

October 28, 2016

Mr. Brian Cass OHM Holdings, Inc. W229 N2494 Hwy F Waukesha, Wisconsin 53186

RE: Investigation Progress Report

Success, Inc. One Hour Martinizing 2262 South 108th Street

West Allis, Wisconsin FID # 241287530

BRRTS # 02-41-246246

Dear Mr. Cass:

On July 28, 2016, Environmental Forensic Investigations, Inc. (EnviroForensics) performed additional investigative activities at the Success, Inc. property located at 2262 South 108th Street, West Allis, Wisconsin (Site). The additional investigations were outlined in our work scoping document titled: *Site Investigative Work Scope*, dated May 10, 2016. The investigations were focused on determing if concentrations of chlorinated volatile organic compounds (CVOCs) had migrated along the sanitary sewer lines and caused groundwater and or vapor impacts to neighboring properties. This report provides a summary of investigative findings and recommendations for further Site actions.

UTILITY CORRIDOR INVESTIGATIONS

Two (2) borings (DP-1 and DP-2) were advanced to the depth of the sanitary sewer main in the locations shown on Figure 1 in **Attachment 1** using a Geoprobe[™] drilling rig. The depth of the sewer main was between 8-10 feet below ground surface (bgs) with the depth to groundwater expected at 9-10 feet bgs in the areas to be investigated. Soil gas samples were collected from a depth invterval of 8-9 feet using a direct push post-run tubing (PRT) system. Immediately after collecting the soil gas samples, the tubing and screen were removed, and the bore hole enlarged and deepened for collection of a water sample from a 1-inch diameter temporary well equipped with a 5-foot slotted screen section.

Document: 6406-0169

Environmental Forensic Investigations, Inc.

N16 W23390 Stone Ridge Drive, Suite G, Waukesha, WI 53188

Phone: 262-290-4001 • Fax 317-972-7875



The results of soil gas and groundwater sampling are shown in Tables 1 and 2 in **Attachment 1**, respectively. The analytical results reports are included in **Attachment 2**.

As can be seen in Table 1, soil gas concentrations were well below the vapor risk screening levels (VRSLs) for these compounds along the sanitary main. However, the depth to water was higher than expected at 7.5 to 7.9 feet bgs, and the soil gas samples were collected from the saturated zone. Therefore the soil gas samples are not representative of the vapor concentrations within the unsaturated (vadose) zone. However, detections of CVOCs in groundwater are indicative that groundwater impacts have migrated in the direction of groundwater flow, or may be migrating preferentially along the backfill of the sanitary main.

As can be seen in Table 2, tetrachloroethene (PCE) and trichloroethene (TCE) were detected in concentrations exceeding the groundwater enforcement standard (ES) at DP-1. At DP-2, PCE and vinyl chloride were detected in concentrations exceeding the ES. The concentrations are reduced significantly with distance from the source area (dry cleaners).

BASEMENT INVESTIGATIONS AT 2234 S. 108TH STREET

Sub-slab vapor samples were collected from Stefaniak Realty building at the locations shown on the hand-sketched figure in **Attachment 3**. In addition, a grab water sample was collected from the basement sump. As can be seen in Tables 1 and 2 of **Attachment 1**, there were no detections of CVOCs in either of the sub-slab vapor samples, or the water sample.

SUB-SLAB DEPRESSURIZATION SYSTEM COMMISSIONING

In September, 2015, sub-lab depressurization systems (SSDS) were installed in the Site building and the Marinello building (adjacent to the north) to mitigate vapor intrusion risk. Initial commissioning of the SSDS was performed during April 4-5, 2016 under cool weather conditions when the buildings were heated. The purpose of commissioning is to verify that the SSDS is operating effectively to prevent indoor air exposure to sub-slab vapors. Commissioning included monitoring of: system vacuum; air flow rate; and the extension of the negative pressure field beneath the slab. Indoor air and outdoor air samples were collected in both buildings prior to operating the system to establish a base line (Table 1 in **Attachment 1**).

A second round of sampling and system inspections were performed on July 28, 2016. Indoor and outdoor air samples were also collected while the system was in operation (Table 1, **Attachment 1**). Logs of the information recorded and analytical results sheets of indoor/outdoor

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air sampling are presented in **Attachment 4**, along with figures depicting the configurations of the systems and pressure field extension readings. As can be seen in this documentation, the SSDSs are operating as designed with significant negative pressure extending beneath the entire floor slabs.

CONCLUSIONS

The two (2) SSDSs are operating efficiently as designed during both the heating and non-heating months. Therefore, no further commissioning is required. System monitoring will be performed annually to ensure continued effectiveness.

Groundwater impacts above the ES were detected along the sanitary main that extends north from the Site. Although concentrations decrease with distance, the extent of the impacts above the ES has not been determined. It is also not known whether the groundwater impacts detected are part of a larger, more diffuse plume, or if the groundwater impacts migrated preferentially along the sewer main. The building adjacent to the Site to the north (Marinello's at 2248 S. 108th Street) has groundwater impacts above the ES in the basement sump, and vapor risks have been mitigated using an SSDS. Although the next building to the north (Stefaniak Realty at 2234 S. 108th Street) did not have contaminated groundwater in the basement sump or sub-slab vapor in concentrations exceeding risk levels, it is not known if any additional structures to the north of the Site along the path of migrating groundwater impacts are at risk for vapor intrusion.

The source of the groundwater impacts is likely concentrations of CVOCs that continue to exist on the west side of the Site building in unsaturated soil. Based on the data produced by former consultants (ARCADIS), contaminated groundwater was treated, but the unsaturated soil impacts were not targeted for remediation and significant concentrations of CVOC's remain (see ARCADIS Figure B.2.a and Table A.2 in **Attachment 5** for reference). These soil impacts extend to the capillary fringe. It is possible that the presence of continued groundwater impacts post remediation are due to the washing out of contaminants during up and down movements of the water table over time.

RECOMMENDATIONS

There are currently no groundwater monitoring wells to determine whether the groundwater plume has re-established or spread post remediation, and the extent of impacts in both groundwater and vapor has not yet been determined to the north. It is also not known if the soil impacts on the west side of the building continue to contribute impacts to groundwater.

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EnviroForensics recommends that a work scope be prepared to address the investigations needed to eliminate these unknowns.

If you have any questions regarding this progress report, please do not hesitate to call me at (414) 982-3988.

Sincerely,

Environmental Forensic Investigations, Inc.

Wayne Fassbender, PG, PMP

Senior Project Manager

Attachments:

Attachment 1: Figure 1 and Tables 1 and 2

Attachment 2: Analytical Results Sheets

Attachemnt 3: Figure of Sub-slab Sample Locations at Stefaniak Realty

Attachment 4: SSDS Commissioning Information

Attachment 5: ARCADIS Figure and Table

cc: John Hnat, WDNR

Ted Warpinski, Friebert, Finerty & St. John S.C.

Jene Bastian, Travelers Insurance



ATTACHMENT 1

Figure 1 and Tables 1 and 2



TABLE 1

VAPOR INTRUSION ASSESSMENT RESULTS

One Hour Martinizing
2262 South 108th Street, West Allis, Wisconsin

							Chl	lorinated V	OCs	
Sample Address	Sample Identification	Sample Location	Applicable Criteria	Date Sampled	Mitigation	Tetrachloroethene	Trichlorethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
			INDOOR/ OU	TDOOR AIR						
	Resider		42	2.1	NE	NE	1.7			
	Non-Resi	dential Vapor Ac	tion Level			180	8.8	NE	NE	28
	6406-2248-OA-1	Outdoor	Non-Residential	4/6/2016	NA	< 3.96	<3.19	<3.96	<1.07	< 0.64
2248 S. 108th St.	6406-2248-IA-B	Basement	Non-Residential	4/6/2016	No	14.7	<1.07	<3.96	< 0.64	< 0.64
	0400-2246-IA-B	Basement	Non-Residential	7/28/2016	Yes	4.34	<1.07	<3.96	<3.96	< 0.64
	6406-2262-IA-1	1st Floor	Non-Residential	4/6/2016	No	7.49	312	<3.96	7.15	< 0.64
2262 S. 108th St.	0400-2202-IA-1	181 F1001	Non-Residential	7/28/2016	Yes	<3.19	<1.07	<19.8	<39.6	<1.28
	6406-OA-1	Outdoor	NA	7/28/2016	NA	<3.19	<1.07	<19.8	<39.6	<1.28
	6406-10710-IA-B	Basement	Residential	9/10/2015	No	< 3.19	<1.07	<19.8	<39.6	<1.28
10710 W. Lincoln Avenue	6406-10710-IA-1	First Floor	Residential	9/10/2015	No	<3.19	<1.07	<19.8	<39.6	<1.28
10/10 W. Lincolli Avellue	6406-10710-IA-2	Second Floor	Residential	9/10/2015	No	< 3.19	<1.07	<19.8	<39.6	<1.28
	6406-10710-OA	Outdoor	Residential	9/10/2015	No	< 3.19	<1.07	<19.8	<39.6	<1.28
			SUB-SLAB	VAPOR						
	Residential	Vapor Risk Scre	ening Level			1,400	70	NE	NE	57
	Non-Resident	ial Vapor Risk S	creening Level			6,000	293	NE	NE	930
2234 S. 108th Street	6406-2234-SSV-1	Basement	Non-Residential	7/28/2016	No	<31.9	<10.7	<39.6	<39.6	< 6.4
2234 S. 108til Street	6406-2234-SSV-2	Basement	Non-Residential	7/28/2019	No	<31.9	<10.7	<39.6	<39.6	< 6.4
10710 W. Lincoln Avenue	6406-10710-SS-1	Basement	Residential	9/10/2015	No	276	<10.7	<198	<396	<12.8
10/10 W. Elifcolli Avellue	6406-10710-SS-2	Basement	Residential	9/10/2015	No	63.8	<10.7	<198	<396	<12.8
			UTILITY S	OIL GAS						
		4,200	210	NE	NE	170				
		18,000	880	NE	NE	2,800				
2234 S. 108th Street	6406-SG-1	NA	Non-Residential	7/28/2016	NA	383	<10.7	<39.6	<39.6	<6.4
2230 S. 108th Street	6406-SG-2	NA	Residential	7/28/2016	NA	619	<10.7	<39.6	<39.6	<6.4

