

From: Jason Powell <jasonp@metcohq.com>
Sent: Tuesday, May 26, 2020 2:34 PM
To: James, Andrew G - DNR
Cc: Ron Anderson
Subject: Kopatz Property - Vapor Sampling - Crivitz (Town of Beaver), WI
Attachments: 2316_001.pdf

Andy, REI was able to sample VP-3 but VP-2 still had water coming out of the vapor pin. REI was able to place a sampling port in the north wall of the basement after VP-2 could not be sampled. An ambient air sample was collected in the basement and main floor of the source property building over a 24 hour period. The results have been attached and no VAL exceedences were documented in the four samples collected.

Based on these results and that they were able to sample one of the two vapor ports that historically have had water present and collected a vapor sample through the north wall of the basement, we will now move forward with the updated closure request unless you tell me otherwise.

Any questions let me know.
Thanks,



Jason Powell

METCO - Staff Scientist

jasonp@metcohq.com / 608.781.8879
709 Gillette Street - Suite 3, La Crosse WI 54603
www.metcohq.com

A.4 Vapor Analytical Table
 Sub-Slab Sampling Data Table for Kopatz Property
 BY METCO

WDNR
 Residential
 Sub-Slab Vapor Action
 Levels for Various VOCs
 Quick Look-Up Table
 Updated November, 2017
 (ug/m³)

Sub-Slab Sampling conducted on: 10/20/2017 10/20/2017 10/20/2017 10/4/2019 5/15/2020 5/15/2020

Sample ID	VP-1	VP-2	VP-3	VP-1	N. Wall	VP-3
Benzene – ug/m ³	422	910000	1050000	0.89	2.49	1.69
Carbon Tetrachloride – ug/m ³	NS	NS	NS	NS	NS	NS
Chloroform – ug/m ³	NS	NS	NS	NS	NS	NS
Chloromethane – ug/m ³	NS	NS	NS	NS	NS	NS
Dichlorodifluoromethane – ug/m ³	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane (1,1-DCA) – ug/m ³	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane (1,2-DCA) – ug/m ³	NS	NS	NS	NS	NS	NS
1,1-Dichloroethylene (1,1-DCE) – ug/m ³	NS	NS	NS	NS	NS	NS
1,2-Dichloroethylene (cis and trans) - ug/m ³	NS	NS	NS	NS	NS	NS
Ethylbenzene – ug/m ³	108	361000	125000	2.38	3.4	1.82
Methylene chloride – ug/m ³	NS	NS	NS	NS	NS	NS
Methyl Tert-Butyl Ether (MTBE) – ug/m ³	<58.4	<5090	<5500	<0.16	<0.16	<0.16
Naphthalene – ug/m ³	<52.2	<4550	<4920	3.7	2.62	2.04
Tetrachloroethylene -ug/m ³	NS	NS	NS	NS	NS	NS
Toluene – ug/m ³	259	573000	89200	8.0	11.3	6.8
1,1,1-Trichloroethane – ug/m ³	NS	NS	NS	NS	NS	NS
Trichloroethylene – ug/m ³	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane (Halcarbon 11) – ug/m ³	NS	NS	NS	NS	NS	NS
Trimethylbenzene (1,2,4) – ug/m ³	113	442000	35600	8.5	16.8	4.3
Trimethylbenzene (1,3,5) – ug/m ³	<36.0	238000	28100	1.96	4.0	1.08
Vinyl chloride – ug/m ³	NS	NS	NS	NS	NS	NS
Xylene (total) -ug/m ³	538	4300000	823800	14.5	20.1	10.22

ug/m³ = Micrograms per cubic meter.
 < = Less than the reporting limit indicated in parentheses.
Bold = Sub-Slab Standard Exceedance
 c = Carcinogen
 n = Non Carcinogen
 J = between Limit of Detection (LOD) and Limit of Quantitation (LOQ)
 * Please note that other VOCs were detected that are not on the WDNR Sub-Slab Vapor Action Levels Quick Look-Up Table.
 B = Compound was found in th blank and sample
 E = Result exceeded calibration range
 - = Inhalation toxicity values are not available from U.S. EPA
 NS = Not Sampled

A.4 Vapor Analytical Table
Indoor Air Sampling Data Table for Kopatz Property
BY METCO

Indoor Air Sampling conducted on: 2/7/2020 2/7/2020 5/15/2020 5/15/2020

WDNR
Residential
Indoor Air Vapor Action Levels
for Various VOCs
Quick Look-Up Table Updated
November, 2017
(ug/m³)

Sample ID	AB-1 Basement	AU-1 Main Floor	AB-1 Basement	AU-1 Main Floor	5/15/2020	5/15/2020
Benzene – ug/m ³	0.96	0.89	0.77	0.38		3.6
Carbon Tetrachloride – ug/m ³	NS	NS	NS	NS		4.7
Chloroform – ug/m ³	NS	NS	NS	NS		1.2
Chloromethane – ug/m ³	NS	NS	NS	NS		94
Dichlorodifluoromethane – ug/m ³	NS	NS	NS	NS		100
1,1-Dichloroethane (1,1-DCA) – ug/m ³	NS	NS	NS	NS		18
1,2-Dichloroethane (1,2-DCA) – ug/m ³	NS	NS	NS	NS		1.1
1,1,1-Dichloroethylene (1,1-DCE) – ug/m ³	NS	NS	NS	NS		210
1,2-Dichloroethylene (cis and trans) - ug/m ³	NS	NS	NS	NS		NA
Ethylbenzene – ug/m ³	0.26	0.43	0.65	0.48		11
Methylene chloride – ug/m ³	NS	NS	NS	NS		630
Methyl Tert-Butyl Ether (MTBE) – ug/m ³	<0.16	<0.16	<0.16	<0.16		110
Naphthalene – ug/m ³	<0.675	<0.675	1.1	<0.675		0.83
Tetrachloroethylene -ug/m ³	NS	NS	NS	NS		42
Toluene – ug/m ³	1.2	1.47	2.67	1.17		5200
1,1,1-Trichloroethane – ug/m ³	NS	NS	NS	NS		5200
Trichloroethylene – ug/m ³	NS	NS	NS	NS		2.1
Trichlorofluoromethane (Halcarbon 11) – ug/m ³	NS	NS	NS	NS		NA
Trimethylbenzene (1,2,4) – ug/m ³	0.49	1.42	1.47	0.78		63
Trimethylbenzene (1,3,5) – ug/m ³	<0.232	0.44	0.44	<0.232		63
Vinyl chloride – ug/m ³	NS	NS	NS	NS		1.7
Xylene (total) -ug/m ³	1.48	2.08	4.03	1.56		100

ug/m³ = Micrograms per cubic meter.

< = Less than the reporting limit indicated in parentheses.

Bold = Exceedence of state standards

c = Carcinogen

Underline = Indoor Residential Air Standard Exceedance

J = between Limit of Detection (LOD) and Limit of Quantitation (LOQ)

* Please note that other VOCs were detected that are not on the WDNR Indoor Air Vapor Action Levels Quick Look-Up Table.

B = Compound was found in th blank and sample

E = Result exceeded calibration range

Synergy Environmental Lab, INC

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

ANDY DELFORGE
REI
4080 N. 20TH AVENUE
WAUSAU, WI 54401

Report Date 21-May-20

Project Name KOPATZ/CRIVITZ
Project # 7346

Invoice # E37917

Lab Code 5037917A
Sample ID VP-3
Sample Matrix Air
Sample Date 5/15/2020

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
Air Samples										
Benzene	1.69	ug/m3	0.136	0.433	1	TO-15		5/20/2020	CJR	1
Ethylbenzene	1.82	ug/m3	0.203	0.645	1	TO-15		5/20/2020	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.16	ug/m3	0.16	0.509	1	TO-15		5/20/2020	CJR	1
Naphthalene	2.04 "u"	ug/m3	0.675	2.15	1	TO-15		5/20/2020	CJR	1
Toluene	6.8	ug/m3	0.184	0.585	1	TO-15		5/20/2020	CJR	1
1,2,4-Trimethylbenzene	4.3	ug/m3	0.283	0.899	1	TO-15		5/20/2020	CJR	1
1,3,5-Trimethylbenzene	1.08	ug/m3	0.232	0.739	1	TO-15		5/20/2020	CJR	1
m&p-Xylene	7.4	ug/m3	0.377	1.2	1	TO-15		5/20/2020	CJR	1
o-Xylene	2.82	ug/m3	0.218	0.695	1	TO-15		5/20/2020	CJR	1

