15/04 10:35
Barium		U	ND	U	ND	mg/kg	N/A	(+/-1.48)		
Cadmium		U	ND	U	ND	mg/kg	N/A	(+/-0.986)		
Chromium		U	ND	U	ND	mg/kg	N/A	(+/-3.94)		
Lead		U	ND	U	ND	mg/kg	N/A	(+/-9.86)		
Selenium		U	ND	U	ND	mg/kg	N/A	(+/-9.86)		
Silver		U	ND	U	ND	mg/kg	N/A	(+/-2.46)		
QC1200656828 LCS										
Arsenic	100				83.0	mg/kg		83 (80%-120%)		07/15/04 10:28
Barium	100				93.7	mg/kg		94 (80%-120%)		
Cadmium	50.0				40.5	mg/kg		81 (80%-120%)		
Chromium	50.0				42.3	mg/kg		85 (80%-120%)		
Lead	200				161	mg/kg		81 (80%-120%)		
Selenium	50.0				40.0	mg/kg		80 (80%-120%)		
Silver	50.0				39.4	mg/kg		79 (75%-120%)		
QC1200656824 MB										
Arsenic			J		1.90	mg/kg				07/15/04 10:24
Barium			U		ND	mg/kg				
Cadmium			U		ND	mg/kg				
Chromium			U		ND	mg/kg				
Lead			U		ND	mg/kg				
Selenium			U		ND	mg/kg				
Silver			U		ND	mg/kg				
QC1200656826 115782011 MS										
Arsenic	95.0	U	ND		79.8	mg/kg		84 (75%-125%)		07/15/04 10:39
Barium	95.0	U	ND		89.4	mg/kg		94 (75%-125%)		
Cadmium	47.5	U	ND		39.7	mg/kg		84 (75%-125%)		
Chromium	47.5	U	ND		40.2	mg/kg		85 (75%-125%)		
Lead	190	U	ND		159	mg/kg		83 (75%-125%)		
Selenium	47.5	U	ND		40.5	mg/kg		85 (75%-125%)		
Silver	47.5	U	ND		38.8	mg/kg		82 (75%-125%)		
QC1200656827 115782011 MSD										
Arsenic	97.9	U	ND		83.5	mg/kg	5	85 (0%-20%)		07/15/04 10:42
Barium	97.9	U	ND		93.4	mg/kg	4	95 (0%-20%)		
Cadmium	49.0	U	ND		40.8	mg/kg	3	83 (0%-20%)		
Chromium	49.0	U	ND		41.2	mg/kg	3	84 (0%-20%)		
Lead	196	U	ND		160	mg/kg	1	81 (0%-20%)		
Selenium	49.0	U	ND		41.6	mg/kg	3	85 (0%-20%)		
Silver	49.0	U	ND		38.8	mg/kg	0	79 (0%-20%)		
Batch	346941									
QC1200657897 115782004 DUP										

00037

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 6 of 7

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anst.	Date	Time
Metals: Mercury											
Batch 344889											
QC1200653095	115320001	DUP									
Mercury		U	ND	J	0.00347	mg/kg	N/A	(+-0.00978) MAK		06/30/04	11:58
QC1200653100	LCS										
Mercury	0.250				0.221	mg/kg		88 (88%-108%)		06/30/04	11:52
QC1200653094	MB										
Mercury				U	ND	mg/kg				06/30/04	11:48
QC1200653097	115320001	MS									
Mercury	0.248	U	ND		0.198	mg/kg		80 (80%-120%)		06/30/04	12:00
QC1200653098	115320001	MSD									
Mercury	0.249	U	ND		0.204	mg/kg	3	81 (0%-20%)		06/30/04	12:07
Batch 346229											
QC1200656156	115782001	DUP									
Mercury		U	ND	U	ND	mg/L	N/A	(+-0.0002) MAK		07/06/04	12:31
QC1200656161	LCS										
Mercury	0.005				0.00541	mg/L		108 (80%-120%)		07/06/04	12:06
QC1200656155	MB										
Mercury				U	ND	mg/L				07/06/04	12:04
QC1200656158	115782001	MS									
Mercury	0.005	U	ND		0.0049	mg/L		98 (75%-125%)		07/06/04	12:33
QC1200656159	115782001	MSD									
Mercury	0.005	U	ND		0.0052	mg/L	6	104 (0%-20%)		07/06/04	12:36
QC1200655625	TB										
Mercury				U	ND	mg/L				07/06/04	11:56
QC1200655630	TB										
Mercury				U	ND	mg/L				07/06/04	11:58
QC1200656758	TB										
Mercury				U	ND	mg/L				07/06/04	12:00
Batch 346944											
QC1200657908	115782005	DUP									
Mercury		U	ND	J	0.000111	mg/L	N/A	(+-0.0002) MAK		07/08/04	17:00
QC1200657914	LCS										
Mercury	0.005				0.0051	mg/L		102 (80%-120%)		07/08/04	16:37
QC1200657907	MB										
Mercury				U	ND	mg/L				07/08/04	16:35
QC1200657911	115782005	MS									
Mercury	0.005	U	ND		0.00541	mg/L		107 (75%-125%)		07/08/04	17:02
QC1200657912	115782005	MSD									
Mercury	0.005	U	ND		0.00529	mg/L	2	104 (0%-20%)		07/08/04	17:07
QC1200657776	TB										
Mercury				J	0.000111	mg/L				07/08/04	16:31
QC1200657894	TB										
Mercury				J	0.000111	mg/L				07/08/04	16:33
Batch 348686											
QC1200662206	LCS										
Mercury	0.005				0.00511	mg/L		102 (80%-120%) MAK		07/14/04	11:19
QC1200662201	MB										
Mercury				U	ND	mg/L				07/14/04	11:17
QC1200661438	TB										
Mercury				U	ND	mg/L				07/14/04	11:13
QC1200661439	TB										

00038

Prep LogBook

Analyte: TU1
 Batch: 346201
 Lab SOP: INORC6 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
TB	1200655630		SW846 3010A	02-JUL-2004 14:00	5	50 mL	50 mL	1	MISC SOLID	.25	mL
MB	1200656091		SW846 3010A	02-JUL-2004 14:00	7	50 mL	50 mL	1	MISC SOLID	.25	mL
LCS	1200656095		SW846 3010A	02-JUL-2004 14:00	7	50 mL	50 mL	1	MISC SOLID	.25	mL
SAMPLE	115782001		SW846 3010A	02-JUL-2004 14:00	6	50 mL	50 mL	1	AQUEOUS	.25	mL
SAMPLE	115782002		SW846 3010A	02-JUL-2004 14:00	6	50 mL	50 mL	1	MISC SOLID	.25	mL
SAMPLE	115782003		SW846 3010A	02-JUL-2004 14:00	5	50 mL	50 mL	1	AQUEOUS	.25	mL
SAMPLE	115782006		SW846 3010A	02-JUL-2004 14:00	5	50 mL	50 mL	1	MISC SOLID	.25	mL
DUP	1200656092	115782006	SW846 3010A	02-JUL-2004 14:00	5	50 mL	50 mL	1	MISC SOLID	.25	mL
MS	1200656093	115782006	SW846 3010A	02-JUL-2004 14:00	5	50 mL	50 mL	1	MISC SOLID	.25	mL
MSD	1200656094	115782006	SW846 3010A	02-JUL-2004 14:00	5	50 mL	50 mL	1	MISC SOLID	.25	mL

F.Y. 7/16/04 12.45

Comments: Hotplate/Hotblock Temperature: 90 C

Reagent/Solvent Lot ID	Amount	Description
217179-C	5 mL	1:1 hydrochloric acid
202473-A	3 mL	NITRIC ACID

00089

Prep Data Logbook Version 1.1

Page# _____
 M. J. H.

