

June 2, 2006

Reference No. 17303

Ms. Vicki Katko
Department of Environmental Quality
Remediation and Redevelopment Division
Jackson District Office
301 East Louis Glick Highway
Jackson, Michigan 49201-1556

Dear Ms. Katko:

Re: Request for Approval of Proposed Remedial Action (IRA)
Company Vehicle Operations Area
Ypsilanti, Michigan

On behalf of ENCORE, a wholly owned subsidiary of General Motors Corporation (GM), Conestoga-Rovers & Associates Inc. (CRA) requests approval of the remedial action (interim response action [IRA]) described in Section 3.0 below, so that the injection of sodium permanganate into groundwater may be authorized as allowed by R323.2210(u)(iii) of rules pursuant to Part 31 of 1994 PA 451 as amended. The injection of sodium permanganate into groundwater at this location is needed to remediate chlorinated volatile organic compounds (CVOCs) and thus prevent CVOCs from entering Tyler Pond at concentrations that could exceed criteria established to be protective of acute hazards to surface water resources.

1.0 SUMMARY OF CONDITION AND INTENDED ACTION

Chemical oxidation using sodium permanganate is the recommended short term remediation approach in an area of high CVOc concentrations at the Company Vehicle Operations Area (CVO) located in Ypsilanti, Michigan (Site). Previously chemical oxidation has been used at the Site as part of in IRA for groundwater upgradient of the location discussed in this letter. Constituent concentrations in the northeast of the Site have been increasing over time. The constituents of concern (COC) at the Site are trichloroethylene (TCE), cis-1,2-dichloroethylene (cis-1,2-DCE), and vinyl chloride. Concentrations of TCE and cis-1,2-DCE have steadily increased in a northern boundary well, GS-8, over the last two quarterly events and are approaching the Final Acute Value (FAV) criteria. A short-term remedial action (IRA), chemical oxidation, is recommended to lower concentrations below the FAV.

The first proposed sodium permanganate injection is scheduled prior to the second 2006 quarterly groundwater monitoring event during the week of June 26, 2006. It is estimated that two injection treatments will be required each lasting no more than two days. The second injection will be conducted following review and evaluation of the June quarterly monitoring results.

2.0 BACKGROUND

The Site is an industrial property located at 2901 Tyler Road, Ypsilanti Township, Washtenaw County, Michigan. It includes a building approximately 25,000 square feet in size surrounded by a paved parking lot. The property is bordered on the west by the Willow Run Business Center, to the north and east by Tyler Pond, and to the South by Tyler Road.

During Site investigations conducted by CRA, stained soils and dense non-aqueous phase liquid (DNAPL) were observed near the southern bank of Tyler Pond. A sheet pile wall was installed in October 2004 to prevent DNAPL from migrating into Tyler Pond. CRA personnel recover DNAPL periodically and groundwater concentrations are monitored for volatile organic compounds (VOCs) on a quarterly basis. Figure 1 shows the location of the sheet pile wall and related monitoring and recovery wells.

The constituent concentrations in groundwater behind the sheet pile wall area and the northeast groundwater-surface water interface (GSI) wells are increasing over time. Tables 1 and 2 present the constituents monitored during the 2005 and 2006 groundwater monitoring for the wells located in the vicinity of the sheet pile wall area.

Two techniques, chemical oxidation treatment and iSOC remediation technology, were evaluated for use at the Site to reduce VOC concentrations. iSOC technology is used at sites contaminated with chlorinated hydrocarbons using oxygen and other gases to treat chlorinated sites under anaerobic and aerobic conditions. The use of oxygen gas is recommended for constituent concentrations less than 1 part per millions (ppm). Concentrations higher than 10 ppm would require the use of hydrogen gas. The highest concentration of TCE within the sheet pile wall area was 11 ppm during the March 2006 quarterly groundwater monitoring event, therefore, hydrogen gas could be used to treat chlorinated compounds in this area. However, since hydrogen gas is explosive, it is not a desirable approach. In addition, this technology has never been used at the Site before, therefore the performance and effectiveness of this technique is uncertain.

