

ANALYTICAL RESULTS

Prepared for:

Chevron
5000 State Route 128
HOOVEN OH 45033

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

August 20, 2009

SAMPLE GROUP

The sample group for this submittal is 1157447. Samples arrived at the laboratory on Thursday, August 13, 2009. The PO# for this group is 0015039270 and the release number is 50008931.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
Field_Blank,081109 Grab Water Sample	5748300
MW-133,081109 Grab Water Sample	5748301
MW-133,081109 Filtered Grab Water Sample	5748302
MW-35,081109 Grab Water Sample	5748303
MW-35,081109 Filtered Grab Water Sample	5748304
MW-138,081209 Grab Water Sample	5748305
MW-138,081209 Filtered Grab Water Sample	5748306
MW-139,081209 Grab Water Sample	5748307
MW-139,081209 Filtered Grab Water Sample	5748308
MW-142,081209 Grab Water Sample	5748309
MW-142,081209 Filtered Grab Water Sample	5748310
Trip_Blank,081209 Water Sample	5748311

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC Trihydro Corporation
COPY TO

Attn: Trihydro Database

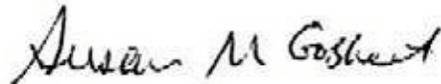
ELECTRONIC Trihydro Corporation
COPY TO
ELECTRONIC Trihydro Corporation
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Attn: Tim Gunn

Attn: Matthew Mitchell

Questions? Contact your Client Services Representative
Katherine A Klinefelter at (717) 656-2300

Respectfully Submitted,



Susan M. Goshert
Group Leader



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5748300

Group No. 1157447
OH

Field_Blank,081109 Grab Water Sample
Monthly Southwest Quad

Collected: 08/11/2009 09:50 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
5000 State Route 128
HOOVEN OH 45033

QUAFB SDG#: HVQ24-01FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06291	Benzene	71-43-2	N.D.	0.5	1
06291	Chlorobenzene	108-90-7	N.D.	0.8	1
06291	Ethylbenzene	100-41-4	N.D.	0.8	1
06291	Toluene	108-88-3	N.D.	0.7	1
06291	Xylene (Total)	1330-20-7	N.D.	0.8	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y092261AA	08/14/2009 19:57	Nicholas P Riehl	1
06291	TCL by 8260 (water)	SW-846 8260B	1	Y092261AA	08/14/2009 19:57	Nicholas P Riehl	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748301

Group No. 1157447
OH

MW-133,081109 Grab Water Sample
Monthly Southwest Quad

Collected: 08/11/2009 10:15 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
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HOOVEN OH 45033

QU133 SDG#: HVQ24-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06291	Benzene	71-43-2	31	0.5	1
06291	Bromodichloromethane	75-27-4	N.D.	1	1
06291	Bromoform	75-25-2	N.D.	1	1
06291	Chlorobenzene	108-90-7	N.D.	0.8	1
06291	Chloroform	67-66-3	N.D.	0.8	1
06291	Dibromochloromethane	124-48-1	N.D.	1	1
06291	Ethylbenzene	100-41-4	N.D.	0.8	1
06291	Toluene	108-88-3	N.D.	0.7	1
06291	Xylene (Total)	1330-20-7	N.D.	0.8	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y092261AA	08/15/2009 00:08	Nicholas P Riehl	1
06291	TCL by 8260 (water)	SW-846 8260B	1	Y092261AA	08/15/2009 00:08	Nicholas P Riehl	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748302

Group No. 1157447
OH

MW-133,081109 Filtered Grab Water Sample
Monthly Southwest Quad

Collected: 08/11/2009 10:15 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
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QF133 SDG#: HVQ24-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 6010B			Metals Dissolved	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0072	1
07055	Lead	7439-92-1	N.D.	0.0069	1

General Sample Comments

This sample was field filtered for metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	092261848006	08/18/2009 18:29	John P Hook	1
07055	Lead	SW-846 6010B	1	092261848006	08/19/2009 11:15	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	092261848006	08/17/2009 21:30	Mirit S Shenouda	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748303