Notes:

Results reported in microgragms per cubic meter (µg/m³)
Analysis performed by Envision Laboratories according to EPA Method TO-15
VOC = Volatile Organic Compound
IA = Indoor Air
OA = Outdoor Air
SSV = Sub-Slab Vapor
SG = Soil Gas Vapor

SG = Soil Gas Vapor NE = Not Established

NE = Not Lestablished
NA = Not Applicable
Bolded values are above detection limits
Bolded and blue shaded concentrations exceed the applicable residential screening level
Bolded and orange shaded concentrations exceed the applicable non-residential screening level
Sub-slab vapor screening levels derived using the attenuation factor of 0.03.
Utility soil gas vapor screening levels derived using the attenuation factor of 0.01

TABLE 2 GROUNDWATER RESULTS

One Hour Martinizing 2262 South 108th Street, West Allis, Wisconsin

Monitoring Well Identification	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Public Health Enforc	ement Standard	5	5	70	100	0.2
Public Health Prevent	tive Action Limit	0.5	0.5	7	20	0.02
6406-2248-SUMP	9/8/2015	81	<4.7	33	< 5.4	3.6 J
6406-10710-SUMP	9/8/2015	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17
6406-2230-SUMP	7/28/2016	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17
DP-1W	7/28/2016	1,590	7.8 J	<4.5	< 5.4	<1.7
DP-2W	7/28/2016	75	0.47 J	0.79 J	< 0.54	0.29 J

Notes:

All concentrations reported in micrograms per liter μ g/l Samples analyzed using EPA SW-846 Method 8260

Bolded values are above detection limits

Bolded and Orange Shaded values indicates an exceedance of the Public Health Enforcement Standard

Bolded and Blue Shaded values indicates an exceedance the Public Health Preventive Action Limit

 $J = Estimated \ concentration \ between \ the \ laboratory \ Reporting \ Limit \ and \ the \ laboratory \ Method \ Detection \ Limit$



ATTACHMENT 2

Analytical Results Sheets



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Mr. W. Fassbender Enviroforensics N16 W. 23390 Stone Ridge Dr Suite G Waukesha, WI 53188

August 11, 2016

EnvisionAir Project Number: 2016-475 Client Project Name: 6406 / OHM-Lincoln

Dear Mr. Fassbender,

Please find the attached analytical report for the samples received August 2, 2016. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A Hunnicutt

Stanley O. Thunnicutt

Project Manager EnvisionAir, LLC



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882

www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-475

Sample Summary

Canister Pressure / Vacuum

			START	START							<u>Lab</u>
			Date	Time	End Date	End Time	Date	Time	Initial Field	Final Field	Received
Laboratory Sample Number:	Sample Description:	Matrix:	Collected:	Collected:	Collected:	Collected:	Received:	Received	(in. Hg)	(in. Hg)	(in. Hg)
16-1706	6406-SG-1	Α	7/28/16	9:55	7/28/16	10:01	8/2/16	11:00	-29.5	-2	-2
16-1707	6406-SG-2	Α	7/28/16	10:30	1/0/00	10:01	8/2/16	11:00	-29	-2	-2



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Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-475

Analytical Method: TO-15 **Analytical Batch:** 080416AIR

Client Sample ID: 6406-SG-1 Sample Collection START Date/Time: 7/28/16 9:55

Sample Collection END Date/Time: 7/28/16 10:01 Sample Received Date/Time: 8/2/16 11:00

Envision Sample Number: 16-1706

Sample Matrix: AIR

Compounds	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 39.6	39.6	
Tetrachloroethene	383	31.9	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 10.7	10.7	
Vinyl Chloride	< 6.4	6.4	
4-bromofluorobenzene (surro	gate) 106%		
Analysis Date/Time:	8-6-16/06:51		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-475

Analytical Method: TO-15 **Analytical Batch:** 080416AIR

Client Sample ID: 6406-SG-2 Sample Collection START Date/Time: 7/28/16 10:30

Sample Collection END Date/Time: 7/28/16 10:35 Sample Received Date/Time: 8/2/16 11:00

Envision Sample Number: 16-1707 Sample Matrix: AIR

Compounds	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 39.6	39.6	
Tetrachloroethene	619	31.9	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 10.7	10.7	
Vinyl Chloride	< 6.4	6.4	
4-bromofluorobenzene (surro	ogate) 107%		
Analysis Date/Time:	8-6-16/07:27		
Analyst Initials	tjg		



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 080416AIR

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	109%		
Analysis Date/Time:	8-5-16/12:52		
Analyst Initials	tjg		

			LCS/D	LCS	LCSD		
<u>LCS/LCSD</u>	LCS Results (ppbv)	LCSD Results (ppbv)	Conc(ppbv)	Rec.	Rec.	<u>RPD</u>	Flag
Vinyl Chloride	10.2	10.4	10	102%	104%	1.9%	
trans-1,2-Dichloroethene	9.74	9.78	10	97%	98%	0.4%	
cis-1,2-Dichloroethene	10.2	10.2	10	102%	102%	0.0%	
Trichloroethene	9.22	9.23	10	92%	92%	0.1%	
Tetrachloroethene	9.93	9.92	10	99%	99%	0.1%	
4-bromofluorobenzene (surrogate)	106%	106%					
Analysis Date/Time:	8-5-16/11:34	8-5-16/12:17					
Analyst Initials	tjg	tjg					



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Flag Number Comments

CHAIN OF CUSTODY RECORD

WAF

EnvisionAir | 1441Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

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4	7/28/16	1030	7/28/16	1035		1		83941	-	-29	- Z	-2	16-1707
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Relinquished by:	Date	Time	Received by:	Date	Time
The the	3/1/2016		1 Feel Ex	8/1/2016	
			Stan Hunnetull	8/2/16	1100

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

WAYNE FASSBENDER ENVIROFORENSICS N16 W23390 STONE RIDGE DRIVE WAUKESHA, WI 53188

Report Date 10-Aug-16

Project Name OHM-LINCOLN Invoice # E31456

Project # 6406

Lab Code5031456ASample ID6406-DP-1WSample MatrixWaterSample Date7/28/2016

	Result	Unit	LOD L	OQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
cis-1,2-Dichloroethene	< 4.5	ug/l	4.5	14	10	8260B		8/4/2016	CJR	1
trans-1,2-Dichloroethene	< 5.4	ug/l	5.4	17	10	8260B		8/4/2016	CJR	1
Tetrachloroethene	1590	ug/l	4.9	15	10	8260B		8/4/2016	CJR	1
Trichloroethene (TCE)	7.8 "J"	ug/l	4.7	15	10	8260B		8/4/2016	CJR	1
Vinyl Chloride	< 1.7	ug/l	1.7	5.4	10	8260B		8/4/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			10	8260B		8/4/2016	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			10	8260B		8/4/2016	CJR	1
SUR - Dibromofluoromethane	97	REC %			10	8260B		8/4/2016	CJR	1
SUR - Toluene-d8	100	REC %			10	8260B		8/4/2016	CJR	1

Lab Code 5031456B Sample ID 6406-DP-2W Sample Matrix Water

Sample Date

7/28/2016

	Result	Unit	LOD I	LOQ I	Pil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
cis-1,2-Dichloroethene	0.79 "J"	ug/l	0.45	1.4	1	8260B		8/5/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		8/5/2016	CJR	1
Tetrachloroethene	75	ug/l	0.49	1.5	1	8260B		8/5/2016	CJR	1
Trichloroethene (TCE)	0.47 "J"	ug/l	0.47	1.5	1	8260B		8/5/2016	CJR	1
Vinyl Chloride	0.29 "J"	ug/l	0.17	0.54	1	8260B		8/5/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	77	REC %			1	8260B		8/5/2016	CJR	1
SUR - 4-Bromofluorobenzene	117	REC %			1	8260B		8/5/2016	CJR	1
SUR - Dibromofluoromethane	88	REC %			1	8260B		8/5/2016	CJR	1
SUR - Toluene-d8	118	REC %			1	8260B		8/5/2016	CJR	1

Project Name OHM-LINCOLN Invoice # E31456

Proiect # 6406

Lab Code5031456CSample ID6406-DUP-1Sample MatrixWaterSample Date7/28/2016

Result	Unit	LOD L	OQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
< 4.5	ug/l	4.5	14	10	8260B		8/4/2016	CJR	1
< 5.4	ug/l	5.4	17	10	8260B		8/4/2016	CJR	1
1460	ug/l	4.9	15	10	8260B		8/4/2016	CJR	1
7.7 "J"	ug/l	4.7	15	10	8260B		8/4/2016	CJR	1
< 1.7	ug/l	1.7	5.4	10	8260B		8/4/2016	CJR	1
101	REC %			10	8260B		8/4/2016	CJR	1
98	REC %			10	8260B		8/4/2016	CJR	1
102	REC %			10	8260B		8/4/2016	CJR	1
99	REC %			10	8260B		8/4/2016	CJR	1
	< 4.5 < 5.4 1460 7.7 "J" < 1.7 101 98 102	< 4.5 ug/l < 5.4 ug/l 1460 ug/l 7.7 "J" ug/l < 1.7 ug/l 101 REC % 98 REC % 102 REC %	< 4.5	<pre> <4.5 ug/l 4.5 14 < < 5.4 ug/l 5.4 17 1460 ug/l 4.9 15 7.7 "J" ug/l 4.7 15 < < 1.7 ug/l 1.7 5.4 101 REC % 98 REC % 102 REC %</pre>	<pre></pre>	 < 4.5 ug/l 4.5 14 10 8260B < 5.4 17 10 8260B 1460 ug/l 4.9 15 10 8260B 7.7 "J" ug/l 4.7 15 10 8260B < 1.7 ug/l 1.7 5.4 10 8260B 101 REC % 10 8260B 	<pre></pre>	< 4.5	< 4.5

Lab Code 5031456D **Sample ID** TRIP BLANK

Sample Matrix Water **Sample Date** 7/28/2016

	Result	Unit	LOD I	LOQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		8/4/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		8/4/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		8/4/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		8/4/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		8/4/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		8/4/2016	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		8/4/2016	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			1	8260B		8/4/2016	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		8/4/2016	CJR	1

Lab Code 5031456E

Sample ID 6406-2234 SUMP

Sample Matrix Water **Sample Date** 7/28/2016

	Result	Unit	LOD I	LOQ I	Dil	Method	Ext Date Run Date	Analyst	Code
Organic									
VOC's									
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B	8/4/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B	8/4/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B	8/4/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B	8/4/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B	8/4/2016	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B	8/4/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B	8/4/2016	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B	8/4/2016	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B	8/4/2016	CJR	1

Project Name OHM-LINCOLN Invoice # E31456

Proiect # 6406

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code Comment

1 Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Michaelyllul

Authorized Signature

Page 3 of 3

Cooler seal intact upon receipt: Yes

Lab I.D. #



Chain # Nº 281

WOF

Page _ t _ of _ \

Environmental Lab, Inc.