An IRA, specifically chemical oxidation using potassium permanganate (KMnO_4) to treat the impacted groundwater, was conducted between December 2001 and June 2002, at two source areas at the Site. An additional KMnO_4 injection was conducted on June 2, 2003 near the area where the sheet pile wall is currently located. The effectiveness of the potassium permanganate solution was reduced by the presence of non-aqueous phase liquids (NAPL). Conclusions showed that potassium permanganate injections could be used to effectively reduce the level of contaminants when NAPL and/or oil are not present. The proposed injection wells located near the east wing wall of the sheet pile wall area do not contain NAPL and therefore are suitable for chemical oxidation. In addition, the geology in this area includes sand that allows effective dispersion of the permanganate, and the low injection volume selected should not mobilize significant amounts of entrained constituents. Sodium permanganate was selected over potassium permanganate because of its higher solubility in water, which allows for lower injection volumes at individual wells.

CRA will report the results to the Michigan Department of Environmental Quality (MDEQ). The permanganate injections do not constitute the long-term remediation approach at the Site but rather a

temporary corrective action (IRA) to prevent the release of constituents into Tyler Pond at concentrations above the FAV GSI criteria, and to reduce CVOC concentrations at this time and location to applicable criteria.

3.0 DETAILS OF PLANNED REMEDIAL ACTION (IRA)

3.1 DESCRIPTION OF OBJECTIVES OF THE REMEDIAL ACTION (IRA) (Part 201 Rule 526(a))

The purpose of this remedial action (IRA) is to prevent constituent discharge into Tyler Pond at concentrations exceeding the FAV GSI criteria, reduce constituent concentrations in the groundwater and monitor the results.

3.2 LEGAL DESCRIPTION OF THE SPECIFIC PARCEL OF PROPERTY ADDRESSED BY THE REMEDIAL ACTION (IRA) (Part 201 Rule 526(b))

The composite description of the Former GM Assembly Division Willow Run Plant Property (including the CVO property) is:

Part of the South ½ Section 12, T, 3S, R, 7E, Ypsilanti Township, Washtenaw County, Michigan, being more particularly described as follows: Beginning at a point on the South line of Section 12, T.3S., R7E, said point South 87 degrees 46 minutes 05 seconds West as measured along the South line of said Section 12, a distance of 935.33 feet from the Southeast corner of said Section 12; Proceeding thence from said point of beginning South 87 degrees 46 minutes 05 seconds West along the South line of said section, said line being also the centerline of Tyler Road, South 87 degrees 30 minutes 10 seconds West, a distance of 1500.79 feet to a point; thence North 00 degrees 01 minute 10 seconds West, a distance of 60.06 feet to a point on the Easterly line of the Willow Run Expressway (width varies); thence along the Easterly line of said Willow Run Expressway, the following courses and distances, North 79 degrees 42 minutes 20 seconds West, 250.14 feet to a point; thence North 00 degrees 02 minutes 30 seconds West, 12170.02 feet to a point of curve in said expressway line; thence along the arc of a curve, concave to the Southeast, a radius of 497.08 feet, a central angle of 90 degrees 02 minutes 30 seconds, (chord bears North 44 degrees 58 minutes 45 seconds East, 703.23 feet), an arc distance of 781.17 feet to a point of tangent; thence East, a distance of 888.86 feet to a point; thence South 29 degrees 09 minutes 07 seconds East, a distance of 224.42 feet to a point on the approximate centerline of Willow Run Creek; thence along the centerline of said Willow Run Creek, the following courses and distances; South 48 degrees 18 minutes 00 seconds East, 140.67 feet to a point; thence South 48 degrees 18 minutes 00 seconds East, 325.75 feet to a point; thence South 66 degrees 19 minutes 45 seconds East, 159.41 feet to a point; thence South 54 degrees 09 minutes 50 seconds East, 41.42 feet to a point; thence South 44 degrees 03 minutes 10 seconds East, 171.04 feet to a point; thence South 16 degrees 47 minutes 55 seconds East, 276.81 feet to a point; thence South 42 degrees 09 minutes 05 seconds East, 284.61 feet to a point; thence South 86 degrees 11 minutes 10 seconds East, 300.66 feet to a point; thence South 74 degrees 06 minutes 15 seconds East, 157.00 feet to a point; thence North 83 degrees 10 minutes 55 seconds East,