Prep LogBook

85
7/6/04

Verified by: _____

Analyt: TUJ

Batch: 346534

Lab SOP: INORG5 REV# 10

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200656828	SMT040609-01	.5	mL
LCS	1200656828	SMT040518-02	.5	mL
MS	1200656826	SMT040609-01	.5	mL
MS	1200656826	SMT040518-02	.5	mL
MSD	1200656827	SMT040609-01	.5	mL
MSD	1200656827	SMT040518-02	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200656824		SW846 3050B	07-JUL-2004 14:25	1 g	100 mL	100	MISC SOLID
LCS	1200656828		SW846 3050B	07-JUL-2004 14:25	1 g	100 mL	100	MISC SOLID
DUP	1200656825	115782010	SW846 3050B	07-JUL-2004 14:25	1.0144 g	100 mL	98.58044	MISC SOLID
MS	1200656826	115782010	SW846 3050B	07-JUL-2004 14:25	1.0522 g	100 mL	95.03897	MISC SOLID
MSD	1200656827	115782010	SW846 3050B	07-JUL-2004 14:25	1.021 g	100 mL	97.94319	MISC SOLID
SAMPLE	115782011		SW846 3050B	07-JUL-2004 14:25	1.0835 g	100 mL	92.29349	MISC SOLID

Comments: Hotplate/Hotblock Temperature: 92 C

Reagent/Solvent Lot ID	Amount	Description
217177-C	10 mL	1:1 NITRIC ACID
040815-A	10 mL	30% HYDROGEN PEROXIDE
213555-A	10 mL	Hydrochloric Acid
202473-A	10 mL	NITRIC ACID

CMA 7-20-04

TCLP LOGBOOK

Report run on: July 2, 2004 2:42 PM

Reagent / Spike ID Amount Units Description

Batch Id: 345991

Employee ID: XXXXXXXXXX

Sop ID: INORG10

Extraction Start Date: 01-JUL-04 15:30:00 @ 23 C

Extraction Stop Date: 02-JUL-04 07:30:00 @ 22 C

Filtration Complete Date: 02-JUL-04 08:30:00 @ 23 C

Tu 7/2/04

Sample Id	Matrix	Inst. ID	Inst. Speed	Sample Properties	Aliquot	Weight of Container	Weight of Filter Cake	Initial pH	pH Temp C	2nd pH	20 X % wet solid X wt. sample	Volume of Filtrate	pH of Filtrate	Positive Pressure (Y/N)	Extraction Vessel number
115782001	m	TCLP01	30	99.2% Liquid (Liquid)	100.08g	N/A	N/A	8	50	NA	NA	125	6	N/A	N/A
115782002	m	TCLP01	30	Solid without Particle Size Reduction	100.1g	N/A	N/A	8	50	3.567	2002	125	6	N/A	N/A
115782003	m	TCLP01	30	99.8% Liquid (Liquid)	100.3g	N/A	N/A	7	50	NA	NA	125	5	N/A	N/A
115782006	m	TCLP01	30	Solid without Particle Size Reduction	100.12g	N/A	N/A	8	50	1.595	2003	125	5	N/A	N/A
1200655630TB	m	TCLP01	30	Solid without Particle Size Reduction	100g	N/A	N/A	4.912	N/A	N/A	N/A	125	5	N/A	N/A

Bottle Lot Number: 111

Filter Lot Number: 92041201w

Tumbled with Buffer #1- M108 pH = 5.09

Note: The aliquot for metals matrix QC is taken from the parent sample filtrate.

00041

Page 11/11/04

PS. 7/6/04

Prep LogBook

Analyt:	PSI	Verified by:	
Batch:	346228		
Lab SOP:	INORG3 REV# 12		

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
TB	120065625		SW846 7470A Prep	06-JUL-2004 07:30	5	LCS	1200656161	MMT722088-11	.1	ml
TB	1200655630		SW846 7470A Prep	06-JUL-2004 07:30	5	MS	1200656158	MMT722088-11	.1	ml
MB	1200656155		SW846 7470A Prep	06-JUL-2004 07:30	7	MSD	1200656159	MMT722088-11	.1	ml
TB	1200656758		SW846 7470A Prep	06-JUL-2004 07:30	7					
LCS	1200656161		SW846 7470A Prep	06-JUL-2004 07:30	7					
SAMPLE	115741001		SW846 7470A Prep	06-JUL-2004 07:30	6					
SAMPLE	115782001		SW846 7470A Prep	06-JUL-2004 07:30	6					
DUP	1200656156	115782001	SW846 7470A Prep	06-JUL-2004 07:30	6					
MS	1200656158	115782001	SW846 7470A Prep	06-JUL-2004 07:30	6					
MSD	1200656159	115782001	SW846 7470A Prep	06-JUL-2004 07:30	6					
SAMPLE	115782002		SW846 7470A Prep	06-JUL-2004 07:30	6					
SAMPLE	115782003		SW846 7470A Prep	06-JUL-2004 07:30	5					
SAMPLE	115782006		SW846 7470A Prep	06-JUL-2004 07:30	5					
SAMPLE	115783001		SW846 7470A Prep	06-JUL-2004 07:30	7					
SAMPLE	115783002		SW846 7470A Prep	06-JUL-2004 07:30	9					
SAMPLE	115783003		SW846 7470A Prep	06-JUL-2004 07:30	6					
SAMPLE	115783004		SW846 7470A Prep	06-JUL-2004 07:30	7					

Comments: Digestion Start Date: 06-JUL-04 08:10
 Digestion End Date: 06-JUL-04 10:10
 Hotplate/Hotblock Temperature: 90 C
 Samples 115783001, 115783002, 115783003 and 115783004 were diluted 1-6 due to high organics in the sample.

Reagent/Solvent Lot ID	Amount	Description
202473-A	.75 mL	NITRIC ACID
150564-A	1.5 mL	SULFURIC ACID FOR CV OHIO
221744-C	1.8 mL	HYDROXYLAMINE SULFATE SOLUTION FOR CV O
221741-C	2.5 mL	POTASSIUM PERSULFATE SOLUTION
221746-C	4.5 mL	POTASSIUM PERMANGANATE SOLUTION

Page# 127/9109

Prep LogBook

P.S.
6/30/04

Analyst:	PSI	Verified by:	Type	Sample Id	Lot Id	Spike Amount	Spike Units
Batch:	344887		LCS	1200653100	MMT222088-11	.1	mL
Lab SOP:	INORG60 REV# 3		MS	1200653097	MMT222088-11	.1	mL
			MSD	1200653098	MMT222088-11	.1	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200653094		SW846 7471A Prep	30-JUN-2004 08:05	0.6 g	30 mL	50	MISC SOLID
LCS	1200653100		SW846 7471A Prep	30-JUN-2004 08:05	0.6 g	30 mL	50	MISC SOLID
SAMPLE	115320001		SW846 7471A Prep	30-JUN-2004 08:05	0.6104 g	30 mL	49.1481	MISC SOLID
DUP	1200653095	115320001	SW846 7471A Prep	30-JUN-2004 08:05	0.6135 g	30 mL	48.89976	AQUEOUS
MS	1200653097	115320001	SW846 7471A Prep	30-JUN-2004 08:05	0.6056 g	30 mL	49.53765	AQUEOUS
MSD	1200653098	115320001	SW846 7471A Prep	30-JUN-2004 08:05	0.6015 g	30 mL	49.87531	AQUEOUS
SAMPLE	115320002		SW846 7471A Prep	30-JUN-2004 08:05	0.6014 g	30 mL	49.8836	MISC SOLID
SAMPLE	115320003		SW846 7471A Prep	30-JUN-2004 08:05	0.6063 g	30 mL	49.48046	MISC SOLID
SAMPLE	115321008		SW846 7471A Prep	30-JUN-2004 08:05	0.6034 g	30 mL	49.71826	MISC SOLID
SAMPLE	115321009		SW846 7471A Prep	30-JUN-2004 08:05	0.6097 g	30 mL	49.20453	MISC SOLID
SAMPLE	115321011		SW846 7471A Prep	30-JUN-2004 08:05	0.6047 g	30 mL	49.61138	MISC SOLID
SAMPLE	115764001		SW846 7471A Prep	30-JUN-2004 08:05	0.6016 g	30 mL	49.86702	SLUDGE
SAMPLE	115782010		SW846 7471A Prep	30-JUN-2004 08:05	0.6054 g	30 mL	49.55401	MISC SOLID
SAMPLE	115782011		SW846 7471A Prep	30-JUN-2004 08:05	0.6033 g	30 mL	49.7265	MISC SOLID

Comments: Date: 6/30/04 09:15
Date: 6/30/04 09:45
Temperature: 90 C
Temperature 2: 90 C

Resident/Solvent Lot ID Amount Description
223099-C 2.5 mL AQUA REGIA FOR CV OHIO
221744-C 1.8 mL HYDROXYLAMINE SULFATE SOLUTION FOR CV O.
221746-C 4.5 mL POTASSIUM PERMANGANATE SOLUTION

Page#

MA
6/30/04

**Volatiles Case Narrative
Ohio Environmental Protection Agency (OEPA)
Work Order 115782
SDG 115782**

Method/Analysis Information

Procedure: GC-MS Analysis of Volatiles 8260B
Analytical Method: SW846 8260B
Prep Method: SW846 1311
Analytical Batch Number: 347359
Prep Batch Number: 345667

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8260B:

Sample ID	Client ID
115782001	028
115782002	-RO-2
115782003	001
115782004	013
115782005	014
115782006	016
115782007	018
115782008	018
115782009	025
1200654868	TCLP Blank (TB)
1200658905	Laboratory Control Sample (LCS)
1200658906	115782001(028) Post Spike (PS)
1200658907	115782001(028) Post Spike Duplicate (PSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with ORG11 REV# 13.