Sample Handling Request

Account No. :		Que	te No.:				Ziirii Oiiii Oii adi					Rush Analysis Date Required													
Project #: 6406									t. • Appleton,								(Ru	shes		751	100	250	Around		
Sampler: (signature)	14/1	0	7				Earl	0-830-2455	• FAX 920-7	33	-063	31						1		_ '	iormai	Turn	Aroun	,	╛
Project (Name / Lo	cation): OHM-Li	neelm	14	Jest	Allis	WI						Anal	ysis	Red	lues	sted						Ot	her An	alysis	
Reports To: W. F	cation): OHM-Lis	teme	tend	Invo	ice To:																				
Company Euros	Forensics			Com	npany			1										SC							
Address کار الم	3390 stere Rida	a De	STE	Add	ress					100	9					ū	ų l	SOLIDS							
City State Zip	3390 Stene Ridge Whesha WI.S	2812		City	State Z	ip		188		Sep 95)						- 14	ALEN	ED S	542.2)						
Phone 317-C				Pho	one					DRO S		1	H. H.	102		3021)		END	A 54	8260)	ALS				
FAX				FAX						D Po	od G	1	GREASE	A 82		PA	TAN I	SUSF	/ (EP	(EPA 82	ME				D/ D
Lab I.D.	Sample I.D.	1 1 1 1 1	ection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod	GRO (Mod GRO	LEAD	OII & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC+N	TOTAL SUSPENDED	VOC DW (EPA	VOC (EF	8-RCRA METALS				
5031456 A	6406 DP-2W	7/28	1335		X	N	3	GW	HC(×					
B	6406-DP-ZW	7/28	1410		×	~	3	GW	ite(1		1	×					
C	6406- ap-1	7/28	-		×	N	3	Gw	HC(×					
D	TRIP BLANK						1													×					
٤	6406-2234-5cmp	7/28	1250		×	2	3	GW	1+4	-						1				×		-	++	+	4
										-			+	+			-						+		-
Comments/Spe	Po#Zo			lwater '			Water "DW", W			", A	ir "A	", Oil	, Slu	idge	etc.)									
Me	ty - To be complete thod of Shipment:	gm			Reli		By: (sign)		Time 13 0Z	0	Dat 7/z			ceive	I By	Tşigi	2	2						Date 7/29	4

Received in Laboratory By: Church



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Mr. W. Fassbender Enviroforensics N16 W. 23390 Stone Ridge Dr Suite G Waukesha, WI 53188

August 11, 2016

EnvisionAir Project Number: 2016-474 Client Project Name: 6406 / OHM-Lincoln

Dear Mr. Fassbender,

Please find the attached analytical report for the samples received August 2, 2016. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A Hunnicutt

Stanley O. Thunnicutt

Project Manager EnvisionAir, LLC



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882

Fax: 317-351-0882 www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-474

Sample Summary

Canister Pressure / Vacuum

			START	START							<u>Lab</u>
			Date	Time	End Date	End Time	Date	Time	Initial Field	Final Field	Received
Laboratory Sample Number:	Sample Description:	Matrix:	Collected:	Collected:	Collected:	Collected:	Received:	Received	(in. Hg)	(in. Hg)	(in. Hg)
16-1704	6406-2234-SSV-1	Α	7/28/16	12:15	7/28/16	12:21	8/2/16	11:00	-29	-2	-2
16-1705	6406-2234-SSV-2	Α	7/28/16	12:35	7/28/16	12:40	8/2/16	11:00	-29	-2	-2



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Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-474

Analytical Method: TO-15
Analytical Batch: 080416AIR

Client Sample ID: 6406-2234-SSV-1 Sample Collection START Date/Time: 7/28/16 12:15

Sample Collection END Date/Time:7/28/1612:21Sample Received Date/Time:8/2/1611:00

Envision Sample Number: 16-1704 **Sample Matrix:** AIR

<u>Compounds</u>	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 39.6	39.6	
Tetrachloroethene	< 31.9	31.9	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 10.7	10.7	
Vinyl Chloride	< 6.4	6.4	
4-bromofluorobenzene (surro	ogate) 107%		
Analysis Date/Time:	8-6-16/05:37		
Analyst Initials	tjg		



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-474

Analytical Method: TO-15 **Analytical Batch:** 080416AIR

Client Sample ID: 6406-2234-SSV-2 Sample Collection START Date/Time: 7/28/16 12:35

> Sample Collection END Date/Time: 7/28/16 12:40 Sample Received Date/Time: 8/2/16 11:00

Envision Sample Number: Sample Matrix: AIR

Compounds	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 39.6	39.6	
Tetrachloroethene	< 31.9	31.9	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 10.7	10.7	
Vinyl Chloride	< 6.4	6.4	
4-bromofluorobenzene (surre	ogate) 103%		
Analysis Date/Time:	8-6-16/06:14		
Analyst Initials	tia		

16-1705



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 080416AIR

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	109%		
Analysis Date/Time:	8-5-16/12:52		
Analyst Initials	tjg		

			LCS/D	LCS	LCSD		
<u>LCS/LCSD</u>	LCS Results (ppbv)	LCSD Results (ppbv)	Conc(ppbv)	Rec.	Rec.	<u>RPD</u>	Flag
Vinyl Chloride	10.2	10.4	10	102%	104%	1.9%	
trans-1,2-Dichloroethene	9.74	9.78	10	97%	98%	0.4%	
cis-1,2-Dichloroethene	10.2	10.2	10	102%	102%	0.0%	
Trichloroethene	9.22	9.23	10	92%	92%	0.1%	
Tetrachloroethene	9.93	9.92	10	99%	99%	0.1%	
4-bromofluorobenzene (surrogate)	106%	106%					
Analysis Date/Time:	8-5-16/11:34	8-5-16/12:17					
Analyst Initials	tjg	tjg					



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Flag Number Comments

CHAIN OF CUSTODY RECORD

WAF

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

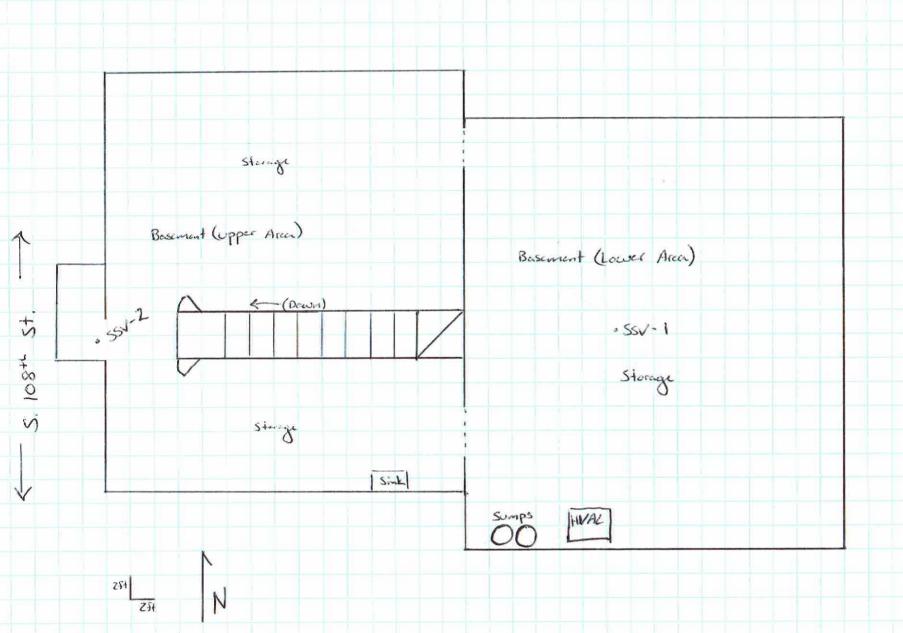
Client: Envire Forensics	njk)		umber:	2016 75	7									
Report NIG W23390 Stone in Address: Store	Endye Dr.	Project	Name or	Number: 6	406		REQU	JESTED	PARAMET	TERS	bas			
Report To: W. Fassberder	Heimster	Sample	ed by:	Hamste	rel			/ /	\s ³ ///		J.E.	VIVI	SIC	NAIR
Phone: 317-972-7876		QA/QC	Required	: (circle if appli	cable) el IV			/ 1	Y/,	/		VVI	310	MAM
Invoice Address:		Report	ing Units i	needed: (circ	le) PPMV] /		Ti Si	//	Sampling Type: Soil-Gas: □ Sub-Slab:				
Desired TAT: (Please Circle One 1 day 2 days 3 days Std (5			: 1LC = 1 Liter 6LC = 6 Liter TB = Tedlar TD = Therm	Canister		12				Indoor-Air:	Caniste	www.en	vision-air.c	om
Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp	Coll. Time (Grab/Comp Start)	Coll. Date	Coll. Time				Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6406-2234-SSV-1	ILC	7/28/16	1215	7/28/16			4		33783		-29	-2	-2	16-1704
6406-2234-SSV-2	ILC	7/28/16	1235	7/28/16	1740		+		¥3726	-	- 29	-2	-2	16-1705
													2	
										1 2			7)	
				A.	 5									
V -										- 5				- L
											3			
				5 4						1 6	5	L L		
Comments:							,			10 July 2011				