Project Name KOPATZ/CRIVITZ
 Project # 7346

Invoice # E37917

Lab Code 5037917B
 Sample ID N. WALL
 Sample Matrix Air
 Sample Date 5/15/2020

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
Air Samples										
Benzene	2.49	ug/m3	0.136	0.433	1	TO-15		5/20/2020	CJR	1
Ethylbenzene	3.4	ug/m3	0.203	0.645	1	TO-15		5/20/2020	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.16	ug/m3	0.16	0.509	1	TO-15		5/20/2020	CJR	1
Naphthalene	2.62	ug/m3	0.675	2.15	1	TO-15		5/20/2020	CJR	1
Toluene	11.3	ug/m3	0.184	0.585	1	TO-15		5/20/2020	CJR	1
1,2,4-Trimethylbenzene	16.8	ug/m3	0.283	0.899	1	TO-15		5/20/2020	CJR	1
1,3,5-Trimethylbenzene	4.0	ug/m3	0.232	0.739	1	TO-15		5/20/2020	CJR	1
m&p-Xylene	12.9	ug/m3	0.377	1.2	1	TO-15		5/20/2020	CJR	1
o-Xylene	7.2	ug/m3	0.218	0.695	1	TO-15		5/20/2020	CJR	1

Lab Code 5037917C
 Sample ID AB-1
 Sample Matrix Air
 Sample Date 5/16/2020

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
Air Samples										
Benzene	0.77	ug/m3	0.136	0.433	1	TO-15		5/20/2020	CJR	1
Ethylbenzene	0.65	ug/m3	0.203	0.645	1	TO-15		5/20/2020	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.16	ug/m3	0.16	0.509	1	TO-15		5/20/2020	CJR	1
Naphthalene	1.1 "J"	ug/m3	0.675	2.15	1	TO-15		5/20/2020	CJR	1
Toluene	2.67	ug/m3	0.184	0.585	1	TO-15		5/20/2020	CJR	1
1,2,4-Trimethylbenzene	1.47	ug/m3	0.283	0.899	1	TO-15		5/20/2020	CJR	1
1,3,5-Trimethylbenzene	0.44 "J"	ug/m3	0.232	0.739	1	TO-15		5/20/2020	CJR	1
m&p-Xylene	2.64	ug/m3	0.377	1.2	1	TO-15		5/20/2020	CJR	1
o-Xylene	1.39	ug/m3	0.218	0.695	1	TO-15		5/20/2020	CJR	1

Lab Code 5037917D
 Sample ID AU-1
 Sample Matrix Air
 Sample Date 5/16/2020

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
Air Samples										
Benzene	0.38 "J"	ug/m3	0.136	0.433	1	TO-15		5/20/2020	CJR	1
Ethylbenzene	0.48 "J"	ug/m3	0.203	0.645	1	TO-15		5/20/2020	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.16	ug/m3	0.16	0.509	1	TO-15		5/20/2020	CJR	1
Naphthalene	< 0.675	ug/m3	0.675	2.15	1	TO-15		5/20/2020	CJR	1
Toluene	1.17	ug/m3	0.184	0.585	1	TO-15		5/20/2020	CJR	1
1,2,4-Trimethylbenzene	0.78 "J"	ug/m3	0.283	0.899	1	TO-15		5/20/2020	CJR	1
1,3,5-Trimethylbenzene	< 0.232	ug/m3	0.232	0.739	1	TO-15		5/20/2020	CJR	1
m&p-Xylene	1.04 "J"	ug/m3	0.377	1.2	1	TO-15		5/20/2020	CJR	1
o-Xylene	0.52 "J"	ug/m3	0.218	0.695	1	TO-15		5/20/2020	CJR	1

Project Name KOPATZ/CRIVITZ
Project # 7346

Invoice # E37917

"J" Flag: Analyte detected between LOD and LOQ

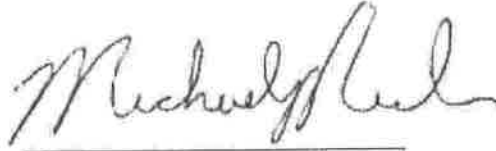
LOD Limit of Detection

LOQ Limit of Quantitation

<i>Code</i>	<i>Comment</i>
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.

