



Environmental Audit Specialists, Inc.

608 South 19th Street, West Des Moines, Iowa 50265
Bus (515) 225-9805 FAX (515) 225-1889

Environmental Audits & Permitting
Underground Tank Management
Hydrogeologic Investigations &
Monitoring
Exploratory Drilling & Monitoring Wells
Remedial Design & Construction
Analytical Testing/Chemistry

August 28, 2014

Ms. Tami Rice
Environmental Specialist, Senior
Iowa Dept of Natural Resources
Contaminated Site Section
Wallace State Office Building
5th Floor
502 E. 9th Street,
Des Moines, Iowa 50319

CON 12-15
Doc #30059

Tami:

As you requested here is the monitoring well results for the project site at 2708 Ingersoll Avenue, Des Moines, Iowa.

Respectfully submitted,
ENVIRONMENTAL AUDIT SPECIALISTS, INC.

M.E. McClure, Jr.

*Environmental Audit Specialists, Inc. President
Environmental Specialist, /Geologist
Certified Environmental Inspector (CEI)
State Certified AHERA Inspector*

RECEIVED

AUG 29 2014

Cc:Enclosure

ANALYTICAL REPORT

July 24, 2014

Work Order: 1G41494

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Report To

Earl McClure
Environmental Audit Specialists
608 S. 19th St.
West Des Moines, IA 50265

Work Order Information

Date Received: 07/22/2014 12:00PM
Collector: Unknown
Phone: (515) 225-9805
PO Number:

Project : Subcontract Analyses

Project Number: 2708 Ingersoll Ave, Des Moines

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1G41494-01	MW-1			Matrix: Water		Collected: 07/22/14 00:00	
Chloromethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Vinyl Chloride	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Bromomethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Chloroethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,1-Dichloroethylene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Acetone	926 ug/L	20.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Carbon Disulfide	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Methylene Chloride	<10.0 ug/L	10.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
trans-1,2-Dichloroethylene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Methyl-t-butyl Ether (MTBE)	<4.0 ug/L	4.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,1-Dichloroethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
cis-1,2-Dichloroethylene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
2-Butanone (MEK)	222 ug/L	10.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Chloroform	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,1,1-Trichloroethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Carbon Tetrachloride	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Benzene	3.3 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,2-Dichloroethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Trichloroethylene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,2-Dichloropropane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Bromodichloromethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
cis-1,3-Dichloropropene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
4-Methyl-2-pentanone (MIBK)	<10.0 ug/L	10.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Toluene	14.7 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
trans-1,3-Dichloropropene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,1,2-Trichloroethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

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West Des Moines, IA 50265

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Work Order: 1G41494

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1G41494-01 MW-1				Matrix: Water		Collected: 07/22/14 00:00	
Tetrachloroethylene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
2-Hexanone (MBK)	28.5 ug/L	10.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Dibromochloromethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Chlorobenzene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Ethylbenzene	2.5 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Xylenes, total	13.4 ug/L	4.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Bromoform	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,1,2,2-Tetrachloroethane	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,3-Dichlorobenzene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,4-Dichlorobenzene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
1,2-Dichlorobenzene	<2.0 ug/L	2.0	1XG0834	EPA 8260B	CAK	07/23/14 15:38	
Surrogate: Dibromofluoromethane	100 %			82-124	CAK	07/23/14 15:38	
Surrogate: 1,2-Dichloroethane-d4	103 %			78-129	CAK	07/23/14 15:38	
Surrogate: Toluene-d8	101 %			88-113	CAK	07/23/14 15:38	
Surrogate: 4-Bromofluorobenzene	98.8 %			72-142	CAK	07/23/14 15:38	