Group No. 1157447
OH

MW-35,081109 Grab Water Sample
Monthly Southwest Quad

Collected: 08/11/2009 11:45 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
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QU-35 SDG#: HVQ24-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06291	Benzene	71-43-2	N.D.	0.5	1
06291	Bromodichloromethane	75-27-4	N.D.	1	1
06291	Bromoform	75-25-2	N.D.	1	1
06291	Chlorobenzene	108-90-7	N.D.	0.8	1
06291	Chloroform	67-66-3	N.D.	0.8	1
06291	Dibromochloromethane	124-48-1	N.D.	1	1
06291	Ethylbenzene	100-41-4	N.D.	0.8	1
06291	Toluene	108-88-3	N.D.	0.7	1
06291	Xylene (Total)	1330-20-7	N.D.	0.8	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y092261AA	08/14/2009 21:00	Nicholas P Riehl	1
06291	TCL by 8260 (water)	SW-846 8260B	1	Y092261AA	08/14/2009 21:00	Nicholas P Riehl	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748304

Group No. 1157447
OH

MW-35,081109 Filtered Grab Water Sample
Monthly Southwest Quad

Collected: 08/11/2009 11:45 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
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QUF35 SDG#: HVQ24-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 6010B			Metals Dissolved	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0072	1
07055	Lead	7439-92-1	N.D.	0.0069	1

General Sample Comments

This sample was field filtered for metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	092261848006	08/18/2009 18:34	John P Hook	1
07055	Lead	SW-846 6010B	1	092261848006	08/19/2009 11:18	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	092261848006	08/17/2009 21:30	Mirit S Shenouda	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748305

Group No. 1157447
OH

MW-138,081209 Grab Water Sample
Monthly Southwest Quad

Collected: 08/12/2009 09:40 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
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HOOVEN OH 45033

QU138 SDG#: HVQ24-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06291	Benzene	71-43-2	N.D.	0.5	1
06291	Bromodichloromethane	75-27-4	N.D.	1	1
06291	Bromoform	75-25-2	N.D.	1	1
06291	Chlorobenzene	108-90-7	N.D.	0.8	1
06291	Chloroform	67-66-3	N.D.	0.8	1
06291	Dibromochloromethane	124-48-1	N.D.	1	1
06291	Ethylbenzene	100-41-4	N.D.	0.8	1
06291	Toluene	108-88-3	N.D.	0.7	1
06291	Xylene (Total)	1330-20-7	N.D.	0.8	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y092261AA	08/15/2009 00:29	Nicholas P Riehl	1
06291	TCL by 8260 (water)	SW-846 8260B	1	Y092261AA	08/15/2009 00:29	Nicholas P Riehl	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748306

Group No. 1157447
OH

MW-138,081209 Filtered Grab Water Sample
Monthly Southwest Quad

Collected: 08/12/2009 09:40 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
5000 State Route 128
HOOVEN OH 45033

QF138 SDG#: HVQ24-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 6010B			Metals Dissolved	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0072	1
07055	Lead	7439-92-1	N.D.	0.0069	1

General Sample Comments

This sample was field filtered for metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	092261848006	08/18/2009 18:47	John P Hook	1
07055	Lead	SW-846 6010B	1	092261848006	08/19/2009 11:21	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	092261848006	08/17/2009 21:30	Mirit S Shenouda	1

Lancaster Laboratories Sample No. WW 5748307

Group No. 1157447
OH

MW-139,081209 Grab Water Sample
Monthly Southwest Quad

Collected: 08/12/2009 10:35 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05

Chevron

Reported: 08/20/2009 at 10:49

5000 State Route 128

Discard: 10/20/2009

HOOVEN OH 45033

QU139 SDG#: HVQ24-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06291	Benzene	71-43-2	120	0.5	1
06291	Bromodichloromethane	75-27-4	N.D.	1	1
06291	Bromoform	75-25-2	N.D.	1	1
06291	Chlorobenzene	108-90-7	N.D.	0.8	1
06291	Chloroform	67-66-3	N.D.	0.8	1
06291	Dibromochloromethane	124-48-1	N.D.	1	1
06291	Ethylbenzene	100-41-4	N.D.	0.8	1
06291	Toluene	108-88-3	6	0.7	1
06291	Xylene (Total)	1330-20-7	5 J	0.8	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y092261AA	08/15/2009 02:55	Nicholas P Riehl	1
06291	TCL by 8260 (water)	SW-846 8260B	1	Y092261AA	08/15/2009 02:55	Nicholas P Riehl	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748308

Group No. 1157447
OH

MW-139,081209 Filtered Grab Water Sample
Monthly Southwest Quad

Collected: 08/12/2009 10:35 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
5000 State Route 128
HOOVEN OH 45033

QF139 SDG#: HVQ24-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 6010B			mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0164 J	0.0072	1
07055	Lead	7439-92-1	N.D.	0.0069	1

General Sample Comments

This sample was field filtered for metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	092261848006	08/18/2009 18:51	John P Hook	1
07055	Lead	SW-846 6010B	1	092261848006	08/19/2009 11:24	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	092261848006	08/17/2009 21:30	Mirit S Shenouda	1

Lancaster Laboratories Sample No. WW 5748309
**Group No. 1157447
OH**
**MW-142,081209 Grab Water Sample
Monthly Southwest Quad**

Collected: 08/12/2009 14:15 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05

Chevron

Reported: 08/20/2009 at 10:49

5000 State Route 128

Discard: 10/20/2009

HOOVEN OH 45033

QU142 SDG#: HVQ24-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06291	Benzene	71-43-2	210	1	2
06291	Bromodichloromethane	75-27-4	N.D.	2	2
06291	Bromoform	75-25-2	N.D.	2	2
06291	Chlorobenzene	108-90-7	N.D.	2	2
06291	Chloroform	67-66-3	N.D.	2	2
06291	Dibromochloromethane	124-48-1	N.D.	2	2
06291	Ethylbenzene	100-41-4	310	2	2
06291	Toluene	108-88-3	22	1	2
06291	Xylene (Total)	1330-20-7	210	2	2

The reporting limits for the GC/MS volatile compounds were raised due to the level of non-target compounds.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y092261AA	08/15/2009 03:37	Nicholas P Riehl	2
06291	TCL by 8260 (water)	SW-846 8260B	1	Y092261AA	08/15/2009 03:37	Nicholas P Riehl	2



Analysis Report

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Lancaster Laboratories Sample No. WW 5748310

Group No. 1157447
OH

MW-142,081209 Filtered Grab Water Sample
Monthly Southwest Quad

Collected: 08/12/2009 14:15 by DB

Account Number: 11494

Submitted: 08/13/2009 09:05
Reported: 08/20/2009 at 10:49
Discard: 10/20/2009

Chevron
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HOOVEN OH 45033

QF142 SDG#: HVQ24-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 6010B			Metals Dissolved	mg/l	
07035	Arsenic	7440-38-2	0.0172 J	0.0072	1
07055	Lead	7439-92-1	N.D.	0.0069	1

General Sample Comments

This sample was field filtered for metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	092261848006	08/18/2009 18:55	John P Hook	1
07055	Lead	SW-846 6010B	1	092261848006	08/19/2009 11:28	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	092261848006	08/17/2009 21:30	Mirit S Shenouda	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5748311