Authorized Signature



CHAIN OF STUDY RECORD

Synergy

Environmental Lab, Inc.

www.synergy-lab.net
 1990 Prospect Ct. • Appleton, WI 54914
 920-830-2455 • mrsynergy@wi.twcbc.com

Chain # No 40714

Page 1 of 1

Sample Handling Request
 Rush Analysis Date Required:
 (Rushes accepted only with prior authorization)
 Normal Turn Around

Lab I.D. # _____
 QUOTE # : 7346
 Project # : _____
 Sampler's Signature: _____

Project (Name / Location): WATZ/CORVIZ
 Reports To: Andy DeRose
 Company: TEL
 Address: 1080 N. 207th Ave
 City State Zip: Waukegan, WI 54901
 Phone: 715-695-6787
 Email: andros@telinc.com

Invoice To:
 Company: AD
 Address: TEL
 City State Zip: _____
 Phone: _____
 Email: ANDY@TELINC.COM

Lab I.D.	Sample I.D.	Collection Date	Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)	Preservation	Analysis Requested	Other Analysis	PID/ FID
5037917A	VP-3	5/17/20	11:10	Y	1	A	-	DRO (Mod DRO Sep 95) GRO (Mod GRO Sep 95) LEAD NITRATE/NITRATE OIL & GREASE PAH (EPA 8270) PCB		
B	AV-104	5/18/20	11:52	Y	1	A	-	PVOC (EPA 8021) PVC + NAPHTHALENE		
C	AD-1	5/18/20	10:55	Y	1	A	-	SULFATE TOTAL SUSPENDED SOLIDS VOC (EPA 8260) VOC AIR (TO - 15) 8-PCRA METALS		
D	AV-1	5/18/20	11:00	Y	1	A	-			

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

Sample Integrity - To be completed by receiving lab.
 Method of Shipment: Cooler
 Temp. of Temp. Blank: _____ °C On Ice:
 Cooler seal intact upon receipt: Yes No

Relinquished By: (sign) _____ Time 5:17 PM Date 5/20/20
 Received By: (sign) _____ Time _____ Date _____
 Received in Laboratory By: [Signature] Time: 13:00 Date: 5/20/20



Sump pump/sump pit



Crawl space under living room



Sampling VP3



Ambient air sample in basement (AB-1)



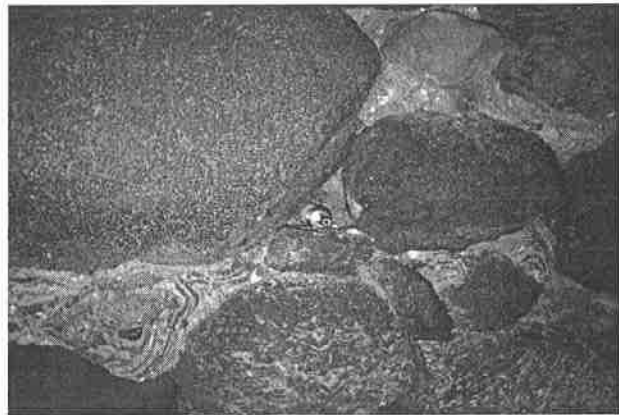
Water in VP2



Drilling hole through north wall



Vapor pin installed in north wall



Vapor pin location



Vapor pin borehole sealed with wax



Sampling North Wall



Project No. 7396 Made By AD 5/15-16/20
 Name Date
 Client METCO Checked By _____
 Name Date
 Project KOPATZ PROPERTY Sheet No. 1 of 1
 Description VAPOR SAMPLING - FIELD NOTES