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Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
EPA 8260B in Water		
	Chloromethane	KS-NT,NELAC,SIA1X
	Vinyl Chloride	KS-NT,NELAC,SIA1X
	Bromomethane	KS-NT,NELAC,SIA1X
	Chloroethane	KS-NT,NELAC,SIA1X
	1,1-Dichloroethylene	KS-NT,NELAC,SIA1X
	Acetone	KS-NT,NELAC,SIA1X
	Carbon Disulfide	KS-NT,NELAC,SIA1X
	Methylene Chloride	KS-NT,NELAC,SIA1X
	trans-1,2-Dichloroethylene	KS-NT,NELAC,SIA1X
	Methyl-t-butyl Ether (MTBE)	KS-NT,NELAC,SIA1X
	1,1-Dichloroethane	KS-NT,NELAC,SIA1X
	cis-1,2-Dichloroethylene	SIA1X
	2-Butanone (MEK)	KS-NT,NELAC,SIA1X
	Chloroform	KS-NT,NELAC,SIA1X
	1,1,1-Trichloroethane	KS-NT,NELAC,SIA1X
	Carbon Tetrachloride	KS-NT,NELAC,SIA1X
	Benzene	KS-NT,NELAC,SIA1X
	1,2-Dichloroethane	KS-NT,NELAC,SIA1X
	Trichloroethylene	KS-NT,NELAC,SIA1X
	1,2-Dichloropropane	KS-NT,NELAC,SIA1X
	Bromodichloromethane	KS-NT,NELAC,SIA1X
	cis-1,3-Dichloropropene	KS-NT,NELAC,SIA1X
	4-Methyl-2-pentanone (MIBK)	KS-NT,NELAC,SIA1X
	Toluene	KS-NT,NELAC,SIA1X
	trans-1,3-Dichloropropene	KS-NT,NELAC,SIA1X
	1,1,2-Trichloroethane	KS-NT,NELAC,SIA1X
	Tetrachloroethylene	KS-NT,NELAC,SIA1X
	2-Hexanone (MBK)	KS-NT,NELAC,SIA1X
	Dibromochloromethane	KS-NT,NELAC,SIA1X
	Chlorobenzene	KS-NT,NELAC,SIA1X
	Ethylbenzene	KS-NT,NELAC,SIA1X
	Xylenes, total	KS-NT,NELAC,SIA1X
	Bromoform	KS-NT,NELAC,SIA1X

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1,1,2,2-Tetrachloroethane	KS-NT,NELAC,SIA1X
1,3-Dichlorobenzene	KS-NT,NELAC,SIA1X
1,4-Dichlorobenzene	KS-NT,NELAC,SIA1X
1,2-Dichlorobenzene	KS-NT,NELAC,SIA1X
Naphthalene	KS-NT,NELAC

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2015
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2014
MO-KC	Missouri Department of Natural Resources	140	04/30/2014
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2015
SIA1X	Iowa Department of Natural Resources	95	02/01/2014

Notes and Definitions

QM-07 . The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

End of Report



Keystone Laboratories, Inc.

Sue Thompson
Project Manager II

CHAIN OF CUSTODY RECORD

Keystone
LABORATORIES, INC.

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Fax: 913-321-7937

PAGE _____ OF _____

PRINT OR TYPE INFORMATION BELOW

SAMPLER: T-25
SITE NAME: _____
ADDRESS: 2708 Lincoln Ave
CITY/ST/ZIP: DN
PHONE: _____

REPORT TO:
NAME: _____
COMPANY NAME: _____
ADDRESS: _____
CITY/ST/ZIP: _____
PHONE: FW MYCL 260 POL
FAX: _____

BILL TO:
NAME: _____
COMPANY NAME: _____
ADDRESS: _____
CITY/ST/ZIP: _____
PHONE: _____
Keystone Quote No.: _____
(If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED										LAB USE ONLY	
SS H1	7/12		FIRST LANE	1	SOL	X											1641495 SAMPLE TEMPERATURE UPON RECEIPT: °C LABORATORY SAMPLE NUMBER	
SS H2	7/12		WISI FIVE	1	SOL	X												01
MW-1	7/12		NE DO	2	WAL	X												02
																		03

Relinquished by: (Signature)	Date	Received by: (Signature)	Date	Turn-Around: ☐ Standard ☐ Rush
	Time		Time	
Relinquished by: (Signature)	Date	Received for Lab by: (Signature)	Date	Remarks:
	Time		Time	

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy