

Klauk, Robert H - DNR

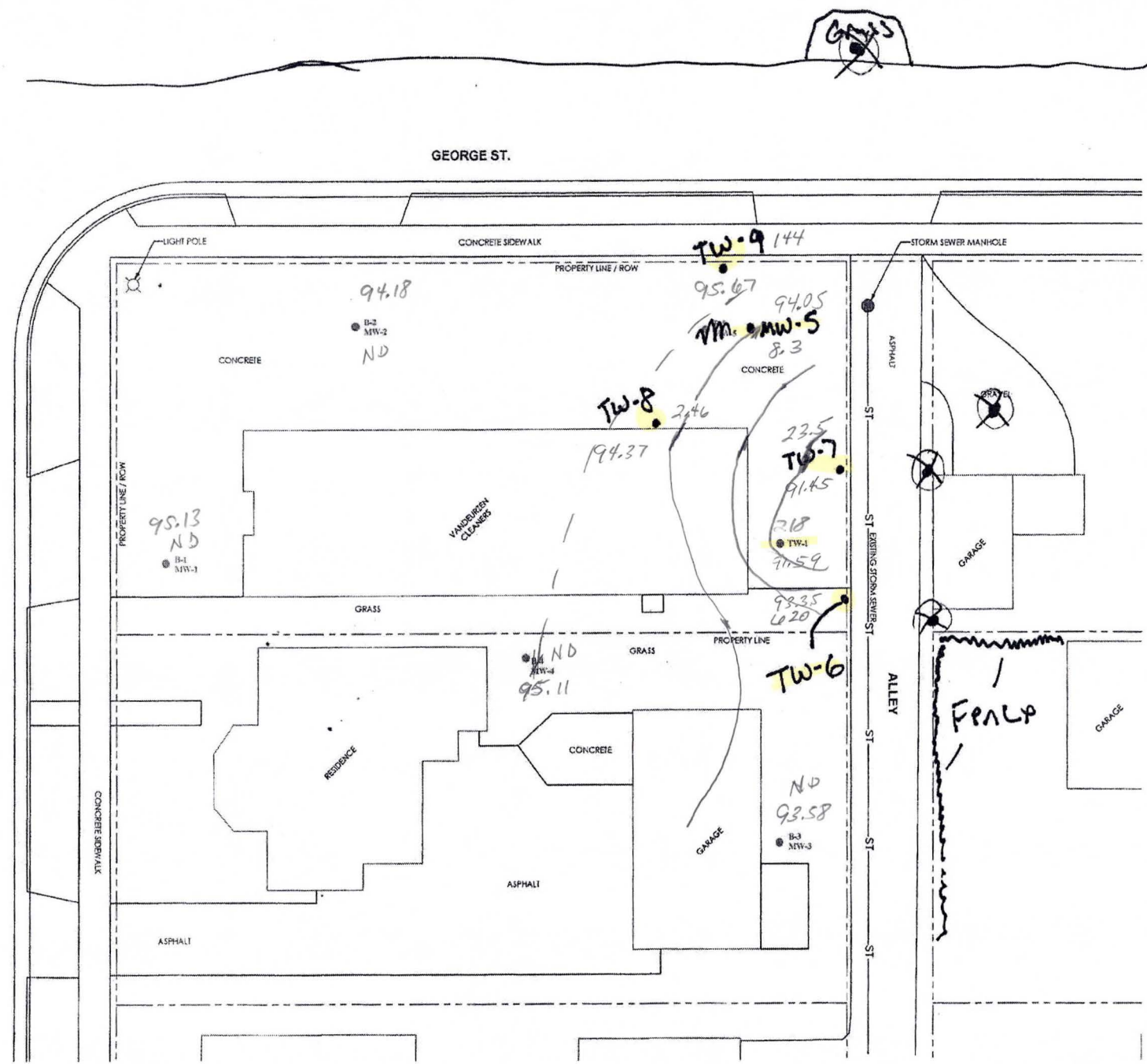
From: Brian Youngwirth <byoungwirth@generalengineering.net>
Sent: Wednesday, August 19, 2015 9:21 AM
To: Klauk, Robert H - DNR
Subject: Vandeurzen
Attachments: Scan0007.pdf; Analytical Table 08.20.2014.xls

Bob, attached is a rough map, and the boring, soil probe, and well data for Vandeurzen. I also marked four locations for possible additional probes. Please give me a call when you have had a chance to review it. I am pretty much just use my cell as I am not in the Portage office so always call me on that.

Brian Youngwirth
Environmental Project Manager
General Engineering Company
916 Silver Lake Drive | PO Box 340 | Portage, WI 53901
P 608-742-2169 | Fax 608-742-2592 | C 608-697-8010
www.generalengineering.net

© Vanderzuren Cleaners - 2-0614-154 (Sept 8, Nov 2-0614-154) (2014-09-08) Vanderzuren Cleaners, 9872014 1.03.03 PM, L.L.

S. ONTARIO ST.





General Engineering Company
 P.O. Box 345 • 418 Blue Lake Ct. • Waipara, WI 53001
 608-742-7188 (Office) • 608-742-7267 (Fax)
 www.generalengr.com

BORING/MONITORING WELL LOCATION PLAN
 Vanderzuren Cleaners
 City of De Pere
 Brown County, WI

NO.	REVISIONS	BY	DATE

0 15
SCALE

Drawn by: SRR
 Date: Sept. 2014
 SHEET NO. 2-0614-154
 SHEET NO.

Fig. 2

**TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
VAN DEURZEN CLEANERS
PROJECT NUMBER**

Sample No.	NC RCL (ug/kg)	C RCL (ug/kg)	Not-To- Exceed Direct Contact	Soil to Groundwater RCL	SB-1/MW-1	SB-2/MW-2	SB-3/MW-3	SB-4/MW-4	SB-4/MW-4	SB-5/MW-5
Sampling Date					07/10/14	07/10/14	07/10/14	07/10/14	07/10/14	07/10/14
Sample Depth (feet)					4-6'	4-6'	4-6'	2-4'	6-7'	4-6'
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/kg)										
Benzene	111,000	1,490	1,490	5.1	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2
Ethylbenzene	4,200,000	7,470	7,470	1,570	<10	<10	<10	<10	<10	<10
Methyl tert-butyl ether	23,800,000	59,400	59,400	27	<30	<30	<30	<30	<30	<30
Naphthalene	188,000	5,150	5,150	658	<114	<114	<114	<114	<114	<114
Tetrachloroethene	115,000	30,700	30,700	4.5	<49	<49	<49	<49	<49	66J
Toluene	5,300,000	NE	818,000	1107	<20	<20	<20	<20	<20	<20
1,2,4-Trimethylbenzene	89,800	NE	89,800	1382	<26	<26	<26	<26	<26	<26
1,3,5-Trimethylbenzene	782,000	NE	182,000	1382	<26	<26	<26	<26	<26	<26
Xylenes, -m, -p	890,000	NE	258,000	3940	<68	<68	<68	<68	<68	<68
Xylenes, -o					<31	<31	<31	<31	<31	<31

µg/kg = micrograms per kilogram

RCL = Residual Contaminant Level

SSL = Soil Screening Level

DCL = Direct Contact Level

NA = Parameter not analyzed

NE = NR 720 RCL not established

J = Analyte detected above laboratory limit of detection but below limit of quantitation.

Bold indicates analytical results exceed NR 720 RCL

**TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VAN DEURZEN CLEANERS
02-0614-154**

Monitoring Well	NR 140		MW-1		MW-2		MW-3		MW-4		MW-5		TW-1		TW-6		TW-7		TW-8		TW-9	
	ES	PAL	07/21/2014	08/06/2015	07/21/2014	08/06/2015	07/21/2014	08/06/2015	07/21/2014	08/06/2015	07/21/2014	08/06/2015	07/21/2014	08/06/2015	08/06/2015	08/06/2015	08/06/2015	08/06/2015	08/06/2015	08/06/2015	08/06/2015	08/06/2015
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/L)																						
Benzene	5	0.5	<0.24	<0.44	<0.24	<0.44	<0.24	<0.44	<0.24	<0.44	<0.24	<0.44	<0.24	<0.44	<4.4	<4.4		<0.44		<0.44		<2.2
Ethylbenzene	700	140	<0.55	<0.71	<0.55	<0.71	<0.55	<0.71	<0.55	<0.71	<0.55	<0.71	<0.55	<0.71	<7.1	<7.1		<0.71		<0.71		<3.55
Methyl tert-butyl ether	60	12	<0.23	<1.1	<0.23	<1.1	<0.23	<0.44	<0.23	<1.1	<0.23	<1.1	<0.23	<1.1	<11	<11		<1.1		<1.1		<5.5
Toluene	1000	200	<0.69	<0.44	<0.69	<0.44	<0.69	<0.44	<0.69	<0.44	<0.69	<0.44	<0.69	<0.44	<4.4	<4.4		<0.44		<0.44		<2.2
1,2,4-Trimethylbenzene	480	96	<2.2	<1.6	<2.2	<1.6	<2.2	<1.6	<2.2	<1.6	<2.2	<1.6	<2.2	<1.6	<16	<16		<1.6		<1.6		<8
1,3,5-Trimethylbenzene			<1.4	<1.5	<1.4	<1.5	<1.4	<1.5	<1.4	<1.5	<1.4	<1.5	<1.4	<1.5	<15	<15		<1.5		<1.5		<7.5
Xylenes, -m, -p	10000	1000	<0.69	<2.2	<0.69	<2.2	<0.69	<2.2	<0.69	<2.2	<0.69	<2.2	<0.69	<2.2	<22	<22		<2.2		<2.2		<11
Xylenes, -o			<0.63	<0.9	<0.63	<0.9	<0.63	<0.9	<0.63	<0.9	<0.63	<0.9	<0.63	<0.9	<9	<9		<0.9		<0.9		<4.5
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)																						
Cis 1,2 Dichloroethene	70	7	<0.38	<0.45	<0.38	<0.45	<0.38	<0.45	<0.38	<0.45	<0.38	<0.45	<0.38	<0.45	32	<4.5		2.2		<0.45		<2.25
Tetrachloroethene	5	0.5	<0.33	<0.49	<0.33	<0.49	<0.33	<0.49	<0.33	<0.49	12.9	8.3	320	218	620		23.5		2.46		144	
Trichloroethene (TCE)	5	0.5	<0.33	<0.47	<0.33	<0.47	<0.33	<0.47	<0.33	<0.47	<0.33	<0.47	11.3	23.1	<4.7		1.37J		<0.47		<2.35	