ON SITE 10:15 AM 5/15 - DENNIS KOPATZ ON SITE

- SUN PUMP NOT WORKING - RE-CONNECTED HOSE, WATER PUMPED TO
 ~ 16' BELOW BASEMENT SLAB

BASEMENT - AMBIENT AIR

O₂ - 20.9%
 CO - 0 PPM
 LEL - 0%
 H₂S - 0.0 PPM
 VOC - 0 PPM

SYMM# AB-1

CAN # 5510
 FC # 5455
 START TIME 5/15 - 10:57 AM
 START VAC - 29
 END TIME 5/16 - 10:55 AM
 END VAC - 1

KITCHEN AMBIENT

O₂ - 20.9%
 CO - 0 PPM
 LEL - 0%
 H₂S - 0.0 PPM
 VOC - 0 PPM

SYMM# AU-1

CAN # 5622
 FC # 5499
 START TIME 5/15 - 11:05
 START VAC - 29
 END TIME - 5/16 - 11:00
 END VAC - 0

UP-3

O₂ - 20.9%
 CO - 0 PPM
 LEL - 2%
 H₂S - 0 PPM
 VOC - 0 PPM

CAN # 5623
 START VAC - 28
 START TIME - 10:54
 END TIME - 11:10
 END VAC - 0

UP-2 RUN OF WATER - HOLE DRILLED IN N. WALL CENTER, 30" ABOVE FLOOR
 INSERT VAPOR PIN W/ TEFALON SPEAR, SEALED W/ WAX

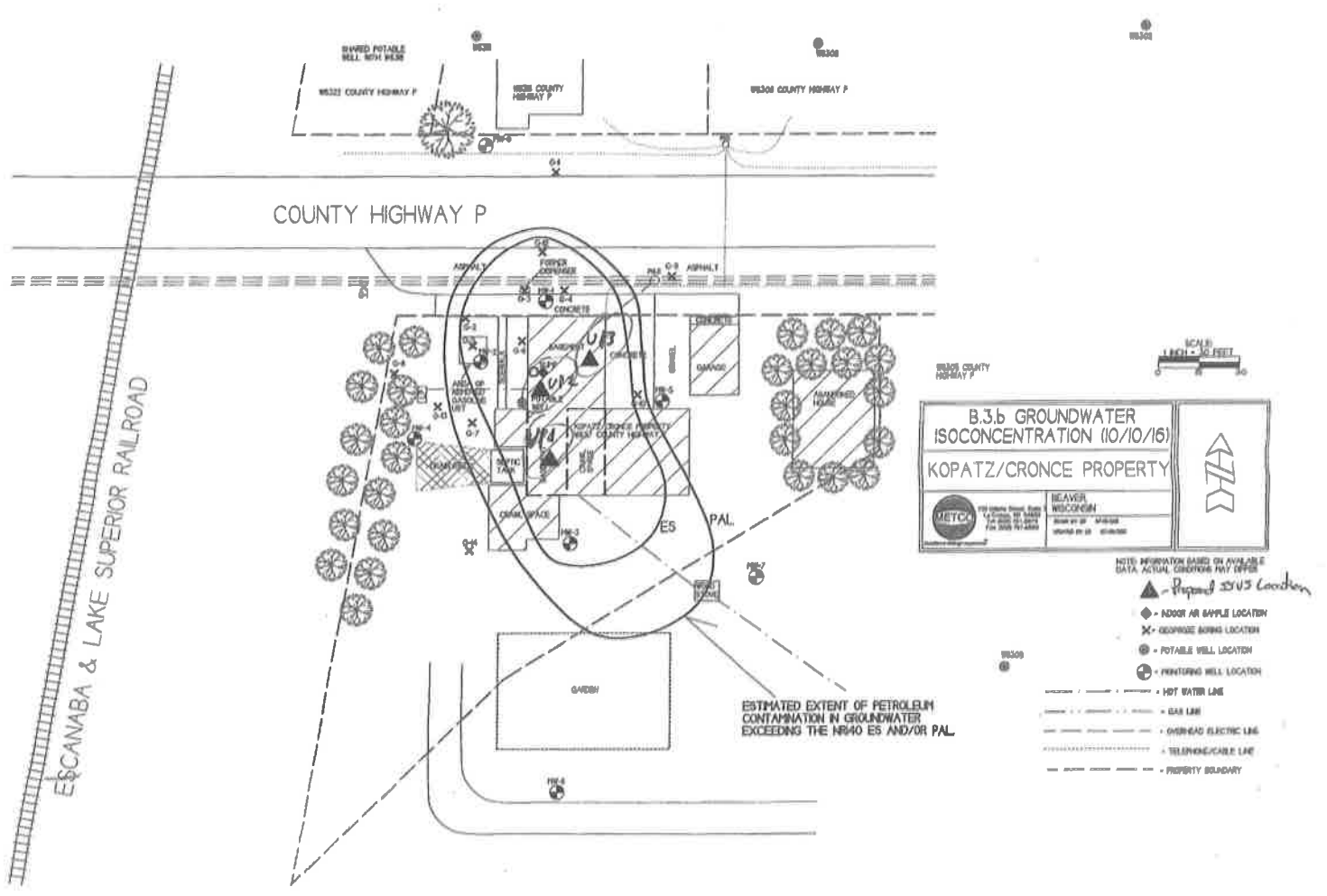
O₂ - 20.9%
 CO - 0 PPM
 LEL - 10%
 H₂S - 0 PPM
 VOC - 0 PPM