Preparation/Analytical Method Verification

00054

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Volatiles: GC-MS analysis was performed on a HP 5973 Mass Spectrometer.

Initial Calibration

All the initial calibration requirements were met.

Continuing Calibration Verification Requirements

All the calibration verification standard (CCV) requirements were met.

Quality Control (QC) Information

Method Blank Acceptance

Target analytes were not detected above the reporting limit in the blank.

Surrogate Recovery

Sample 115782006 was analyzed twice and both time it had low surrogate recoveries. 115782006 (016).

Laboratory Control Sample Recovery Statement (LCS)

All the required analyte recoveries in the LCS were within the acceptance limits.

QC Sample Designation

Spike analyses were performed on the following sample: 115782001 (028).

Spike Recovery Statement

All the required spike recoveries were within the acceptance limits.

Spike Duplicate Recovery Statement

All the required spike recoveries were within the acceptance limits.

Relative Percent Difference Statement (RPD)

The RPD between spike recoveries were within the acceptance limits.

Internal Standard (ISTD) Acceptance

The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

██████████ assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those

holding times expressed as days expire at midnight on the day of expiration.

Holding Time Specifications

All samples were originally analyzed within hold time. Some of the samples had to be re-analyzed more dilute and due to internal standard and surrogate failures. The re-analysis took place out of hold time. 115782003 (001), 115782006 (016), 115782007 (018), 115782008 (018) and 115782009 (025).

Sample Preservation and Integrity

All samples met the sample preservation and integrity requirements.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

TCLP samples are routinely analyzed at a 50X dilution to minimize the potential for system contamination. TCLP reporting limits are still met at a 50X dilution. Some of these samples had to be analyzed at a higher dilution. Samples were however analyzed at the lowest dilution possible without contaminating the instrument.

Sample Re-prep/Re-analysis

Sample 115782006, 007, 008 and 009 had to be re-analyzed due to low internal standard and surrogate recoveries. 115782006 (016), 115782007 (018), 115782008 (018) and 115782009 (025).

Miscellaneous Information

Nonconformance (NCR) Documentation

NCR ID 129468 The following NCR was generated for this SDG: NCR 129468 was generated due to Sample Analyzed out of Holding.

Manual Integrations

Manual integrations were performed as per SOP GEN 43, details are documented in the raw data.

TIC Comment

Tentatively identified compounds (TIC) were not required for this sample delivery group/work order.

Additional Comments

There were no additional comments.

Review Validation:

Initial VF Date 7/26/14

JUL 20 2012

Volatiles Case Narrative
Ohio Environmental Protection Agency (OEPA)
Work Order 115782
SDG 115782

Method/Analysis Information

Procedure: GC-MS Analysis of Volatiles 8260B
Analytical Method: SW846 8260B
Prep Method: SW846 5035
Analytical Batch Number: 347358
Prep Batch Number: 347357

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8260B:

Sample ID	Client ID
115782011	002
1200658896	Method Blank (MB)
1200658897	Laboratory Control Sample (LCS)
1200658898	115782011(002) Post Spike (PS)
1200658899	115782011(002) Post Spike Duplicate (PSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by ██████████ Laboratories of Ohio, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with ORG11 REV# 13.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by ██████████ Laboratories of Ohio, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Volatiles: GC-MS analysis was performed on a HP 5973 Mass Spectrometer.

Initial Calibration

All the initial calibration requirements were met.

Continuing Calibration Verification Requirements

All the calibration verification standard (CCV) requirements were met.

00057

Quality Control (QC) Information

Method Blank Acceptance

Target analytes were not detected above the reporting limit in the blank.

Surrogate Recovery

Surrogate recoveries in all samples and quality control samples were within the established acceptance limits.

Laboratory Control Sample Recovery Statement (LCS)

The LCS had low recovery for Bromomethane and Trichlorofluoromethane. These compounds are often low on Methanol prep samples. 1200658897 (LCS).

QC Sample Designation

Spike analyses were performed on the following sample: 115782011 (002).

Spike Recovery Statement

The MS and MSD had low recoveries for Bromomethane, Trichlorofluoromethane, Acetone and 2-Butanone. 1200658898 (002) and 1200658899 (002).

Spike Duplicate Recovery Statement

The MS and MSD had low recoveries for Bromomethane, Trichlorofluoromethane, Acetone and 2-Butanone. 1200658898 (002) and 1200658899 (002).

Relative Percent Difference Statement (RPD)

The %RPD failed for 2-Butanone and Acetone. 1200658898 (002) and 1200658899 (002).

Internal Standard (ISTD) Acceptance

The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Time Specifications

All the samples were prepared and/or analyzed within the required holding time period.

Sample Preservation and Integrity

All samples met the sample preservation and integrity requirements.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

This sample and QC samples were prepped by Methanol dilution and analyzed at a 50X dilution.

Sample Re-prep/Re-analysis

Reanalyses were not required for samples in this sample group/work order.

Miscellaneous Information

Nonconformance (NCR) Documentation

NCR 129035 was generated due to Failed Recovery for LCS/MS/PS, Failed RPD for LCS/LCSD, MS/MSD and or PS/PSD.

Manual Integrations

Manual integrations were performed as per SOP GEN 43, details are documented in the raw data.

TIC Comment

Tentatively identified compounds (TIC) were not required for this sample delivery group/work order.

Additional Comments

There were no additional comments.

Review Validation:

Initial VF Date 7/24/14

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection Agency
 Address : P.O. Box 1049
 Columbus, Ohio 43216

Report Date: July 26, 2004

Contact:
 Project:

Page 1 of 2

Client Sample ID: 028	Project: OHEP00304
Sample ID: 115782001	Client ID: OHEPA001
Matrix: Misc Solid	
Collect Date: 23-JUN-04 15:45	Client Desc.:
Receive Date: 25-JUN-04	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatiles Analysis											
<i>TCLP Volatiles in Solid</i>											
1,1-Dichloroethylene	U	ND	0.0112	0.050	mg/L	50	MW1	07/16/04	0102	347359	1
1,2-Dichloroethane	U	ND	0.0221	0.050	mg/L	50					
1,4-Dichlorobenzene	U	ND	0.0103	0.050	mg/L	50					
2-Butanone	U	ND	0.117	0.500	mg/L	50					
Benzene	U	ND	0.0171	0.050	mg/L	50					
Carbon tetrachloride	U	ND	0.0075	0.050	mg/L	50					
Chlorobenzene	U	ND	0.0178	0.050	mg/L	50					
Chloroform	U	ND	0.0166	0.050	mg/L	50					
Tetrachloroethylene	J	0.0113	0.0102	0.050	mg/L	50					
Trichloroethylene	U	ND	0.0151	0.050	mg/L	50					
Vinyl chloride	U	ND	0.00925	0.050	mg/L	50					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 1311	SW846 1311 TCLP Volatiles Prep Solids	MW1	07/06/04	1524	345667

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8260B	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	TCLP Volatiles in Solid	99	(78%-110%)
Bromofluorobenzene	TCLP Volatiles in Solid	106	(95%-108%)
Dibromofluoromethane	TCLP Volatiles in Solid	97	(79%-115%)
Toluene-d8	TCLP Volatiles in Solid	100	(94%-107%)

Notes:

The Qualifiers in this report are defined as follows :

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 26, 2004

Contact:
Project:

Page 2 of 2

Client Sample ID: 028
Sample ID: 115782001

Project: OHEP00304
Client ID: OHEPA001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with Laboratories of Ohio, LLC standard operating procedures. Please direct any questions to your Project Manager,



Reviewed by

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection Agency
 Address : P.O. Box 1049
 Columbus, Ohio 43216

Report Date: July 26, 2004

Contact:
 Project:

Page 1 of 2

Client Sample ID: RO-2
 Sample ID: 115782002
 Matrix: Misc Solid
 Collect Date: 24-JUN-04 11:10
 Receive Date: 25-JUN-04
 Collector: Client

Project: OHEP00304
 Client ID: OHEPA001

Client Desc.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatiles Analysis											
<i>TCLP Volatiles in Solid</i>											
1,1-Dichloroethylene	U	ND	0.0223	0.100	mg/L	100	MW1	07/16/04	0141	347359	1
1,2-Dichloroethane	U	ND	0.0442	0.100	mg/L	100					
1,4-Dichlorobenzene	U	ND	0.0205	0.100	mg/L	100					
2-Butanone		1.25	0.235	1.00	mg/L	100					
Benzene	U	ND	0.0342	0.100	mg/L	100					
Carbon tetrachloride	U	ND	0.015	0.100	mg/L	100					
Chlorobenzene	U	ND	0.0355	0.100	mg/L	100					
Chloroform	U	ND	0.0331	0.100	mg/L	100					
Tetrachloroethylene	J	0.0361	0.0203	0.100	mg/L	100					
Trichloroethylene	U	ND	0.0301	0.100	mg/L	100					
Vinyl chloride	J	0.201	0.0185	0.100	mg/L	100					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 1311	SW846 1311 TCLP Volatiles Prep Solids	MW1	07/06/04	1524	345667

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8260B	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	TCLP Volatiles in Solid	109	(78%-110%)
Bromofluorobenzene	TCLP Volatiles in Solid	118*	(95%-108%)
Dibromofluoromethane	TCLP Volatiles in Solid	115	(79%-115%)
Toluene-d8	TCLP Volatiles in Solid	116*	(94%-107%)

Notes:

The Qualifiers in this report are defined as follows :

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.