Relinquished by:	Date	Time	Received by:	Date	Time
Kyh Kint	8/1/16		Feel Ex as	8/1116	
			Sian Hunnery 19	8/2/16	1100



ATTACHMENT 3

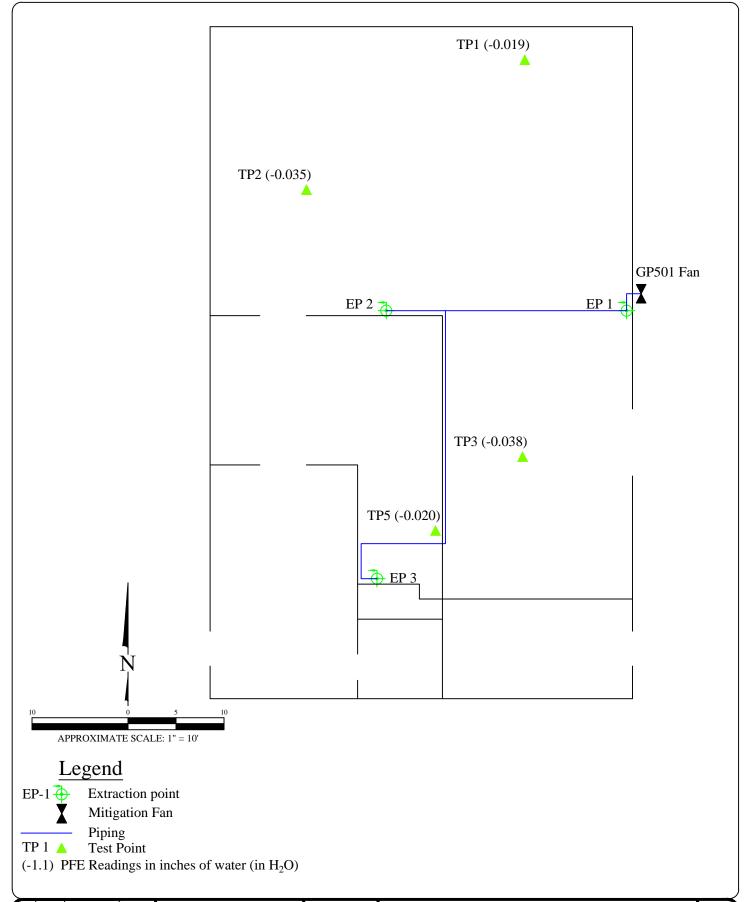
Figure of Sub-slab Sample Locations at Stefaniak Realty





ATTACHMENT 4

SSDS Commissioning Information





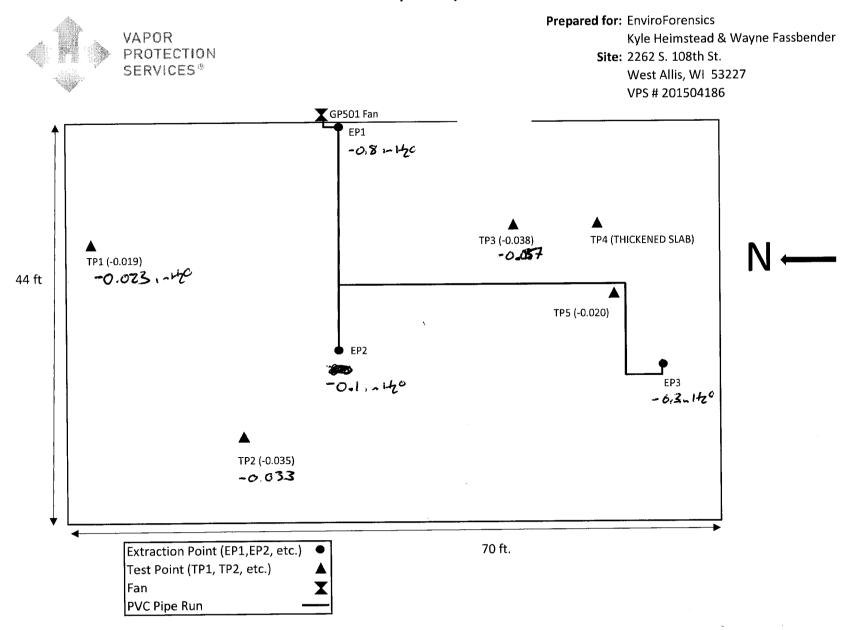
Date:	8/1/10
Designed	: EB
Drawn:	EB
Checked:	KH
DWG file	: 6406-0173

SUB SLAB DEPRESSURIZATION SYSTEM LAYOUT OHM Property

OHM Property 2262 South 108th Street West Allis, Wisconsin Figure

1
Project
6406

Figure 2
System Layout



10



INDOOR AIR BUILDING SURVEY FORM

Date	4/5/16		
Site #	6406		
Site Name	OHM Lincoln		
Address	2262 5.108	th St	-
	west Allo,	(£)	
Occupant Info	rmation		
Owner Name	Frank Mar	inello	
Occupant Name	AN		
Address	2248 5.10	81 St	
	West Allis, W)	
Telephone No	414 545-87	.77	Home/Work Mobile
	()		Home/Work/Mobile
Number and Age of Occupants			
Does anyone smoke	inside the building?	be tenants (2nd	Floor)
Building Chara	cteristics		
Type of building: (c	ircle) Residential/Industrial/Sc	chool/Commercial/Multi-use/Other?	?
If residential, what t	ype (circle) Single family/Con	ndo/Multi-family/Other?	
If the property is cor	nmercial, indicate the business	? Hair salon /	Apartments
How many floors do	pes the building have?3		
Does the building ha	ave a (circle) Basement/Crawl s	pace/Slab-on-grade/Other?	
Is the basement used	l as a living/work space area?_	No	
What type of founda	tion does the building have (cir	rcle) Field stone/Poured concrete/Co	oncrete block Other?
Is there an attached	garage?	Is there a fuel tank?	N
Is there a wood stov	e? ~	Is there a fireplace?	N

|--|

Payne (Plos 80) Ilieh rnace

1		Tompies		High eff. fue
Describe the heating system:	(circle) Force		Boiler/ Win	dow air conditioner/Other?
If forced air heating, answer th	ne following	questions:		
Is there a fresh air exchange?	If so, details	No		
Are air ducts located within th	e crawl spac	e of the proper	ty? Ne	3
Are there additional vents with	nin the prope	rty? (Non-pow	ered vent/	athroom vendetc.)
Table 1: Potential vapor	migration	entry point	informatic	on
Potential Vapor Entry Points	Present (Yes/No)	Field Screening Results (ppm)	Picture	Comments
Foundation penetrations in floor or walls	N			
Cracks in foundation floor or walls	Ø Y	3		
Sump	Y	Ŏ		
Floor drain	Y	0		
Other				
Other				
	1.			
Sampling Information				
Sample Date	16/16			
Sampler Type Sorbent	SUMN	A Pas	ssive (Pleas	se circle one)
Analysis Method Mass A one)	РН ТО-Т	Standard T	O-15LL	TO-15-SIM TO-17 Other: (Please circle
Contact Person (Project Mana	ger)	J. Fass	bender	
Telephone No (317)	972	7870		
Laboratory Er	ruision			
Telephone No 317)	351-0	885		



Table 2: Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, etc.

Date and time of pre-sampling inspection 4/5/16 @ 0900

Sampling Inspection Product Inventory

	Potential Source/ Trade Name	(Floor/Room)	Active/Main <u>Ingredient</u>	<u>Picture</u>	$\frac{Removed}{(Y/N)}$
A.	Wiwax	В	polyethylene	y	N
B.	Latex Enamel	B	Acrylic Resm	y	N
Ć	Latex Enamel Sanding Scaler & Finish	В	Aliphatic Hydrocarbons, Vinyl Toluene	У	N
	77				
				*	



Sampling Information

Table 3: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Table 4: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On- site Pressure*	Final On-Site Pressure*
6406-2248-0A-1	OA	-	4687 07256	-30	-5
The state of the s	Basement	- Carlotter	19625/05248	-30	-4.5

*Indicate pressure in units of inches Please provide a sketch of building			he followi	ng page.			
Was the building ventilated prior to	sample colle	ection?	U a				
How long was the ventilation proce	ss?_ N	1					
Were vapor control methods in effe	ct while the	samples were	being col	lected?			
Windows open? Yes No V	entilation far	ns? Yes/🗸	Va	apor barrie	ers? Yes/🐼		
Vapor phase carbon treatment syste measures	m? Yes 🔨	SSDS?	Yes/No	(Other site contro	ol	
Weather Conditions during	Sampling						
Outside temperature (°F) High:	Low	1: 24	Ins	side tempe	erature (°F)	4	
Prevailing wind speed and direction	7 11	V	_				
Describe the general weather condit	ions (e.g. su	nny, cloudy,	rain)	isht row	in then c	loudy	
Significant precipitation (1 inches o	r more) with	in 72 hours o	of the samp	oling even	t? <u>\</u>	,	

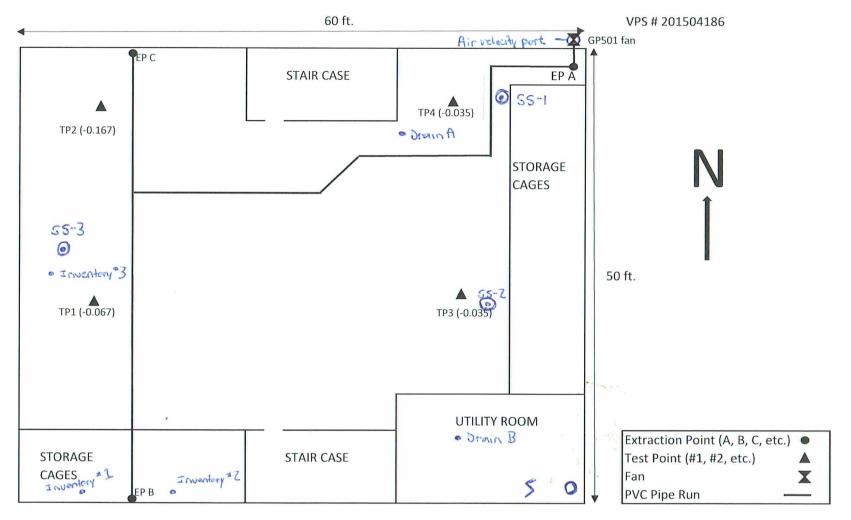
Figure 1
System Layout



Prepared for: EnviroForensics

Kyle Heimstead & Wayne Fassbender

Site: 2248 S. 108th St. W. Allis, WI 53227





602 N. Capitol Avenue, Ste. 210, Indianapolis, IN 46204 T:317-972-7870 F: 317-972-7875

Notes:

PROJECT NAME LOCATION/ADDRESS PROJECT NO. CLIENT/CONTACT DATA COLLECTION: START DATE		OHM - Lincoln 2248 S - 108	8th St	SAMPLE DATE SAMPLE ID SAMPLE TIME	4/6/2016 6406-2248-0A-1	
		Brian Cass 4/6/2016		CANISTER ID END DATE	4/6/2016	7/07256
Time hh:mm	Vaccum Reading In. of H2O	Wind Direction	Wind Speed - mph	Temperature ° F	Barometer Hg	Relative Humidity %
0653	-30	NW	7	240	NA	71
1458	-5	NW	7	35°	NA	71
	1					
		-				



602 N. Capitol Avenue, Ste. 210, Indianapolis, IN 46204 T:317-972-7870 F: 317-972-7875

Notes:

PROJECT NAME LOCATION/ADDRESS PROJECT NO. CLIENT/CONTACT DATA COLLECTION: Time hh:mm	START DATE Vaccum Reading In. of H2O	OHM - Lincoln 2248 5 - 108 6406 Brian Cass 4/6/2016 Wind Direction	Wind Speed mph	SAMPLE DATE SAMPLE ID SAMPLE TIME CANISTER ID END DATE Temperature ° F		Relative Humidity %
6648	-30	NW	- 7	84.º	NU	71
1456	-4.5	New	7	35°	NA	71_
				-W		
			-			
	-					
				<u> </u>	7	
	-					
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-			-			
=	-					



INDOOR AIR BUILDING SURVEY FORM

Date	4/5/16		
Site #	6408		
Site Name	OHM- Lincoln		
Address	2262 S.108th	5t	
	West Allis, WI	10	
Occupant Infor			
Owner Name	Brian Cass		
Occupant Name			
Address	2262 S. 1081h	- St.	
	West Allis, w		
Telephone No			
	()		
Number and Age of Occupants			
Does anyone smoke in	side the building?		
Building Characte			
Type of building: (circle	e) Residential/Industrial/School/G	ommercial/Multi-use/Oth	er?
If residential, what type	e (circle) Single family/Condo/Mu	llti-family/Other?	
If the property is comm	ercial, indicate the business?	Dry Clanner	
How many floors does	the building have?	7	
Does the building have	a (circle) Basement/Crawl space/81	ab-on-grade/Other?	
Is the basement used as	a living/work space area?		
What type of foundation	n does the building have (circle) Fie	eld stone/Roured concrete/	Concrete block Other?
Is there an attached gara	ige? N	Is there a fuel tank?	to bringly page (C. MAC)
Is there a wood stove?	N	Is there a fireplace?	N



Describe the heating system: (circle) Force	ed air furnace	Boiler/ Win	dow air conditioner/Other?
If forced air heating, answer th	e following	questions:		
Is there a fresh air exchange?	If so, details	NB		
			tv?	A
				athroom vent etc.)
Are there additional vents with	iiii tiie prope	rty: (Non-pow	vered vent	atmoon verwete.)
Table 1: Potential vapor	migration	entry point	informatio	n
,				
Potential Vapor Entry	Present	Field Screening	Picture	
Points	(Yes/No)	Results	Ticture	Comments
Foundation penetrations in	& V	(ppm)	7	
floor or walls Cracks in foundation floor	唐		Ý	
or walls Sump	\$ N		/	
Floor drain	3 /	NA	\/	
1/2	* /		/	overhead ~ 15'
Other Crawl Space	7	O	7	gvernear 215
Other				
Sampling Information				
Sample Date	16/16			
Sampler Type Sorbent	SUMN	A Pas	ssive (Pleas	e circle one)
Analysis Method Mass Alone)	РН ТО-13	Standard To	O-15LL 7	TO-15-SIM TO-17 Other: (Please circle
Contact Person (Project Manag	ger)	N. Fas	sbend	er
Telephone No (313)	972	7870		
Laboratory	nuisia			
Telephone No 317)	351 -	0885		



Table 2: Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, etc.

Date and time of pre-sampling inspection _	4/5/16	@ 1500	

Sampling Inspection Product Inventory

Potential Source/ Trade Name	Location (Floor/Room)	Active/Main <u>Ingredient</u>	<u>Picture</u>	$\frac{\text{Removed}}{(Y/N)}$
wet system 206 Slow Hardener At 2.	work reen		yanine	N
Novus 2 fine scratch	WORK TOOM		Y	N
Novus 2 fine scratch wer system 105 Epocy Resin	Work room	Unknown	y	N
•				
-				
e the service of				



Sampling Information

Table 3: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Table 4: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On- site Pressure*	Final On-Site Pressure*
6406-2262-IA-1	Main	office	17896 (05308	-28	-3
	Î				

^{*}Indicate pressure in units of inches of mercury.

Please provide a sketch of building and sample locations on the following page.

Was the building ventilated prior to sample collection?

How long was the ventilation process?

Were vapor control methods in effect while the samples were being collected?

Windows open? Yes Ventilation fans? Yes Vapor barriers? Yes Vapor phase carbon treatment system? Yes SSDS?

Vapor phase carbon treatment system? Yes SSDS?

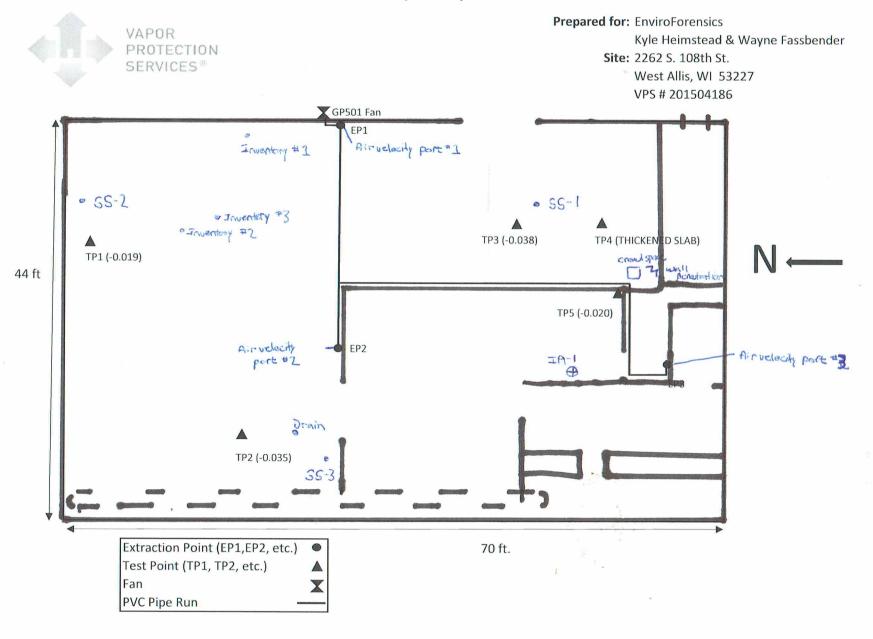
Weather Conditions during Sampling

Outside temperature (°F) High: 35 Low: 24 Inside temperature (°F) Manual Prevailing wind speed and direction 7 NW

Describe the general weather conditions (e.g. sunny, cloudy, rain)

Significant precipitation (1 inches or more) within 72 hours of the sampling event?

Figure 2
System Layout





DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln DHM - Lincoln		384 SE	SAMPLE DATE SAMPLE ID SAMPLE TIME CANISTER ID END DATE	4/6/2016 6406-2262-IA-1 17896 / 05308 4/6/2016		
Time hh:mm	Vaccum Reading In. of H2O	Wind Direction	Wind Speed - mph	Temperature ° F	Barometer Hg	Relative Humidity %
0657	-28	NAME OF THE OWNER OWNER OF THE OWNER OWNE	7	240		71
	-3	NU	7	35°	<u>~~</u> ₩	71
1506		NW			NA	न्।
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	-					-
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	-					
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	W					
	/					
	-					
				•		
Notes:						



PROJECT NO. PROJECT NAME SITE ADDRESS	6406 OHM- Lincol	St. West A	T. T.	SAMPLE ADDRESS	6406 - 1767	8th St., Wes	Allis LI
CLIENT/ CONTACT	Brian Cass	37. West A	ulis Wi	CANISTER ID FLOW CONTROLLER ID	<u>11072</u> 05249		
Date Start/End mm/dd/yyyy	Time	Vacuum Reading	Wind Direction	Wind Speed	Temperature	Barometric Pressure	Relative Humidity
	·	In. of Hg	· · · · · · · · · · · · · · · · · · ·	mph	°F	In. of Hg	%
07/28/2016	08:00	29	NE_	5-10	69	29.95	<u> 88′ </u>
07/28/2016	1600	-8	NE	5-10	_68	29.95	73
							
							· · · · · · · · · · · · · · · · · · ·
						······································	
Notes:				**************************************			



PROJECT NO.	6406			SAMPLE ADDRESS	7762 S. 10	38th St. 100	st Allis J
PROJECT NAME	OHM lineal			SAMPLE ID	6406- OA - 1		3 10 201
SITE ADDRESS	2262 S. 10	2767 S. 108th St. West Allis LT			19627		
CLIENT/ CONTACT	Brian Lass			FLOW CONTROLLER ID	07310		
Date Start/End	Time	Vacuum Reading	Wind Direction	Wind Speed	Temperature	Barometric Pressure	Relative Humidity
mm/dd/yyyy	hh:mm	In. of Hg		mph	° F	In. of Hg	%
07/28/2016	810	-19	NE	5-10	_69	29.95	88
07/18/2016	1605	-6	NE	5-10	68	29.95	73
							<u> </u>
		1					
							
					-		
Notes:							