ES = Enforcement Standard
PAL = Preventive Action Limit
µg/L = micrograms per liter
NA = Parameter not analyzed
NE = NR 140 ES not established
J = Analyte detected above laboratory limit of detection but below limit of quantitation.
Bold indicates analytical results above NR 140 ES

**TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
VAN DEURZEN CLEANERS
PROJECT NUMBER**

Sample No.	NC RCL (ug/kg)	C RCL (ug/kg)	Not-To- Exceed Direct Contact	Soil to Groundwater RCL	GP-6	GP-6	GP-7	GP-7	GP-8	GP-9
Sampling Date					07/30/15	07/30/15	07/30/15	07/30/15	07/30/15	07/30/15
Sample Depth (feet)					3-4	7-8	2-3	7-8	6-7'	4-5
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/kg)										
Benzene	111,000	1,490	1,490	5.1	<16	<16	<16	<16	<16	<16
Ethylbenzene	4,200,000	7,470	7,470	1,570	<27	<27	<27	<27	<27	<27
Methyl tert-butyl ether	23,800,000	59,400	59,400	27	<25	<25	<25	<25	<25	<25
Naphthalene	188,000	5,150	5,150	658	<87	<87	<87	<87	<87	<87
Tetrachloroethene	115,000	30,700	30,700	4.5	860	6,100	360	247	<54	930
Toluene	5,300,000	NE	818,000	1107	<31	<31	<31	<31	<31	<31
1,2,4-Trimethylbenzene	89,800	NE	89,800	1382	<78	<78	<78	<78	<78	<78
1,3,5-Trimethylbenzene	782,000	NE	182,000	1382	<89	<89	<89	<89	<89	<89
Xylenes, -m, -p	890,000	NE	258,000	3940	<70	<70	<70	<70	<70	<70
Xylenes, -o					<29	<29	<29	<29	<29	<29

µg/kg = micrograms per kilogram

RCL = Residual Contaminant Level

SSL = Soil Screening Level

DCL = Direct Contact Level

NA = Parameter not analyzed

NE = NR 720 RCL not established

J = Analyte detected above laboratory limit of detection but below limit of quantitation.

Bold indicates analytical results exceed NR 720 RCL

**TABLE 3
WATER LEVEL DATA
VAN DEURZEN CLEANERS
2-0614-154**

Monitoring Well Number	Top of Well Casing Elevation	Date Measured	Depth to Water (Ft.)	Groundwater Elevation (Ft.)
MW-1	99.72	07/16/2014	10.32	89.40
		07/21/2014	8.40	91.32
		08/06/2015	6.81	92.91
		08/18/2015	4.59	95.13
MW-2	99.57	07/16/2014	6.99	92.58
		07/21/2014	7.16	92.41
		08/06/2015	7.02	92.55
		08/18/2015	5.39	94.18
MW-3	100.31	07/16/2014	7.49	92.82
		07/21/2014	7.50	92.81
		08/06/2015	7.35	92.96
		08/18/2015	6.73	93.58
MW-4	100.66	07/16/2014	7.01	93.65
		07/21/2014	6.09	94.57
		08/06/2015	6.73	93.93
		08/18/2015	5.55	95.11
MW-5	99.75	07/16/2014	8.66	91.09
		07/21/2014	7.80	91.95
		08/06/2015	6.92	92.83
		08/18/2015	5.70	94.05
TW-1	100.54	07/16/2014	5.55	94.99
		07/21/2014	8.59	91.95
		08/06/2015	8.69	91.85
		08/18/2015	8.95	91.59
TW-6	100.56	08/06/2015	9.84	90.72
		08/18/2015	7.21	93.35
TW-7	100.42	08/06/2015	10.45	89.97
		08/18/2015	8.97	91.45
TW-8	101.33	08/06/2015	11.37	89.96
		08/18/2015	6.96	94.37
TW-9	99.69	08/06/2015	7.35	92.34
		08/18/2015	4.02	95.67

ft = feet

NR=Not recorded

Elevations in feet in reference to benchmark with an assumed elevation of 100 feet.