N. WALL
 CAN # 5636
 START VAC - 28
 START TIME - 11:37
 END VAC - 0
 END TIME - 11:52



RESPONSIVE. EFFICIENT. INNOVATIVE.

4080 N. 20th Avenue Wausau, WI 54401
 715-675-9784 REIengineering.com



SCALE
1 INCH = 30 FEET

WISCONSIN COUNTY HIGHWAY P

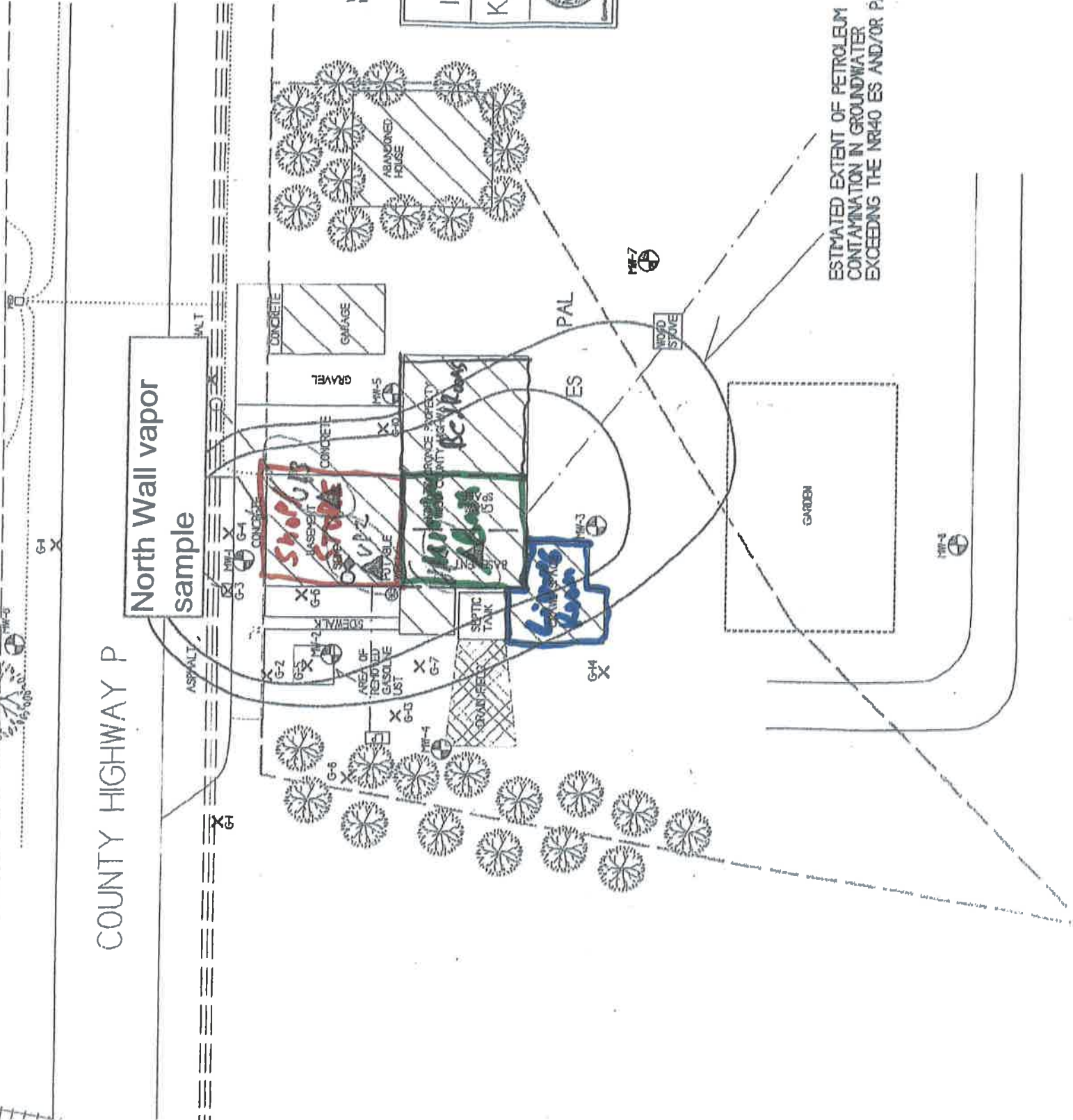
B.3.b GROUNDWATER ISOCONCENTRATION (10/10/16)	
KOPATZ/CRONCE PROPERTY	
METCA 1000 Lakes Road, Suite 100 La Crosse, WI 54601 Phone: 608-785-3333 Fax: 608-785-3334	BEAVER WISCONSIN Area #100 MADISON Started on 10/10/2016

- NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY VARY.
- ▲ - Proposed 25US Location
 - ◆ - ADDITIONAL SAMPLE LOCATION
 - X - GEOPHYSICAL BOUNDARY LOCATION
 - ⊕ - POTABLE WELL LOCATION
 - ⊙ - FERTILIZER WELL LOCATION
 - — — — — HOT WATER LINE
 - — — — — GAS LINE
 - — — — — OVERHEAD ELECTRIC LINE
 - — — — — TELEPHONE/CABLE LINE
 - - - - - PROPERTY BOUNDARY

ESTIMATED EXTENT OF PETROLEUM CONTAMINATION IN GROUNDWATER EXCEEDING THE M940 ES AND/OR PAL

COUNTY HIGHWAY P

North Wall vapor sample



NECOS COUNTY HIGHWAY P

B.3.b GROUNDWATER
 ISOCONCENTRATION (10/1)
 KOPATZ/CRONCE PROPE



765 Green Street, Suite 2
 La Crosse, WI 54603
 Tel: (608) 781-3879
 Fax: (608) 781-4853

BEAVER
 WISCONSIN
 BEVER INC. B
 01/27/2002

NOTE
 DATE

ESTIMATED EXTENT OF PETROLEUM
 CONTAMINATION IN GROUNDWATER
 EXCEEDING THE NR40 ES AND/OR PAL

W3505

MW-4

MW-7

PAL

ES

G-4

MW-3

GRAVEL

CONCRETE GARAGE

SEPTIC TANK

GARDEN

ROAD STONE

AREA OF REMOVED GASOLINE LUST

SEWALK

POTABLE

CONCRETE

CONCRETE

ABANDONED HOUSE

MW-1

MW-2

G-2

G-3

MW-5

MW-6

MW-8

MW-9

MW-10

MW-11

MW-12

MW-13

MW-14

MW-15

MW-16

MW-17

MW-18

MW-19

MW-20

MW-21

MW-22

MW-23

MW-24

MW-25

MW-26

MW-27

MW-28

MW-29