PROJECT NO.	6406			SAMPLE ADDRESS	2248 S. 108th St., West Allis LI		
PROJECT NAME	OHM - Lincoln			SAMPLE ID			
SITE ADDRESS CLIENT/ CONTACT	800 S. 108+	St., west	Allis	CANISTER ID FLOW CONTROLLER ID			
Date Start/End mm/dd/yyyy	Time	Vacuum Reading In. of Hg	Wind Direction	Wind Speed	Temperature ° F	Barometric Pressure In. of Hg	Relative Humidity %
07/28/2016	850	- 29	NE	5-10	71	Z9.95	
07/28/2016	16 45	7	NE	5-10	68	29.95	73
			·				

				<u> </u>			
				-			
	-						
							
Notes:							



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Mr. Wayne Fassbender Enviroforensics N16 W. 23390 Stone Ridge Dr Suite G Waukesha, WI 53188

April 28, 2016

EnvisionAir Project Number: 2016-288

Client Project Name: 6406

Dear Mr. Fassbender,

Please find the attached analytical report for the samples received April 13, 2016. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A Hunnicutt

Hanly O. Hunnicutt

Project Manager EnvisionAir, LLC



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882

www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6406

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-288

Sample Summary

Canister Pressure / Vacuum

			START	START							<u>Lab</u>
			Date	Time	End Date	End Time	Date	Time	Initial Field	Final Field	Received
Laboratory Sample Number:	Sample Description:	Matrix:	Collected:	Collected:	Collected:	Collected:	Received:	Received	(in. Hg)	(in. Hg)	(in. Hg)
16-1039	6406-2248-OA-1	Α	4/6/16	6:53	4/6/16	14:58	4/13/16	11:45	-30	-5	-5
16-1040	6406-2248-IA-B	Α	4/6/16	6:48	4/6/16	14:56	4/13/16	11:45	-30	-4.5	-4.5
16-1041	6406-2262-IA-1	Α	4/6/16	6:57	4/6/16	15:06	4/13/16	11:45	-28	-3	-3



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Client Name: ENVIROFORENSICS

Project ID: 6406

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-288

Analytical Method: TO-15
Analytical Batch: 041816CAIR

Client Sample ID: 6406-2248-OA-1 Sample Collection START Date/Time: 4/6/16 6:53

Sample Collection END Date/Time: 4/6/16 14:58

Envision Sample Number: 16-1039 Sample Received Date/Time: 4/13/16 11:45

Sample Matrix: AIR

Compounds	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 3.96	3.96	_
Tetrachloroethene	< 3.19	3.19	
trans-1,2-Dichloroethene	< 3.96	3.96	
Trichlorethene	< 1.07	1.07	
Vinyl Chloride	< 0.64	0.64	
4-bromofluorobenzene (surro	ogate) 121%		
Analysis Date/Time:	4-19-16/02:28		
Analyst Initials	tia		



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Client Name: ENVIROFORENSICS

Project ID: 6406

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-288

Analytical Method: TO-15 **Analytical Batch:** 041816CAIR

Client Sample ID: 6406-248-IA-B Sample Collection START Date/Time: 4/6/16 6:48

Sample Collection END Date/Time: 4/6/16 14:56 Sample Received Date/Time: 4/13/16 11:45

Envision Sample Number: 16-1040 AIR

Sample Matrix:

Compounds	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 3.96	3.96	
Tetrachloroethene	14.7	3.19	
trans-1,2-Dichloroethene	< 3.96	3.96	
Trichlorethene	< 1.07	1.07	
Vinyl Chloride	< 0.64	0.64	
4-bromofluorobenzene (surro	gate) 102%		
Analysis Date/Time:	4-19-16/03:08		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6406

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-288

Analytical Method: TO-15
Analytical Batch: 041816CAIR

Client Sample ID: 6406-2262-IA-1 Sample Collection START Date/Time: 4/6/16 6:57

Sample Collection END Date/Time:4/6/1615:06Sample Received Date/Time:4/13/1611:45

Envision Sample Number: 16-1041 **Sample Matrix:** AIR

Compounds	Sample Results ug/m ³	Reporting Limit ug/m³	<u>Flag</u>
cis-1,2-Dichloroethene	7.49	3.96	
Tetrachloroethene	312	31.9	1
trans-1,2-Dichloroethene	< 3.96	3.96	
Trichlorethene	7.15	1.07	
Vinyl Chloride	< 0.64	0.64	
4-bromofluorobenzene (surro	ogate) 103%		
Analysis Date/Time:	4-19-16/03:49		
Analyst Initials	tjg		



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Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 041816CAIR

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	113%		
Analysis Date/Time:	4-19-16/00:11		
Analyst Initials	tjg		

			LCS/D	LCS	LCSD		
LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	Conc(ppbv)	Rec.	Rec.	RPD	Flag
cis-1,2-Dichloroethene	10.7	10.2	10	107%	102%	4.8%	
Tetrachloroethene	9.59	9.62	10	96%	96%	0.3%	
trans-1,2-Dichloroethene	11.1	10.4	10	111%	104%	6.5%	
Trichlorethene	9.81	10	10	98%	100%	1.9%	
Vinyl Chloride	10.9	10.5	10	109%	105%	3.7%	
4-bromofluorobenzene (surrogate)	107%	108%					
Analysis Date/Time:	4-18-16/22:50	4-18-16/23:32					
Analyst Initials	tjg	tjg					



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Flag Number

Comments

1

Reported value is from a 10x dilution. TJG 4-27-16

WAF EnvisionAir Proj#: 2016-288 Page of

4/13/16

1145

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: Envira Forces				31630 <u>9</u>	• ?		REQUES	STED I	PARAME	TERS				
Report NI6 WA3390 Address: Washesha, L	1 53188	Project 6'	t Name or へのと	Number:				/	//					
Report To: W. Fassbander	-		ed by: 🄨	Vanderi	kiden						L ER		CIC	NAIR
Phone: 517 972			Required:	(circle if app	licable)		/, /,	//		/				
Invoice Address:		Report		needed: (dir 3 PPBV				Ž/ /	//	Sampling Type: Soil-Gas: □ Sub-Slab: □	i	MANAU AM	wicion oir o	ıom
Desired TAT: (Please Circle One 1 day 2 days 3 days Std (5		Media typ	e: 1LC = 1 Liter 6LC = 6 Liter TB = Tedlar TD = Therm	Canister	e e	Sampling Type: Soil-Gas: Sub-Slab: Indoor-Air: Canister Pressure / Vacuum						.com		
Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp	Coll. Time (Grab/Comp	Coll. Date (Comp. End)	Coll. Time (Comp. End)				Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6406-2248-09-1	6LC	4/6	0653	4/6	1458	1		1	4687	07256	-30	-5	-5	16-1039
6406-3348-IA-B	6LC	4/6	0648	4/6	1456				19625	05348	-30	-4.5	-4.5	
1-AII-2362-3049	6LC	4/6	0657	4/6	1506	×			17896	G23G8	-38	-3	-3	16-1041

Comments:	<u> </u>		,					<u> </u>		d.				
Reline	quished	by:			Date	Time	<u> </u>		Red	ceived by:		Da	ate	Time

0900



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Mr. W. Fassbender Enviroforensics N16 W. 23390 Stone Ridge Dr Suite G Waukesha, WI 53188

August 11, 2016

EnvisionAir Project Number: 2016-472 Client Project Name: 6406 / OHM-Lincoln

Dear Mr. Fassbender,

Please find the attached analytical report for the samples received August 2, 2016. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A Hunnicutt

Stanley O. Thurnicutt

Project Manager EnvisionAir, LLC



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882

www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-472

Sample Summary

Canister Pressure / Vacuum

			START	START							<u>Lab</u>
			Date	Time	End Date	End Time	Date	Time	Initial Field	Final Field	Received
Laboratory Sample Number:	Sample Description:	Matrix:	Collected:	Collected:	Collected:	Collected:	Received:	Received	(in. Hg)	(in. Hg)	(in. Hg)
16-1701	6406-2262-IA-1	Α	7/28/16	8:00	7/28/16	16:00	8/2/16	11:00	-29	-8	-8
16-1702	6406-OA-1	Α	7/28/16	8:10	7/28/16	16:05	8/2/16	11:00	-29	-6	-6



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Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-472

Analytical Method: TO-15 **Analytical Batch:** 080416AIR

Client Sample ID: 6406-2262-IA-1 Sample Collection START Date/Time: 7/28/16 8:00

Sample Collection END Date/Time: 7/28/16 16:00 Sample Received Date/Time: 8/2/16 11:00

Envision Sample Number: 16-1701 **Sample Matrix:** AIR

Sample Results ug/m³ Reporting Limit ug/m³ Compounds <u>Flag</u> cis-1,2-Dichloroethene < 3.96 3.96 Tetrachloroethene < 3.19 3.19 < 3.96 trans-1,2-Dichloroethene 3.96 Trichloroethene < 1.07 1.07 Vinyl Chloride < 0.64 0.64 4-bromofluorobenzene (surrogate) 119% Analysis Date/Time: 8-5-16/16:04 **Analyst Initials** tjg



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Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-472

Analytical Method: TO-15 **Analytical Batch:** 080416AIR

Client Sample ID: 6406-OA-1 Sample Collection START Date/Time: 7/28/16 8:10

Sample Collection END Date/Time: 7/28/16 16:05 Sample Received Date/Time: 8/2/16 11:00

Envision Sample Number: 16-1702 Sample Matrix: AIR

Compounds	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 3.96	3.96	_
Tetrachloroethene	< 3.19	3.19	
trans-1,2-Dichloroethene	< 3.96	3.96	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 0.64	0.64	
4-bromofluorobenzene (surro	gate) 115%		
Analysis Date/Time:	8-5-16/14:04		
Analyst Initials	tjg		



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 080416AIR

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	109%		
Analysis Date/Time:	8-5-16/12:52		
Analyst Initials	tjg		