00062

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection
Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 26, 2004

Contact:
Project:

Page 2 of 2

Client Sample ID: -RO-2
Sample ID: 115782002

Project: OHEP00304
Client ID: OHEPA001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with Laboratories of Ohio, LLC standard operating procedures. Please direct any questions to your Project Manager,



Reviewed by

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection
 Agency
 Address : P.O. Box 1049
 Columbus, Ohio 43216

Report Date: July 24, 2004

Contact:
 Project:

Page 1 of 3

Client Sample ID: 002
 Sample ID: 115782011
 Matrix: Oil
 Collect Date: 24-JUN-04 09:30
 Receive Date: 25-JUN-04
 Collector: Client

Project: OHEP00304
 Client ID: OHEPA001

Client Desc.: Oil

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatiles Analysis											
<i>GEL 8260B Method List Soil</i>											
1,1,1,2-Tetrachloroethane	U	ND	11.1	97.5	ug/kg	50	MW1	07/08/04	2335	347358	1
1,1,1-Trichloroethane	U	ND	16.8	97.5	ug/kg	50					
1,1,2,2-Tetrachloroethane	U	ND	9.26	97.5	ug/kg	50					
1,1,2-Trichloroethane	U	ND	12.7	97.5	ug/kg	50					
1,1-Dichloroethane	U	ND	15.7	97.5	ug/kg	50					
1,1-Dichloroethylene	U	ND	14.2	97.5	ug/kg	50					
1,1-Dichloropropene	U	ND	15.7	97.5	ug/kg	50					
1,2,3-Trichlorobenzene	U	ND	21.5	97.5	ug/kg	50					
1,2,3-Trichloropropane	U	ND	29.1	97.5	ug/kg	50					
1,2,4-Trichlorobenzene	U	ND	19.0	97.5	ug/kg	50					
1,2,4-Trimethylbenzene	B	670	18.5	97.5	ug/kg	50					
1,2-Dibromo-3-chloropropane	U	ND	18.6	97.5	ug/kg	50					
1,2-Dibromoethane	U	ND	12.5	97.5	ug/kg	50					
1,2-Dichlorobenzene	U	ND	22.6	97.5	ug/kg	50					
1,2-Dichloroethane	U	ND	8.09	195	ug/kg	50					
1,2-Dichloropropane	U	ND	19.2	97.5	ug/kg	50					
1,3,5-Trimethylbenzene	U	159	11.1	97.5	ug/kg	50					
1,3-Dichlorobenzene	U	ND	14.2	97.5	ug/kg	50					
1,3-Dichloropropane	U	ND	15.6	97.5	ug/kg	50					
1,4-Dichlorobenzene	U	ND	20.6	97.5	ug/kg	50					
2,2-Dichloropropane	U	ND	14.9	97.5	ug/kg	50					
2-Butanone	B	1390	245	975	ug/kg	50					
2-Chlorotoluene	U	ND	13.0	97.5	ug/kg	50					
2-Hexanone	U	ND	88.7	975	ug/kg	50					
4-Chlorotoluene	U	ND	16.3	97.5	ug/kg	50					
4-Isopropyltoluene	U	246	15.2	97.5	ug/kg	50					
4-Methyl-2-pentanone	U	ND	16.9	975	ug/kg	50					
Acetone	U	5270	336	1950	ug/kg	50					
Benzene	U	ND	19.7	97.5	ug/kg	50					
Bromobenzene	U	ND	16.0	97.5	ug/kg	50					
Bromochloromethane	U	ND	22.7	97.5	ug/kg	50					
Bromodichloromethane	U	ND	13.0	97.5	ug/kg	50					
Bromoform	U	ND	11.1	195	ug/kg	50					
Bromomethane	U	ND	21.2	195	ug/kg	50					
Carbon disulfide	U	ND	13.5	195	ug/kg	50					
Carbon tetrachloride	U	ND	10.8	97.5	ug/kg	50					
Chlorobenzene	U	ND	9.26	97.5	ug/kg	50					

00064

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection
Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 24, 2004

Contact:
Project:

Page 2 of 3

Client Sample ID: 002
Sample ID: 115782011

Project: OHEP00304
Client ID: OHEPA001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatiles Analysis											
<i>GEL 8260B Method List Soil</i>											
Chloroethane	U	ND	20.2	97.5	ug/kg	50					
Chloroform		3050	18.1	97.5	ug/kg	50					
Chloromethane	U	ND	17.3	97.5	ug/kg	50					
Dibromochloromethane	U	ND	11.8	97.5	ug/kg	50					
Dibromomethane	U	ND	15.5	97.5	ug/kg	50					
Dichlorodifluoromethane	U	ND	10.7	97.5	ug/kg	50					
Ethylbenzene	J	89.9	16.6	97.5	ug/kg	50					
Hexachlorobutadiene	U	ND	25.4	97.5	ug/kg	50					
Isopropylbenzene	J	24.2	16.8	97.5	ug/kg	50					
Methylene chloride	U	ND	21.0	97.5	ug/kg	50					
Naphthalene	B	121	28.8	97.5	ug/kg	50					
Styrene	BJ	20.5	12.9	195	ug/kg	50					
Tetrachloroethylene	U	ND	18.3	97.5	ug/kg	50					
Toluene	BJ	159	30.6	195	ug/kg	50					
Trichloroethylene	U	ND	16.2	97.5	ug/kg	50					
Trichlorofluoromethane	U	ND	9.06	97.5	ug/kg	50					
Vinyl chloride	U	ND	14.3	97.5	ug/kg	50					
Xylenes (total)		408	64.4	292	ug/kg	50					
cis-1,2-Dichloroethylene	U	ND	18.0	97.5	ug/kg	50					
cis-1,3-Dichloropropylene	U	ND	13.0	97.5	ug/kg	50					
m,p-Xylenes		290	45.5	195	ug/kg	50					
n-Butylbenzene		158	15.3	97.5	ug/kg	50					
n-Propylbenzene	J	77.2	15.3	97.5	ug/kg	50					
o-Xylene		118	18.9	97.5	ug/kg	50					
sec-Butylbenzene	J	52.8	13.8	97.5	ug/kg	50					
tert-Butyl methyl ether	U	ND	11.4	195	ug/kg	50					
tert-Butylbenzene	U	ND	12.8	97.5	ug/kg	50					
trans-1,2-Dichloroethylene	U	ND	20.5	97.5	ug/kg	50					
trans-1,3-Dichloropropylene	U	ND	13.0	97.5	ug/kg	50					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 5035	5035/8260B Prep Solids	MW1	07/08/04	1505	347357

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8260B	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	8260B Method List Soil	103	(74%-121%)

00065

LABORATORIES OF OHIO, LLC

Certificate of Analysis

Company : Ohio Environmental Protection
Agency
Address : P.O. Box 1049
Columbus, Ohio 43216

Report Date: July 24, 2004

Contact:
Project:

Page 3 of 3

Client Sample ID: 002
Sample ID: 115782011

Project: OHEP00304
Client ID: OHEPA001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Bromofluorobenzene		8260B Method List Soil			108	(85%-128%)				
Dibromofluoromethane		8260B Method List Soil			99	(86%-114%)				
Toluene-d8		8260B Method List Soil			92	(80%-120%)				

Notes:

The Qualifiers in this report are defined as follows :

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- P The concentration between the confirmation column and the primary column is >40 RPD for EPA methods 808 1A, 8082 & 608.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with Laboratories of Ohio, LLC standard operating procedures. Please direct any questions to your Project Manager, [redacted].