Group No. 1157447
OH

Trip_Blank,081209 Water Sample
Monthly Southwest Quad

Collected: 08/12/2009 14:45

Account Number: 11494

Submitted: 08/13/2009 09:05

Chevron

Reported: 08/20/2009 at 10:49

5000 State Route 128

Discard: 10/20/2009

HOOVEN OH 45033

QU-TB SDG#: HVQ24-12TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06291	Benzene	71-43-2	N.D.	0.5	1
06291	Chlorobenzene	108-90-7	N.D.	0.8	1
06291	Ethylbenzene	100-41-4	N.D.	0.8	1
06291	Toluene	108-88-3	N.D.	0.7	1
06291	Xylene (Total)	1330-20-7	N.D.	0.8	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y092261AA	08/14/2009 20:18	Nicholas P Riehl	1
06291	TCL by 8260 (water)	SW-846 8260B	1	Y092261AA	08/14/2009 20:18	Nicholas P Riehl	1

Quality Control Summary

 Client Name: Chevron
 Reported: 08/20/09 at 10:49 AM

Group Number: 1157447

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: Y092261AA	Sample number(s): 5748300-5748301,5748303,5748305,5748307,5748309,5748311							
Benzene	N.D.	0.5	ug/l	101	98	80-116	3	30
Bromodichloromethane	N.D.	1.	ug/l	98	96	79-118	2	30
Bromoform	N.D.	1.	ug/l	93	91	67-112	3	30
Chlorobenzene	N.D.	0.8	ug/l	104	100	82-111	3	30
Chloroform	N.D.	0.8	ug/l	103	100	77-122	4	30
Dibromochloromethane	N.D.	1.	ug/l	96	93	78-113	3	30
Ethylbenzene	N.D.	0.8	ug/l	101	98	80-113	3	30
Toluene	N.D.	0.7	ug/l	102	99	80-115	3	30
Xylene (Total)	N.D.	0.8	ug/l	103	99	81-114	3	30
Batch number: 092261848006	Sample number(s): 5748302,5748304,5748306,5748308,5748310							
Arsenic	N.D.	0.0072	mg/l	97		80-120		
Lead	N.D.	0.0069	mg/l	99		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: Y092261AA	Sample number(s): 5748300-5748301,5748303,5748305,5748307,5748309,5748311 UNSPK: 5748303								
Benzene	115		80-126						
Bromodichloromethane	109		78-125						
Bromoform	94		62-113						
Chlorobenzene	113		86-118						
Chloroform	117		81-134						
Dibromochloromethane	99		74-116						
Ethylbenzene	112		77-125						
Toluene	112		80-125						
Xylene (Total)	113		79-125						
Batch number: 092261848006	Sample number(s): 5748302,5748304,5748306,5748308,5748310 UNSPK: P747286 BKG: P747286								
Arsenic	113	113	75-125	0	20	N.D.	N.D.	0 (1)	20
Lead	89	94	75-125	5	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 08/20/09 at 10:49 AM

Group Number: 1157447

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TCL by 8260 (water)

Batch number: Y092261AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5748300	94	90	93	90
5748301	94	89	92	90
5748303	95	92	94	90
5748305	94	92	93	91
5748307	94	90	91	94
5748309	93	90	93	94
5748311	93	90	92	90
Blank	94	91	93	91
LCS	93	92	94	93
LCSD	93	90	93	92
MS	94	91	94	93
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 11494 Group# 1157447 Sample # 5748300-11 **COC #** 216212

Please print. Instructions on reverse side correspond with circled numbers.