			LCS/D	LCS	LCSD		
<u>LCS/LCSD</u>	LCS Results (ppbv)	LCSD Results (ppbv)	Conc(ppbv)	Rec.	Rec.	<u>RPD</u>	Flag
Vinyl Chloride	10.2	10.4	10	102%	104%	1.9%	
trans-1,2-Dichloroethene	9.74	9.78	10	97%	98%	0.4%	
cis-1,2-Dichloroethene	10.2	10.2	10	102%	102%	0.0%	
Trichloroethene	9.22	9.23	10	92%	92%	0.1%	
Tetrachloroethene	9.93	9.92	10	99%	99%	0.1%	
4-bromofluorobenzene (surrogate)	106%	106%					
Analysis Date/Time:	8-5-16/11:34	8-5-16/12:17					
Analyst Initials	tjg	tjg					



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Flag Number Comments

Time

1100

Date

8/1/16

CHAIN OF CUSTODY RECORD

WOFF

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: Enviro Forensics	1656. A.	CONTRACTOR CONTRACTOR	lumber:	2016 7]	D	EOLIECTE	D DADAME:	TEDE				
Reportule w23390 Stom Address: Ste.a.	L Rodge D I 53188	Y Project	t Name or	Number: 6	406		K	EQUESTE	D PARAMET	/ /				
Report To: W. Forss bendar	K. Heimsta	Sample	ed by: y.	Heimster	ael			//			FER	IVI	SIC	NAIR
Phone: 317-972-787			Required:	: (circle if appli	icable) el IV		/	//5		/		V	510	
Invoice Address:		Report		needed: (circ						Sampling Type: Soil-Gas: □ Sub-Slab: □		www.en	vision-air.c	com
Desired TAT: (Please Circle One) 1 day 2 days 3 days Std (5 bus. days) Media type: 1LC = 1 Liter Canister 6LC = 6 Liter Canister TB = Tedlar Bag TD = Thermal Desorption Tu				Canister Bag	e	1	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			Indoor-Air: 🌌	Canistei	Pressure /		OII
Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp	Coll. Time (Grab/Comp	Coll. Date	Coll. Time				Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6406-2262-IP-1		7/28/16		7/28/16	1600		X) 	11072	05249	- 29	-8	-8	16-1701
6406-0A-1	6LC	7/08/16	810	7128/16	1605		×		19627	07310	-29	-6	-6	16-1702
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Date

8/11/6

Time

Received by:

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Relinquished by:



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Mr. W. Fassbender Enviroforensics N16 W. 23390 Stone Ridge Dr Suite G Waukesha, WI 53188

August 11, 2016

EnvisionAir Project Number: 2016-473 Client Project Name: 6406 / OHM-Lincoln

Dear Mr. Fassbender,

Please find the attached analytical report for the samples received August 2, 2016. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A Hunnicutt

Stanley O. Thurnicutt

Project Manager EnvisionAir, LLC



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882

www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-473

Sample Summary

Canister Pressure / Vacuum

			START	START							<u>Lab</u>
			Date	Time	End Date	End Time	Date	Time	Initial Field	Final Field	Received
Laboratory Sample Number:	Sample Description:	Matrix:	Collected:	Collected:	Collected:	Collected:	Received:	Received	(in. Hg)	(in. Hg)	(in. Hg)
16-1703	6406-2248-IA-B	Α	7/28/16	8:50	7/28/16	16:45	8/2/16	11:00	-29	-7	-7



1441 Sadlier Circle West Drive Indianapolis, IN 46239 Ph: 317-351-0885 Fax: 317-351-0882 www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6406 / OHM-LINCOLN

Client Project Manager: W. FASSBENDER

EnvisionAir Project Number: 2016-473

Analytical Method: TO-15 **Analytical Batch:** 080416AIR

Client Sample ID: 6406-2248-IA-B Sample Collection START Date/Time: 7/28/16 8:50

> Sample Collection END Date/Time: 7/28/16 16:45 Sample Received Date/Time: 8/2/16 11:00

Envision Sample Number: 16-1703 AIR

Sample Matrix:

Compounds	Sample Results ug/m ³	Reporting Limit ug/m ³	<u>Flag</u>
cis-1,2-Dichloroethene	< 3.96	3.96	
Tetrachloroethene	4.34	3.19	
trans-1,2-Dichloroethene	< 3.96	3.96	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 0.64	0.64	
4-bromofluorobenzene (surro	gate) 112%		
Analysis Date/Time:	8-5-16/16:45		
Analyst Initials	tjg		



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Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 080416AIR

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	109%		
Analysis Date/Time:	8-5-16/12:52		
Analyst Initials	tjg		

			LCS/D	LCS	LCSD		
<u>LCS/LCSD</u>	LCS Results (ppbv)	LCSD Results (ppbv)	Conc(ppbv)	Rec.	Rec.	<u>RPD</u>	Flag
Vinyl Chloride	10.2	10.4	10	102%	104%	1.9%	
trans-1,2-Dichloroethene	9.74	9.78	10	97%	98%	0.4%	
cis-1,2-Dichloroethene	10.2	10.2	10	102%	102%	0.0%	
Trichloroethene	9.22	9.23	10	92%	92%	0.1%	
Tetrachloroethene	9.93	9.92	10	99%	99%	0.1%	
4-bromofluorobenzene (surrogate)	106%	106%					
Analysis Date/Time:	8-5-16/11:34	8-5-16/12:17					
Analyst Initials	tjg	tjg					



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Flag Number Comments

1100

CHAIN OF CUSTODY RECORD

WAF

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

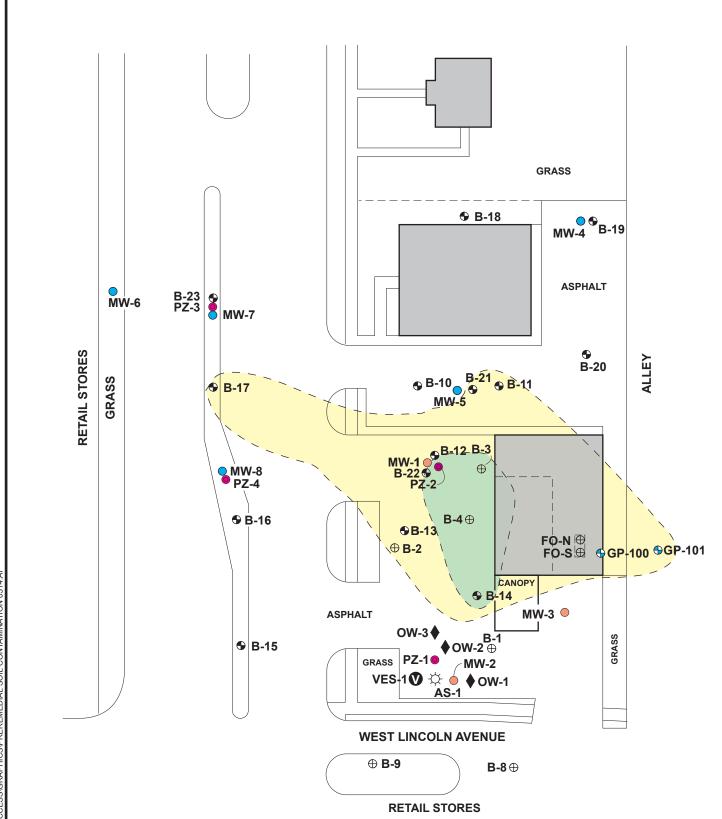
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Report No: W. Fassbander Report To: W. Fassbander K. Heinster	u Piclys F 53188	Project	Name or	Number: 6	406			/	//	//_				
Report To: W. Fassberdes	d	Sample	ed by: 14.1	termste	ed		1	/ /	Water /		FER	IVL	SIC	NAIR
Phone: 317-972-78	70	QA/QC	Required:	(circle if appl		dr Jeros		/	¥//,	Sampling Type:				
Invoice Address:				needed: (circ	cle) PPMV	/	THE STATE OF THE PERSON OF THE	adi J	//	Soil-Gas: Sub-Slab:		www.en	vision-air.c	om
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Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp	Coll. Time (Grab/Comp	Coll. Date (Comp. End)	Coll. Time (Comp. End)				Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6406-2248-IA-B	640	7/28/16	850	7/28/16	1645		7		10347	9934-4	- 29	-7	-7	16-1703
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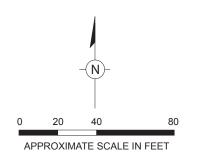
Fed Ex. Hunnicall



ATTACHMENT 5

ARCADIS Figure and Table





LEGEND

- MONITORING WELL LOCATION (MW-1 to MW-3) (Installed by Giles Engineering Associates 4/94)
- SOIL BORING LOCATION (B-1 TO B-9) (Drilled by Giles Engineering Associates 4/94)
- GEOPROBE LOCATION (B-10 TO B-22) (Drilled by Geraghty & Miller, Inc. 1995-1996)
- MONITORING WELL LOCATION (MW-4 to MW-8) (Installed by Geraghty & Miller, Inc. 1995-1996)
- PIEZOMETER LOCATION (PZ-1 to PZ-4) (Installed by Geraghty & Miller, Inc. 1995-1996)
- VAPOR EXTRACTION WELL LOCATION (VES-1) (Installed by Geraghty & Miller, Inc. 1996)
- ♦ VAPOR MONITORING PROBE LOCATION (OW-1 to OW-3) (Installed by Geraghty & Miller, Inc. 1996)
- AIR SPARGING WELL LOCATION (AS-1) (Installed by Geraghty & Miller, Inc. 1996)
- GEOPROBE LOCATION (GP-100 to GP-101) (Installed by ARCADIS 2012)
- EXTENT OF HYDROCARBONS IN SOIL EXCEEDING THE NON-INDUSTRIAL DIRECT CONTACT RCL
 - EXTENT OF HYDROCARBONS IN SOIL EXCEEDING THE GROUNDWATER PROTECTION RCL