185.31 feet to a point; thence South 82 degrees 54 minutes 10 seconds East, 250.92 feet to a point; thence South 45 degrees 40 minutes 10 seconds East, 181.68 feet to a point; thence South 04 degrees 51 minutes 50 seconds West, 188.68 feet to a point; thence leaving the approximate centerline of the Willow Run Creek on a course of South 61 degrees 16 minutes 45 seconds west, a distance of 232.01 feet to a point on the proposed North line of Tyler Road; thence South 01 degree 16 minutes 17 seconds East, a distance of 60.01 feet to the point of beginning. (Description of Existing Conditions Report, Former Willow Run Assembly Plant Property, Ypsilanti, Michigan, BBL, 1997).

3.3 DETAILED DESCRIPTION OF THE REMEDIAL ACTION (IRA) TO BE UNDERTAKEN (Part 201 Rule 526(c))

CRA's evaluation criteria for the needed remedial action (IRA) were effectiveness, ease of implementation and quick degradation of constituents. CRA investigated several remediation alternatives. The first was to use air sparging units in an attempt to reduce TCE and daughter product concentrations. This option was abandoned because of the long start up time and performance uncertainties. CRA then considered using sodium or potassium permanganate injections to reduce constituent concentrations. This approach has the advantage of being easily implemented and acting quickly. In the absence of total petroleum hydrocarbons (TPH) permanganate injections are an effective means of destroying TCE and its daughter products. Previous sampling results indicate the level of TPH at the proposed injection area is low.

The proposed injection area is located near the sheet pile wall that acts as a hydraulic barrier preventing constituent migration into Tyler Pond (Figure 1). Soil conditions in the vicinity of the injection site are illustrated on Figure 2. Soil borings completed in the proposed injection area, indicate fill and sands overlaying a silty/clay-confining layer beginning at 15 feet to 19 feet below ground surface. Moving closer to the pond boring logs show the clay interface present at a depth of about 5 feet below ground surface and at ground surface adjacent to the pond. The overall subsurface conditions at the proposed injection area suggest that permanganate injections should be an effective short term remedy. The region contains porous sand that should allow effective dispersion of the permanganate and a low injection volume should not mobilize significant amounts of entrained constituents.

Sodium permanganate injection is the preferred short term remediation approach because its lower volume injection requirements, approximately 75 gallons per well, would minimize the potential of mobilization of any entrained constituents (compared to 250 gallons per well of potassium permanganate). The short term remediation proposed for the Site consists of injecting a total of 500 gallons of a 10 percent solution of sodium permanganate divided among five wells. The sodium permanganate will be injected into the wells by a gravity feed system further reducing the possibility of mobilizing entrained constituents.

The proposed injection wells are MW18-45, IW-43, IW-44, IW-45, and IW-50. For monitoring purposes CRA will monitor well GS-8, a down gradient well located northeast of the injection site. Well boring logs for MW18-45 and GS-8 are included in Appendix A. Injection wells IW-43, IW-44, IW-45, and IW-50 were installed to the clay confining layer, approximately 20 to 25 feet below ground surface, with alternating 5 and 10 foot well screens. Figure 1 shows the location of each injection well and groundwater flow direction in the vicinity of the sheet pile wall. Figure 2 shows a cross section of the

subsurface geology near the injection area. Figure 3 shows the topography of the subsurface sand/clay interface inside the sheet pile wall.