Reviewed by _____

00066

LABORATORIES OF OHIO, LLC

QC Summary

Report Date: July 26, 2004

Page 1 of 3

Client: Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio

Contact:

Workorder: 115782

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Antst	Date	Time
Volatiles: GC-MS											
Batch 347359											
QC1200658905											
1,1-Dichloroethylene	0.050			2.19	mg/L		88	(72%-126%)	MW1	07/15/04	19:51
1,2-Dichloroethane	0.050			2.25	mg/L		90	(67%-116%)			
1,4-Dichlorobenzene	0.050			2.08	mg/L		83	(52%-163%)			
2-Butanone	0.050			1.74	mg/L		70	(58%-125%)			
Benzene	0.050			2.37	mg/L		95	(78%-130%)			
Carbon tetrachloride	0.050			2.48	mg/L		99	(67%-120%)			
Chlorobenzene	0.050			2.32	mg/L		93	(79%-112%)			
Chloroform	0.050			2.35	mg/L		94	(69%-117%)			
Tetrachloroethylene	0.050			2.11	mg/L		84	(79%-119%)			
Trichloroethylene	0.050			2.29	mg/L		92	(77%-118%)			
Vinyl chloride	0.050			1.96	mg/L		79	(66%-125%)			
**1,2-Dichloroethane-d4	0.050			2.18	mg/L		87	(78%-110%)			
**Bromofluorobenzene	0.050			2.57	mg/L		103	(95%-108%)			
**Dibromofluoromethane	0.050			2.38	mg/L		95	(79%-115%)			
**Toluene-d8	0.050			2.55	mg/L		102	(94%-107%)			
QC1200658906	115782001	PS									
1,1-Dichloroethylene	50.0	U	ND	41.8	ug/L		84	(72%-126%)		07/15/04	20:29
1,2-Dichloroethane	50.0	U	ND	43.7	ug/L		87	(67%-116%)			
1,4-Dichlorobenzene	50.0	U	ND	42.0	ug/L		84	(52%-163%)			
2-Butanone	50.0	U	ND	32.1	ug/L		64	(58%-125%)			
Benzene	50.0	U	ND	46.7	ug/L		93	(78%-130%)			
Carbon tetrachloride	50.0	U	ND	48.1	ug/L		96	(67%-120%)			
Chlorobenzene	50.0	U	ND	45.8	ug/L		92	(79%-112%)			
Chloroform	50.0	U	ND	46.4	ug/L		93	(69%-117%)			
Tetrachloroethylene	50.0	J	0.226	41.9	ug/L		83	(79%-119%)			
Trichloroethylene	50.0	U	ND	44.6	ug/L		89	(77%-118%)			
Vinyl chloride	50.0	U	ND	38.2	ug/L		77	(66%-125%)			
**1,2-Dichloroethane-d4	50.0		49.3	42.7	ug/L		86	(78%-110%)			
**Bromofluorobenzene	50.0		53.2	49.9	ug/L		100	(95%-108%)			
**Dibromofluoromethane	50.0		48.6	48.0	ug/L		96	(79%-115%)			
**Toluene-d8	50.0		50.0	50.9	ug/L		102	(94%-107%)			
QC1200658907	115782001	PSD									
1,1-Dichloroethylene	50.0	U	ND	42.6	ug/L	2	85	(0%-30%)		07/15/04	21:09
1,2-Dichloroethane	50.0	U	ND	44.1	ug/L	1	88	(0%-30%)			
1,4-Dichlorobenzene	50.0	U	ND	42.7	ug/L	2	85	(0%-30%)			
2-Butanone	50.0	U	ND	32.9	ug/L	2	66	(0%-30%)			
Benzene	50.0	U	ND	48.2	ug/L	3	96	(0%-30%)			
Carbon tetrachloride	50.0	U	ND	50.9	ug/L	6	102	(0%-30%)			
Chlorobenzene	50.0	U	ND	47.0	ug/L	3	94	(0%-30%)			
Chloroform	50.0	U	ND	46.8	ug/L	1	94	(0%-30%)			
Tetrachloroethylene	50.0	J	0.226	43.0	ug/L	3	86	(0%-30%)			
Trichloroethylene	50.0	U	ND	46.5	ug/L	4	93	(0%-30%)			

00067

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 2 of 3

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Velatiles: GC-MS											
Batch	347399										
Vinyl chloride	50.0	U	ND	38.9	ug/L	2	78	(0%-30%)			
*1,2-Dichloroethane-d4	50.0		49.3	41.9	ug/L		84	(78%-110%)	MW1	07/15/04	21:09
*Bromofluorobenzene	50.0		53.2	51.0	ug/L		102	(95%-108%)			
*Dibromofluoromethane	50.0		48.6	47.2	ug/L		94	(79%-115%)			
*Toluene-d8	50.0		50.0	50.7	ug/L		101	(94%-107%)			
QC1200654868											
1,1-Dichloroethylene			U	ND	mg/L					07/15/04	23:03
1,2-Dichloroethane			U	ND	mg/L						
1,4-Dichlorobenzene			J	0.0209	mg/L						
2-Butanone			U	ND	mg/L						
Benzene			U	ND	mg/L						
Carbon tetrachloride			U	ND	mg/L						
Chlorobenzene			U	ND	mg/L						
Chloroform			U	ND	mg/L						
Tetrachloroethylene			J	0.013	mg/L						
Trichloroethylene			U	ND	mg/L						
Vinyl chloride			U	ND	mg/L						
**1,2-Dichloroethane-d4	0.050			2.48	mg/L		99	(78%-110%)			
**Bromofluorobenzene	0.050			2.62	mg/L		105	(95%-108%)			
**Dibromofluoromethane	0.050			2.43	mg/L		97	(79%-115%)			
**Toluene-d8	0.050			2.48	mg/L		99	(94%-107%)			

Notes:

The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- P The concentration between the confirmation column and the primary column is >40 RPD for EPA methods 8081A, 8082 & 608.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

00068

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 3 of 3

Paramname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
-----------	-----	-------------	----	-------	------	------	-------	-------	------	------

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

00069

LABORATORIES OF OHIO, LLC

QC Summary

Report Date: July 24, 2004

Page 1 of 7

Client: Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio

Contact:

Workorder: 115782

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Asst	Date Time
Volatiles GC-MS										
Batch 347358										
QC1200658897 LCS										
1,1,1,2-Tetrachloroethane	5000			5980	ug/kg		120	(64%-122%)	MW1	07/08/04 17:38
1,1,1-Trichloroethane	5000			5420	ug/kg		108	(60%-131%)		
1,1,2,2-Tetrachloroethane	5000			4120	ug/kg		82	(36%-143%)		
1,1,2-Trichloroethane	5000			5090	ug/kg		102	(62%-123%)		
1,1-Dichloroethane	5000			5250	ug/kg		105	(59%-133%)		
1,1-Dichloroethylene	5000			4210	ug/kg		84	(45%-129%)		
1,1-Dichloropropene	5000			5600	ug/kg		112	(63%-136%)		
1,2,3-Trichlorobenzene	5000			5540	ug/kg		111	(57%-126%)		
1,2,3-Trichloropropane	5000			4810	ug/kg		96	(58%-131%)		
1,2,4-Trichlorobenzene	5000			5800	ug/kg		116	(52%-126%)		
1,2,4-Trimethylbenzene	5000		B	5720	ug/kg		114	(64%-118%)		
1,2-Dibromo-3-chloropropane	5000			4080	ug/kg		82	(62%-129%)		
1,2-Dibromoethane	5000			4980	ug/kg		100	(69%-124%)		
1,2-Dichlorobenzene	5000			5130	ug/kg		103	(71%-123%)		
1,2-Dichloroethane	5000			4920	ug/kg		98	(58%-134%)		
1,2-Dichloropropane	5000			5550	ug/kg		111	(57%-139%)		
1,3,5-Trimethylbenzene	5000			5700	ug/kg		114	(64%-122%)		
1,3-Dichlorobenzene	5000			5450	ug/kg		109	(68%-121%)		
1,3-Dichloropropane	5000			4930	ug/kg		99	(65%-129%)		
1,4-Dichlorobenzene	5000			5160	ug/kg		103	(69%-116%)		
2,2-Dichloropropane	5000			5590	ug/kg		112	(62%-135%)		
2-Butanone	5000		B	4200	ug/kg		84	(35%-149%)		
2-Chlorotoluene	5000			5280	ug/kg		106	(62%-128%)		
2-Hexanone	5000			4490	ug/kg		90	(57%-126%)		
4-Chlorotoluene	5000			5450	ug/kg		109	(67%-127%)		
4-Isopropyltoluene	5000			5750	ug/kg		115	(59%-118%)		
4-Methyl-2-pentanone	5000		B	4520	ug/kg		90	(58%-128%)		
Acetone	5000			5360	ug/kg		107	(44%-181%)		
Benzene	5000			5300	ug/kg		106	(56%-133%)		
Bromobenzene	5000			5490	ug/kg		110	(68%-123%)		
Bromochloromethane	5000			5450	ug/kg		109	(68%-141%)		
Bromodichloromethane	5000			5650	ug/kg		113	(53%-138%)		
Bromoform	5000			5430	ug/kg		109	(40%-146%)		
Bromomethane	5000			1550	ug/kg		31*	(41%-163%)		
Carbon disulfide	5000			4120	ug/kg		82	(45%-135%)		
Carbon tetrachloride	5000			5450	ug/kg		109	(58%-132%)		
Chlorobenzene	5000			5300	ug/kg		106	(59%-125%)		
Chloroethane	5000			985	ug/kg		20*	(51%-145%)		
Chloroform	5000			5410	ug/kg		108	(59%-133%)		
Chloromethane	5000			4520	ug/kg		90	(58%-134%)		
Dibromochloromethane	5000			5510	ug/kg		110	(62%-125%)		
Dibromomethane	5000			5060	ug/kg		101	(74%-133%)		