<p>1 Client: <u>CHEVRON</u> Acct. #: <u>11494</u></p> <p>Project Name#: <u>MONTHLY SOUTHWEST QUAD</u> PWSID # <u>NWRCW17000M20</u></p> <p>Project Manager: <u>DOUG LAM</u> P.O.#: _____</p> <p>Sampler: <u>DALE BARRETT + JOHN HALL</u> Quote #: _____</p> <p>Name of state where samples were collected: <u>OHIO</u></p>				<p>4 Matrix</p> <p><input type="checkbox"/> Potable <input type="checkbox"/> Check if Applicable</p> <p><input type="checkbox"/> Water <input type="checkbox"/> NPDES</p> <p><input type="checkbox"/> Other</p>		<p>5 Analyses Requested</p> <p>Preservation Codes</p> <p>VOC'S DISOLVED PB/AS THM (THM) TRIALHALOMETHANES</p>					<p>For Lab Use Only</p> <p>FSC: _____</p> <p>SCR#: _____</p> <p>6 Preservation Codes</p> <p>H=HCl T=Thiosulfate</p> <p>N=HNO₃ B=NaOH</p> <p>S=H₂SO₄ O=Other</p>	
<p>2 Sample Identification</p>		<p>3 Composite</p>	<p>Date Collected</p>	<p>Time Collected</p>	<p>Grab</p>	<p>Soil</p>	<p>Water</p>	<p>Other</p>	<p>Total # of Containers</p>	<p>Remarks</p>	<p>Temperature of samples upon receipt (if requested)</p>	
FIELD BLANK, 081109			8-11-09	0950	X		X		3	X	SEE ATTACHED ANALYTE LIST	20°C
MW-133, 081109			8-11-09	1015	X		X		4	X		
MW-35, 081109			8-11-09	1145	X		X		4	X		
MW-138, 081209			8-12-09	0940	X		X		4	X		
MW-139, 081209			8-12-09	1035	X		X		4	X		
MW-142, 081209			8-12-09	1415	X		X		4	X		
TRIP BLANK, 081209			8-12-09	1445	X		X		2	X		
<p>7 Turnaround Time Requested (TAT) (please circle): Normal <u>Rush</u></p> <p>(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)</p> <p>Date results are needed: <u>ASAP</u></p> <p>Rush results requested by (please circle): Phone Fax <u>E-mail</u></p> <p>Phone #: <u>513-353-1323</u> Fax #: <u>513-353-4664</u></p> <p>E-mail address: <u>MMITCHELL@TRHYDRO.COM</u></p>				<p>Relinquished by: <u>Dale Barrett</u> Date: <u>8-12-09</u> Time: <u>1500</u></p> <p>Relinquished by: _____ Date: _____ Time: _____</p>		<p>Received by: _____ Date: _____ Time: _____</p> <p>Received by: _____ Date: _____ Time: _____</p> <p>Received by: _____ Date: _____ Time: _____</p> <p>Received by: <u>Kristin Ziegler</u> Date: <u>8-13-09</u> Time: <u>0905</u></p>						
<p>8 Data Package Options (please circle if required)</p> <p>Type I (validation/NJ Reg) <u>TX TRRP-13</u></p> <p>Type II (Tier II) <u>MA MCP CT RCP</u></p> <p>Type III (Reduced NJ) <u>Site-specific QC (MS/MSD/Dup)? Yes No</u></p> <p>Type IV (CLP SOW) <u>Internal COC Required? Yes / No</u></p> <p>Type VI (Raw Data Only) <u>Internal COC Required? Yes / No</u></p>		<p>SDG Complete?</p> <p>Yes No</p>										

Analytical Requests for Groundwater Monthly Southwest Quad
Chevron Cincinnati Facility, Hooven, Ohio

Volatile Organics

Benzene
Chlorobenzene
Ethylbenzene
Toluene
Xylenes (total)

Trihalomethanes (THM)

Dissolved Metals – field filtered

Arsenic
Lead

**Environmental Sample Administration
 Receipt Documentation Log**

Client/Project: Chevron-OH
 Date of Receipt: 8-13-09
 Time of Receipt: 0905
 Source Code: 50-1
 Unpacker Emp. No.: 2123

Shipping Container Sealed: YES NO

Custody Seal Present * : YES NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	0429951	2.0°	TB	WI	Y	L	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Sample Administration Internal Chain of Custody			
Name	Date	Time	Reason for Transfer
Kristin Zigel	8-13-09	0948	Unpacking / Storage
Mary Beth Reed	8/13/09	1011	Place in Storage or <u>Entry</u>
			Entry
			Entry

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	l	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml
<	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.		

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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