SUCCESS, INC. ONE HOUR MARTINIZING WEST ALLIS, WISCONSIN

PRE-REMEDIAL SOIL CONTAMINATION

FIGURE **B.2.a**



Boring I.D. No.	NR 720	NR 720	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
Sample Depth (feet)	NIDC	GWP	10-12	7.5-9	7.5-9	5-7	7.5-9	5-7	7.5-9	5-7
Saturated Sample?			Yes	Yes	Yes	No	Yes	No	Yes	No
Date Collected	RCL	RCL	4-19-94	4-19-94	4-19-94	4-19-94	4-19-94	4-19-94	4-19-94	4-19-94
VOCs (µg/kg)										
Benzene	1490	2.6	<1.3	3.4	<150	<1,400	<1.2	<1.2	<1.1	<1.2
n-Butylbenzene	108000	NL	NA	NA	17,000	NA	NA	NA	NA	NA
sec-Butylbenzene	145000	NL	NA	NA	340	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156000	NL	NA	NA	<410	NA	NA	NA	NA	NA
Ethylbenzene	7,470	785	<1.3	45	<200	2,000	<1.2	<1.2	<1.1	<1.2
Isopropylbenzene	NL	NL	NA	NA	400	NA	NA	NA	NA	NA
p-Isopropyltoluene	162000	NL	NA	NA	520	NA	NA	NA	NA	NA
Methyl tert-butyl ether	59400	13.5	<1.3	1.4	23,000	<1,400	<1.2	<1.2	<1.1	<1.2
Naphthalene	5150	329.4	NA	NA	10,000	NA	NA	NA	NA	NA
n-Propylbenzene	NL	NL	NA	NA	460	NA	NA	NA	NA	NA
Tetrachloroethene	30700	2.3	NA	NA	14,000	NA	NA	NA	NA	NA
Toluene	818,000	554	<1.3	<1.3	<200	<1,400	<1.2	<1.2	<1.1	<1.2
Trichloroethene	644	27.5	NA	NA	270	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	89800	NL	<1.3	2.3	2,500	25,000	<1.2	<1.2	<1.1	<1.2
1,3,5-Trimethylbenzene	182000	NL	<1.3	<1.3	5,900	8,700	<1.2	<1.2	<1.1	<1.2
Total trimethylbenzenes	NL	689.7	<2.6	2.3	8400	33,700	<2.4	<2.4	<2.2	<2.4
Total xylenes	4,100	1,970	<2.6	77	10,300	9,000	<2.4	<2.3	<2.3	<2.4
Other Analyses (mg/kg)										
Gasoline Range Organics	NL	NL	6.3	47	200	12	27	31	7.8	<6.1
Diesel Range Organics	NL	NL	NA	NA	9,500	NA	NA	NA	NA	NA
Lead	400	13500	19	22	54	22	19	19	19	19

The all-time low groundwater table, used to evaluate whether soil samples were saturated, is 8.97 feet below land surface.

RCL Residual Contaminant Level.
VOC Volatile organic compound.

 $\mu g/kg$ Micrograms per kilogram; equivalent to parts per billion (ppb).

mg/kg Milligrams per kilogram; equivalent to parts per million (ppm).

< Indicates not detected. If present the concentration is below the method detection limit (the numerical value following the < symbol).

NA Not analyzed for this parameter.

NL No RCL established.

NIDC Non-Industrial Direct Contact

GWP Groundwater Protection

100 Concentration exceeds the GWP Concentration exceeds the NIDC

Boring I.D. No.	B-9	B-10	B-11	B-12	B-12	B-13	B-14	B-15	B-16	B-17
Sample Depth (feet)	7.5-9	6-8	6-8	8-10	22-24	6-8	8-10	6-8	6-8	8-10
Saturated Sample?	Yes	No	No	Yes	Yes	No	Yes	No	No	Yes
Date Collected	4-19-94	8-18-95	8-18-95	8-18-95	8-18-95	8-18-95	8-18-95	8-18-95	8-18-95	8-18-95
VOCs (μg/kg)										
Benzene	<1.2	<25	<500	<2,500	<25	<25	9,800	<25	<25	<25
n-Butylbenzene	NA	<25	<500	<2,500	<25	<25	20,000	<25	<25	<25
sec-Butylbenzene	NA	<25	<500	<2,500	<25	<25	<5,000	<25	<25	<25
cis-1,2-Dichloroethene	NA	30	<500	<2,500	<25	<25	<5,000	<25	<25	<25
Ethylbenzene	<1.2	<25	<500	<2,500	<25	64	23,000	<25	<25	<25
Isopropylbenzene	NA	<25	<500	<2,500	<25	<25	<5,000	<25	<25	<25
p-Isopropyltoluene	NA	<25	<500	<2,500	<25	<25	<5,000	<25	<25	<25
Methyl tert-butyl ether	<1.2	<25	<500	<2,500	<25	<25	<5,000	<25	<25	<25
Naphthalene	NA	<25	<500	<2,500	54	<25	9,800	<25	<25	<25
n-Propylbenzene	NA	<25	<500	<2,500	<25	31	9,300	<25	<25	<25
Tetrachloroethene	NA	<25	13,000	12,000	<25	<25	<5,000	<25	<25	81
Toluene	<1.2	<25	<500	<2,500	<25	39	9,100	<25	<25	<25
Trichloroethene	NA	<25	<500	<2,500	<25	<25	<5,000	<25	<25	<25
1,2,4-Trimethylbenzene	<1.2	<25	<500	3,900	<25	<25	57,000	<25	<25	<25
1,3,5-Trimethylbenzene	<1.2	<25	<500	<2,500	<25	<25	19,000	<25	<25	<25
Total trimethylbenzenes	<2.4	<50	<1000	3900	<50	<50	76000	<50	<50	<50
Total xylenes	<2.4	<25	<500	<2,500	<25	72	120,000	<25	<25	<25
Other Analyses (mg/kg)										
Gasoline Range Organics	4.9	<1.2	2.4	2.2	NA	34	240	<1.1	<1.1	<1.2
Diesel Range Organics	NA	<6.0	<5.9	<6.0	NA	NA	NA	NA	NA	NA
Lead	21	NA								

The all-time low groundwater table, used to evaluate whether soil samples were saturated, is 8.97 feet below land surface.

RCL Residual Contaminant Level.

VOC Volatile organic compound.

μg/kg Micrograms per kilogram; equivalent to parts per billion (ppb).

mg/kg Milligrams per kilogram; equivalent to parts per million (ppm).

< Indicates not detected. If present the concentration is below the method detection limit (the numerical value following the < symbol).

NA Not analyzed for this parameter.

NL No RCL established.

NIDC Non-Industrial Direct Contact

GWP Groundwater Protection

Too Concentration exceeds the GWP Concentration exceeds the NIDC

A.2 Pre-remedial Soil Analy			<i>,</i> ,		U,,,	,				
Boring I.D. No.	B-18	B-19	B-20	B-21	B-21	B-22	B-22	B-23	MW-6	PZ-3
Sample Depth (feet)	6-8	6-8	6-8	4-6	6-8	2-4	6-8	4-6	4-6	4-6
Saturated Sample?	No	No	No	No	No	No	No	No	No	No
Date Collected	2-8-96	2-8-96	2-8-96	2-8-96	2-8-96	2-8-96	2-8-96	2-8-96	3-1-96	5-21-96
VOCs (µg/kg)	-05	405	405	-05	-05	-05	-05	-05	-05	-05
Benzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
n-Butylbenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
sec-Butylbenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
p-Isopropyltoluene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Methyl tert-butyl ether	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
n-Propylbenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<25	<25	<25	49	<25	3,700	46,000	<25	<25	<25
Toluene	44	<25	<25	<25	<25	<25	<25	<25	<25	<25
Trichloroethene	<25	<25	<25	<25	<25	62	150	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Total trimethylbenzenes	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Total xylenes	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Other Analyses (mg/kg)										
Gasoline Range Organics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The all-time low groundwater table, used to evaluate whether soil samples were saturated, is 8.97 feet below land surface.

RCL Residual Contaminant Level.

VOC Volatile organic compound.

 $\mu g/kg$ Micrograms per kilogram; equivalent to parts per billion (ppb).

mg/kg Milligrams per kilogram; equivalent to parts per million (ppm).

< Indicates not detected. If present the concentration is below the method detection limit (the numerical value following the < symbol).

NA Not analyzed for this parameter.

NL No RCL established.

NIDC Non-Industrial Direct Contact

GWP Groundwater Protection

100 Concentration exceeds the GWP Concentration exceeds the NIDC

Boring I.D. No.	PZ-4	VES-1	GP-100	GP-100	GP-101
Sample Depth (feet)	4-6	5-7	4-6	6-8	6-8
Saturated Sample?	No	No	No	No	No
Date Collected	5-21-96	2-28-96	3-2/12	3-2/12	3-2/12
VOCs (μg/kg)					
Benzene	<25	<25	<27	<27	<29
n-Butylbenzene	<25	<25	<27	<27	<29
sec-Butylbenzene	<25	<25	<27	<27	<29
cis-1,2-Dichloroethene	<25	<25	<27	<27	<29
Ethylbenzene	<25	<25	<27	<27	<29
Isopropylbenzene	<25	<25	<27	<27	<29
p-Isopropyltoluene	<25	<25	<27	<27	<29
Methyl tert-butyl ether	<25	<25	<27	<27	<29
Naphthalene	<25	<25	<55	<55	<59
n-Propylbenzene	<25	<25	<27	<27	<29
Tetrachloroethene	<25	<25	2200	2200	86J
Toluene	<25	<25	<27	<27	<29
Trichloroethene	<25	<25	<27	<27	<29
1,2,4-Trimethylbenzene	<25	<25	<27	<27	<29
1,3,5-Trimethylbenzene	<25	<25	<27	<27	<29
Total trimethylbenzenes	<50	<50	<54	<54	<58
Total xylenes	<25	<25	<82	<82	<88
Other Analyses (mg/kg)					
Gasoline Range Organics	NA	<6.9	NA	NA	NA
Diesel Range Organics	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA

The all-time low groundwater table, used to evaluate whether soil samples were saturated, is 8.97 feet below land surface.

RCL Residual Contaminant Level.
VOC Volatile organic compound.

 $\mu g/kg$ Micrograms per kilogram; equivalent to parts per billion (ppb).

mg/kg Milligrams per kilogram; equivalent to parts per million (ppm).

< Indicates not detected. If present the concentration is below the method detection limit (the numerical value following the < symbol).

NA Not analyzed for this parameter.

NL No RCL established.

NIDC Non-Industrial Direct Contact

GWP Groundwater Protection

100 Concentration exceeds the GWP Concentration exceeds the NIDC