00070

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 2 of 7

Parname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anst	Date Time
Volfiles: GC-MS									
Batch 347358									
Dichlorodifluoromethane	5000		4650	ug/kg		93	(35%-135%)		
Ethylbenzene	5000		5400	ug/kg		108	(56%-129%)	MW1	07/08/04 17:38
Hexachlorobutadiene	5000		5750	ug/kg		115	(56%-121%)		
Isopropylbenzene	5000		5770	ug/kg		115	(55%-134%)		
Methylene chloride	5000		5140	ug/kg		103	(58%-131%)		
Naphthalene	5000	B	4420	ug/kg		88	(45%-127%)		
Styrene	5000	B	5770	ug/kg		115	(60%-129%)		
Tetrachloroethylene	5000		5290	ug/kg		106	(65%-129%)		
Toluene	5000	B	4680	ug/kg		94	(56%-124%)		
Trichloroethylene	5000		5660	ug/kg		113	(43%-143%)		
Trichlorofluoromethane	5000		3760	ug/kg		75	(39%-147%)		
Vinyl chloride	5000		4890	ug/kg		98	(46%-135%)		
Xylenes (total)	15000		16300	ug/kg		109	(54%-129%)		
cis-1,2-Dichloroethylene	5000		5450	ug/kg		109	(46%-150%)		
cis-1,3-Dichloropropylene	5000		5930	ug/kg		119	(69%-133%)		
m,p-Xylenes	10000		10700	ug/kg		107	(54%-129%)		
n-Butylbenzene	5000		5880	ug/kg		118*	(56%-115%)		
n-Propylbenzene	5000		5600	ug/kg		112	(64%-126%)		
o-Xylene	5000		5530	ug/kg		111	(59%-128%)		
sec-Butylbenzene	5000		5780	ug/kg		116	(59%-124%)		
tert-Butyl methyl ether	5000		4850	ug/kg		97	(53%-147%)		
tert-Butylbenzene	5000		5730	ug/kg		115	(59%-125%)		
trans-1,2-Dichloroethylene	5000		5240	ug/kg		105	(39%-138%)		
trans-1,3-Dichloropropylene	5000		5650	ug/kg		113	(56%-130%)		
**1,2-Dichloroethane-d4	5000		4460	ug/kg		89	(74%-121%)		
**Bromofluorobenzene	5000		5080	ug/kg		102	(85%-128%)		
**Dibromofluoromethane	5000		4890	ug/kg		98	(86%-114%)		
**Toluene-d8	5000		4650	ug/kg		93	(80%-120%)		
QC1200658396 MB									
1,1,1,2-Tetrachloroethane		U	ND	ug/kg					07/08/04 21:25
1,1,1-Trichloroethane		U	ND	ug/kg					
1,1,2,2-Tetrachloroethane		U	ND	ug/kg					
1,1,2-Trichloroethane		U	ND	ug/kg					
1,1-Dichloroethane		U	ND	ug/kg					
1,1-Dichloroethylene		U	ND	ug/kg					
1,1-Dichloropropene		U	ND	ug/kg					
1,2,3-Trichlorobenzene		U	ND	ug/kg					
1,2,3-Trichloropropane		U	ND	ug/kg					
1,2,4-Trichlorobenzene		U	ND	ug/kg					
1,2,4-Trimethylbenzene		J	22.1	ug/kg					
1,2-Dibromo-3-chloropropane		U	ND	ug/kg					
1,2-Dibromoethane		U	ND	ug/kg					
1,2-Dichlorobenzene		U	ND	ug/kg					
1,2-Dichloroethane		U	ND	ug/kg					
1,2-Dichloropropane		U	ND	ug/kg					
1,3,5-Trimethylbenzene		U	ND	ug/kg					
1,3-Dichlorobenzene		U	ND	ug/kg					
1,3-Dichloropropane		U	ND	ug/kg					

00071

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 3 of 7

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Volatiles: GC-MS										
Batch	347358									
1,4-Dichlorobenzene			U	ND	ug/kg					
2,2-Dichloropropane			U	ND	ug/kg				MW1	07/08/04 21:25
2-Butanone			J	788	ug/kg					
2-Chlorotoluene			U	ND	ug/kg					
2-Hexanone			U	ND	ug/kg					
4-Chlorotoluene			U	ND	ug/kg					
4-Isopropyltoluene			U	ND	ug/kg					
4-Methyl-2-pentanone			J	27.3	ug/kg					
Acetone			U	ND	ug/kg					
Benzene			U	ND	ug/kg					
Bromobenzene			U	ND	ug/kg					
Bromochloromethane			U	ND	ug/kg					
Bromodichloromethane			U	ND	ug/kg					
Bromoform			U	ND	ug/kg					
Bromomethane			U	ND	ug/kg					
Carbon disulfide			U	ND	ug/kg					
Carbon tetrachloride			U	ND	ug/kg					
Chlorobenzene			U	ND	ug/kg					
Chloroethane			U	ND	ug/kg					
Chloroform			U	ND	ug/kg					
Chloromethane			U	ND	ug/kg					
Dibromochloromethane			U	ND	ug/kg					
Dibromomethane			U	ND	ug/kg					
Dichlorodifluoromethane			U	ND	ug/kg					
Ethylbenzene			U	ND	ug/kg					
Hexachlorobutadiene			U	ND	ug/kg					
Isopropylbenzene			U	ND	ug/kg					
Methylene chloride			U	ND	ug/kg					
Naphthalene			J	31.4	ug/kg					
Styrene			J	13.5	ug/kg					
Tetrachloroethylene			U	ND	ug/kg					
Toluene			J	46.0	ug/kg					
Trichloroethylene			U	ND	ug/kg					
Trichlorofluoromethane			U	ND	ug/kg					
Vinyl chloride			U	ND	ug/kg					
Xylenes (total)			U	ND	ug/kg					
cis-1,2-Dichloroethylene			U	ND	ug/kg					
cis-1,3-Dichloropropylene			U	ND	ug/kg					
m,p-Xylenes			U	ND	ug/kg					
n-Butylbenzene			U	ND	ug/kg					
n-Propylbenzene			U	ND	ug/kg					
o-Xylene			U	ND	ug/kg					
sec-Butylbenzene			U	ND	ug/kg					
tert-Butyl methyl ether			U	ND	ug/kg					
tert-Butylbenzene			U	ND	ug/kg					
trans-1,2-Dichloroethylene			U	ND	ug/kg					
trans-1,3-Dichloropropylene			U	ND	ug/kg					
**1,2-Dichloroethane-d4	50.0			5030	ug/kg		101	(74%-121%)		

00072

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 4 of 7

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Volatiles: GC-MS											
Batch 347358											
**Bromofluorobenzene	50.0			5330	ug/kg		107	(85%-128%)			
**Dibromofluoromethane	50.0			4930	ug/kg		99	(86%-114%)	MW1	07/08/04	21:25
**Toluene-d8	50.0			4550	ug/kg		91	(80%-120%)			
QC1200658898 115782011 PS											
1,1,1,2-Tetrachloroethane	50.0	U	ND	52.5	ug/L		105	(64%-122%)		07/08/04	19:15
1,1,1-Trichloroethane	50.0	U	ND	47.5	ug/L		95	(60%-131%)			
1,1,2,2-Tetrachloroethane	50.0	U	ND	38.9	ug/L		78	(36%-143%)			
1,1,2-Trichloroethane	50.0	U	ND	44.2	ug/L		88	(62%-123%)			
1,1-Dichloroethane	50.0	U	ND	47.3	ug/L		95	(59%-133%)			
1,1-Dichloroethylene	50.0	U	ND	38.0	ug/L		76	(45%-129%)			
1,1-Dichloropropene	50.0	U	ND	48.8	ug/L		98	(63%-136%)			
1,2,3-Trichlorobenzene	50.0	U	ND	41.2	ug/L		83	(57%-126%)			
1,2,3-Trichloropropane	50.0	U	ND	42.9	ug/L		86	(58%-131%)			
1,2,4-Trichlorobenzene	50.0	U	ND	44.7	ug/L		90	(52%-126%)			
1,2,4-Trimethylbenzene	50.0	B	6.88	B 58.0	ug/L		102	(64%-118%)			
1,2-Dibromo-3-chloropropane	50.0	U	ND	40.2	ug/L		80	(62%-129%)			
1,2-Dibromoethane	50.0	U	ND	43.6	ug/L		87	(69%-124%)			
1,2-Dichlorobenzene	50.0	U	ND	46.9	ug/L		94	(71%-123%)			
1,2-Dichloroethane	50.0	U	ND	43.6	ug/L		87	(58%-134%)			
1,2-Dichloropropane	50.0	U	ND	49.3	ug/L		99	(57%-139%)			
1,3,5-Trimethylbenzene	50.0	U	1.63	52.3	ug/L		101	(64%-122%)			
1,3-Dichlorobenzene	50.0	U	ND	49.3	ug/L		99	(68%-121%)			
1,3-Dichloropropane	50.0	U	ND	44.2	ug/L		89	(65%-129%)			
1,4-Dichlorobenzene	50.0	U	ND	46.6	ug/L		93	(69%-116%)			
2,2-Dichloropropane	50.0	U	ND	48.6	ug/L		97	(62%-135%)			
2-Butanone	50.0	B	14.3	B 38.1	ug/L		48*	(55%-149%)			
2-Chlorotoluene	50.0	U	ND	48.4	ug/L		97	(62%-128%)			
2-Hexanone	50.0	U	ND	38.1	ug/L		76	(57%-126%)			
4-Chlorotoluene	50.0	U	ND	50.0	ug/L		100	(67%-127%)			
4-Isopropyltoluene	50.0	U	2.53	52.1	ug/L		99	(59%-118%)			
4-Methyl-2-pentanone	50.0	U	ND	B 38.0	ug/L		76	(58%-128%)			
Acetone	50.0	U	54.1	65.8	ug/L		24*	(44%-181%)			
Benzene	50.0	U	ND	48.2	ug/L		97	(56%-133%)			
Bromobenzene	50.0	U	ND	49.6	ug/L		99	(68%-123%)			
Bromochloromethane	50.0	U	ND	48.4	ug/L		97	(68%-141%)			
Bromodichloromethane	50.0	U	ND	49.0	ug/L		98	(53%-138%)			
Bromoform	50.0	U	ND	47.3	ug/L		95	(40%-146%)			
Bromomethane	50.0	U	ND	14.7	ug/L		29*	(41%-163%)			
Carbon disulfide	50.0	U	ND	37.7	ug/L		75	(45%-135%)			
Carbon tetrachloride	50.0	U	ND	47.4	ug/L		95	(58%-132%)			
Chlorobenzene	50.0	U	ND	47.9	ug/L		96	(59%-125%)			
Chloroethane	50.0	U	ND	9.31	ug/L		19*	(51%-145%)			
Chloroform	50.0	U	31.3	73.8	ug/L		85	(59%-133%)			
Chloromethane	50.0	U	ND	40.5	ug/L		81	(58%-134%)			
Dibromochloromethane	50.0	U	ND	47.3	ug/L		95	(62%-125%)			
Dibromomethane	50.0	U	ND	44.2	ug/L		88	(74%-133%)			
Dichlorodifluoromethane	50.0	U	ND	39.9	ug/L		80	(35%-135%)			
Ethylbenzene	50.0	J	0.922	49.9	ug/L		98	(56%-129%)			

00073

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 5 of 7

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anist	Date Time
Volatiles: GC-MS										
Batch 347358										
Hexachlorobutadiene	50.0	U	ND	32.9	ug/L		66	(56%-121%)		
Isopropylbenzene	50.0	J	0.249	51.8	ug/L		103	(55%-134%)	MWI	07/08/04 19:15
Methylene chloride	50.0	U	ND	47.4	ug/L		95	(58%-131%)		
Naphthalene	50.0	B	1.24	B 38.9	ug/L		75	(45%-127%)		
Styrene	50.0	BJ	0.210	B 52.5	ug/L		105	(60%-129%)		
Tetrachloroethylene	50.0	U	ND	48.6	ug/L		97	(65%-129%)		
Toluene	50.0	BJ	1.63	B 45.1	ug/L		87	(56%-124%)		
Trichloroethylene	50.0	U	ND	49.1	ug/L		98	(43%-143%)		
Trichlorofluoromethane	50.0	U	ND	31.6	ug/L		63	(39%-147%)		
Vinyl chloride	50.0	U	ND	43.1	ug/L		86	(46%-135%)		
Xylenes (total)	150		4.19	152	ug/L		98	(54%-129%)		
cis-1,2-Dichloroethylene	50.0	U	ND	48.8	ug/L		98	(46%-150%)		
cis-1,3-Dichloropropylene	50.0	U	ND	51.2	ug/L		102	(69%-133%)		
m,p-Xylenes	100		2.98	101	ug/L		98	(54%-129%)		
n-Butylbenzene	50.0		1.62	51.1	ug/L		99	(56%-115%)		
n-Propylbenzene	50.0	J	0.792	50.9	ug/L		100	(64%-126%)		
o-Xylene	50.0		1.21	51.3	ug/L		100	(59%-128%)		
sec-Butylbenzene	50.0	J	0.542	50.4	ug/L		100	(59%-124%)		
tert-Butyl methyl ether	50.0	U	ND	42.3	ug/L		85	(53%-147%)		
tert-Butylbenzene	50.0	U	ND	50.6	ug/L		101	(59%-125%)		
trans-1,2-Dichloroethylene	50.0	U	ND	47.2	ug/L		94	(39%-138%)		
trans-1,3-Dichloropropylene	50.0	U	ND	50.1	ug/L		100	(56%-130%)		
**1,2-Dichloroethane-d4	50.0		51.6	42.9	ug/L		86	(74%-121%)		
**Bromofluorobenzene	50.0		54.0	51.3	ug/L		103	(85%-128%)		
**Dibromofluoromethane	50.0		49.7	47.5	ug/L		95	(86%-114%)		
**Toluene-d8	50.0		46.2	49.1	ug/L		98	(80%-120%)		
QC1200658899 115782011 PSD										
1,1,1,2-Tetrachloroethane	50.0	U	ND	55.2	ug/L	5	110	(0%-30%)		07/08/04 19:48
1,1,1-Trichloroethane	50.0	U	ND	50.1	ug/L	5	100	(0%-30%)		
1,1,2,2-Tetrachloroethane	50.0	U	ND	46.6	ug/L	18	93	(0%-30%)		
1,1,2-Trichloroethane	50.0	U	ND	49.6	ug/L	12	99	(0%-30%)		
1,1-Dichloroethane	50.0	U	ND	49.9	ug/L	5	100	(0%-30%)		
1,1-Dichloroethylene	50.0	U	ND	38.7	ug/L	2	78	(0%-30%)		
1,1-Dichloropropene	50.0	U	ND	51.9	ug/L	6	104	(0%-30%)		
1,2,3-Trichlorobenzene	50.0	U	ND	39.5	ug/L	4	79	(0%-30%)		
1,2,3-Trichloropropane	50.0	U	ND	52.7	ug/L	21	105	(0%-30%)		
1,2,4-Trichlorobenzene	50.0	U	ND	42.5	ug/L	5	85	(0%-30%)		
1,2,4-Trimethylbenzene	50.0	B	6.88	B 60.2	ug/L	4	107	(0%-30%)		
1,2-Dibromo-3-chloropropane	50.0	U	ND	47.8	ug/L	17	96	(0%-30%)		
1,2-Dibromoethane	50.0	U	ND	49.7	ug/L	13	99	(0%-30%)		
1,2-Dichlorobenzene	50.0	U	ND	49.1	ug/L	5	98	(0%-30%)		
1,2-Dichloroethane	50.0	U	ND	47.2	ug/L	8	94	(0%-30%)		
1,2-Dichloropropane	50.0	U	ND	52.2	ug/L	6	104	(0%-30%)		
1,3,5-Trimethylbenzene	50.0		1.63	53.6	ug/L	3	104	(0%-30%)		
1,3-Dichlorobenzene	50.0	U	ND	51.0	ug/L	3	102	(0%-30%)		
1,3-Dichloropropane	50.0	U	ND	48.7	ug/L	10	97	(0%-30%)		
1,4-Dichlorobenzene	50.0	U	ND	48.1	ug/L	3	96	(0%-30%)		
2,2-Dichloropropane	50.0	U	ND	51.4	ug/L	6	103	(0%-30%)		

00074

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 6 of 7

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlist	Date	Time
Volatiles: GC-MS											
Batch 347358											
2-Butanone	50.0	B	14.3	B	50.1	ug/L	40*	72	(0%-30%)		
2-Chlorotoluene	50.0	U	ND		51.0	ug/L	5	102	(0%-30%)	MWI	07/08/04 19:48
2-Hexanone	50.0	U	ND		48.2	ug/L	24	97	(0%-30%)		
4-Chlorotoluene	50.0	U	ND		52.0	ug/L	4	104	(0%-30%)		
4-Isopropyltoluene	50.0		2.53		50.5	ug/L	3	96	(0%-30%)		
4-Methyl-2-pentanone	50.0	U	ND	B	49.0	ug/L	25	98	(0%-30%)		
Acetone	50.0		54.1		89.1	ug/L	99*	70	(0%-30%)		
Benzene	50.0	U	ND		50.9	ug/L	5	102	(0%-30%)		
Bromobenzene	50.0	U	ND		54.4	ug/L	9	109	(0%-30%)		
Bromochloromethane	50.0	U	ND		53.1	ug/L	9	106	(0%-30%)		
Bromodichloromethane	50.0	U	ND		51.9	ug/L	6	104	(0%-30%)		
Bromoform	50.0	U	ND		56.3	ug/L	17	113	(0%-30%)		
Bromomethane	50.0	U	ND		15.0	ug/L	2	30*	(0%-30%)		
Carbon disulfide	50.0	U	ND		38.1	ug/L	1	76	(0%-30%)		
Carbon tetrachloride	50.0	U	ND		50.3	ug/L	6	101	(0%-30%)		
Chlorobenzene	50.0	U	ND		50.3	ug/L	5	101	(0%-30%)		
Chloroethane	50.0	U	ND		9.18	ug/L	1	18*	(0%-30%)		
Chloroform	50.0		31.3		87.5	ug/L	28	112	(0%-30%)		
Chloromethane	50.0	U	ND		44.1	ug/L	8	88	(0%-30%)		
Dibromochloromethane	50.0	U	ND		51.8	ug/L	9	104	(0%-30%)		
Dibromomethane	50.0	U	ND		48.7	ug/L	10	97	(0%-30%)		
Dichlorodifluoromethane	50.0	U	ND		43.9	ug/L	10	88	(0%-30%)		
Ethylbenzene	50.0	J	0.922		52.1	ug/L	4	102	(0%-30%)		
Hexachlorobutadiene	50.0	U	ND		26.0	ug/L	23	52*	(0%-30%)		
Isopropylbenzene	50.0	J	0.249		54.8	ug/L	6	109	(0%-30%)		
Methylene chloride	50.0	U	ND		50.0	ug/L	5	100	(0%-30%)		
Naphthalene	50.0	B	1.24	B	41.0	ug/L	6	80	(0%-30%)		
Styrene	50.0	BJ	0.210	B	54.6	ug/L	4	109	(0%-30%)		
Tetrachloroethylene	50.0	U	ND		50.6	ug/L	4	101	(0%-30%)		
Toluene	50.0	BJ	1.63	B	47.2	ug/L	5	91	(0%-30%)		
Trichloroethylene	50.0	U	ND		52.1	ug/L	6	104	(0%-30%)		
Trichlorofluoromethane	50.0	U	ND		32.2	ug/L	2	64	(0%-30%)		
Vinyl chloride	50.0	U	ND		47.2	ug/L	9	94	(0%-30%)		
Xylenes (total)	150		4.19		159	ug/L	4	103	(0%-30%)		
cis-1,2-Dichloroethylene	50.0	U	ND		51.7	ug/L	6	103	(0%-30%)		
cis-1,3-Dichloropropylene	50.0	U	ND		54.7	ug/L	6	109	(0%-30%)		
m,p-Xylenes	100		2.98		105	ug/L	5	102	(0%-30%)		
n-Butylbenzene	50.0		1.62		47.4	ug/L	8	92	(0%-30%)		
n-Propylbenzene	50.0	J	0.792		52.7	ug/L	4	104	(0%-30%)		
o-Xylene	50.0		1.21		53.5	ug/L	4	105	(0%-30%)		
sec-Butylbenzene	50.0	J	0.542		49.2	ug/L	2	97	(0%-30%)		
tert-Butyl methyl ether	50.0	U	ND		47.1	ug/L	11	94	(0%-30%)		
tert-Butylbenzene	50.0	U	ND		51.0	ug/L	1	102	(0%-30%)		
trans-1,2-Dichloroethylene	50.0	U	ND		50.2	ug/L	6	100	(0%-30%)		
trans-1,3-Dichloropropylene	50.0	U	ND		54.5	ug/L	8	109	(0%-30%)		
**1,2-Dichloroethane-d4	50.0		51.6		45.8	ug/L		92	(74%-121%)		
**Bromofluorobenzene	50.0		54.0		53.5	ug/L		107	(85%-128%)		
**Dibromofluoromethane	50.0		49.7		48.8	ug/L		98	(86%-114%)		

00075

LABORATORIES OF OHIO, LLC

QC Summary

Workorder: 115782

Page 7 of 7

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anst	Date	Time
Volatiles: GC-MS											
Batch 347358											
**Toluene-d8	50.0	46.2		48.3	ug/L		97	(80%-120%)			

Notes:

The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J The result was greater than the MDL, but less than the RL and is an estimated value. Values below a CRDL are also flagged.
- P The concentration between the confirmation column and the primary column is >40 RPD for EPA methods 8081A, 8082 & 608.
- U Indicates the target analyte was analyzed for but not detected above the MDL.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your Project Manager for details.
- h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

00076

VOA GCMS# 2

LABORATORIES OF OHIO, LLC

VOLATILES SAMPLE PREP LOGBOOK

Date Loading 7-23-09 Prep Batch # 345667 Analyst: JLW

IS/SS ID 115782001 Analytical Batch # 347309 Reviewed by: [Signature]

Sample ID	Container Number	Description	Sample Vol (g or mL)	Final Volume (mL)	Standard ID and Volume	pH	Residual Chlorine	Dilution	Comments
1		Blank	100ul	5ml		5	N/A	none	
2	72	Sample	20ul			5			
3			5ul			5			
4			100ul			5			
5			100ul			7			
6			30ul			5			
7									
8		See pg 74 for original prep							
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

JLW
7-23-09

00077

LABORATORIES OF OHIO, LLC

VOLATILES SAMPLE PREP LOGBOOK

Date Loading 7-15-04 Prep Batch # 345667 Analyst: TKW
 ISSS ID INV04071202 Analytical Batch # 347359 Reviewed by: TK
TKW 7-15-04

Sample ID	Container Number	Description	Sample Vol (g or mL)	Final Volume (mL)	Standard ID and Volume	pH	Residual Chlorine	Dilution	Comments
1 15722008	---	Blank	100ul	50ul	---	5	NA	none	
2 15722015	---	ICS	---	---	---	---	---	---	
3 15722001	3/2	Sample	---	---	---	6	---	---	
4 15722006	11/14	NSD	---	---	---	---	---	---	
5 15722007	7/16	NSD	---	---	---	---	---	---	
6 15722002	---	Sample	50ul	---	---	6	---	---	
7 15722003	---	---	50ul	---	---	5	---	---	
8 15722004	---	---	100ul	---	---	5	---	---	
9 15722005	---	---	100ul	---	---	5	---	---	
10 15722006	---	---	100ul	---	---	5	---	---	
11 15722007	---	---	100ul	---	---	5	---	---	
12 15722008	---	---	100ul	---	---	7	---	---	
13 15722009	---	---	25ul	---	---	5	---	---	
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

TKW
7-16-04

82000

VOA GC/MS 7

LABORATORIES OF OHIO, LLC

VOLATILES SAMPLE PREP LOGBOOK

Analyst: ILK

Reviewed by: ILK

Prep Batch # 347357

Analytical Batch # 347358

Date Loading 7-8-04
ISS ID 1100410628-03

Sample ID	Container Number	Description	Sample Vol (g or mL)	Final Volume (mL)	Standard ID and Volume	pH	Residual Chlorine	Dilution	Comments
1 1200658896	✓	BLANK	5g	10mL	5000000-034mL	N/A	N/A	5X	✓
2 1200658897	✓	1CS	5g	10mL	5000000-034mL	N/A	N/A	5X	✓
3 115712011	✓	SAMPLE	5.13g	10mL	5000000-034mL	N/A	N/A	5X	✓
4 1200658898	✓	NSD	5g	10mL	5000000-034mL	N/A	N/A	5X	✓
5 1200658899	✓	NSD	5g	10mL	5000000-034mL	N/A	N/A	5X	✓
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

AKW
7-8-04

NE#_1581_P9

Laboratories of Ohio's QA Department, 2/16/04.

This form has been reviewed by

00079