Well GS-8 will act as the compliance point for the remedial action (IRA); it will be monitored for chromium, total petroleum hydrocarbons, dissolved oxygen and redox potential prior to the first injection to develop a baseline. These substances and physical characteristics are useful indicators when evaluating the effectiveness of the permanganate injections. If permanganate is detected at the compliance point it can indicate one of two possibilities. The first is that a preferential pathway exists for permanganate migration and the second is that there are no further constituents to oxidize up-gradient; both possibilities will be explored by CRA. Substantial increases of dissolved oxygen and redox potential in the compliance point indicate that the permanganate is not oxidizing the constituents but converting to oxygen gas. Chromium VI is a potential by-product of the permanganate injections; existing chromium in groundwater can be oxidized to chromium VI.

CRA is aware of the presence of ancillary metals in raw sodium permanganate and ultra pure grade sodium permanganate could be used if deemed necessary. However, metals present in the injection solution will be in an oxidized state lowering their solubility and consequently also their ability to migrate with groundwater.

After baseline conditions are established CRA will sample GS-8 two and/or four weeks after the injections. Analysis of these samples will include tests for the permanganate ion, dissolved oxygen levels, redox potential, chromium VI, chromium (total), arsenic, sodium, and VOCs. The injections will be deemed beneficial if the concentrations of TCE and its daughter products are observed to decrease over time.

3.4 RELATIONSHIP OF REMEDIAL ACTION (IRA) TO SITE-WIDE ACTIONS BEING TAKEN AND PLANNED (Part 201 Rule 526(d))

The long term Site-wide remediation strategy is still under development. Current activities at the area include weekly DNAPL recovery, water levels measurements and quarterly groundwater sampling for VOCs, SVOCs, PCBs and metals. Broader Site-wide investigation and remedial alternative analyses are continuing.

The planned remedial action (IRA) is one of several actions designed to prevent the release of constituents into Tyler Pond. The permanent long term remedy is still under development. This short term remedial action (IRA) will provide surface water protection during development of the long term strategy.

3.5 SCHEDULE FOR IMPLEMENTATION OF PROPOSED REMEDIAL ACTION (IRA) (Part 201 Rule 526(e))

The first of the proposed injections will take place mid June 2006. CRA Services will carry out the injections and log all the work in a field book. The injection events are not expected to last more than two days each.

4.0 COMPLIANCE WITH REQUIREMENTS OF RULE 2210 OF PART 22 RULES FOR PART 31 OF ACT 451

Rule 2210 indicates that certain items may be discharged to groundwater without a permit. At (u) (iii), Rule 2210 specifically identifies a discharge for a remedial action (IRA) of the type described in Section 3.0 above as being allowed, provided a remediation plan has been approved by the department.

“Remediation plan” is defined by Rule 2203 of the Part 22 Rules as a remedial action plan approved under other parts of Act 451, such as Part 201. We understand Part 201 to be the relevant and applicable regulations of Act 451 relative to cleanup actions at this Site, and that the Remediation and Redevelopment Division (RRD) is the appropriate division to consider and potentially approve the plan.

4.1 PART 201 REQUIREMENTS

Part 201 (at Section 20101(cc)) defines “remedial action” to be any of a wide range of activities that may be performed to mitigate injuries to the environment. The definition does not limit “remedial action” to being a complete set of activities that result in achievement of full cleanup of a site to a specified remedial action standard.

Part 201 (at Section 20101(dd)) defines “Remedial action plan” as a work plan for performing remedial action under Part 201.

Rules promulgated for Part 201 do not further define “Remedial action plan”, other than at Rule 532, where details are specified for plans that are designed to achieve a given remedial action standard.

The remedial action (IRA) described in Section 3.0 to reduce concentrations of CVOCs in groundwater moving toward surface water is a part of response activities being undertaken to fully address Site conditions in this area. It is not itself however, an action or plan intended to achieve full compliance with a given remedial action criteria for the Site, although it is intended to reduce CVOC concentrations at the specified location to levels below relevant and applicable criteria.

Given that Part 201 and Rule 532 do not establish specific requirements for remedial action plans for the type of activities described in Section 3.0, we have presented the plan in accordance with the requirements of Part 201 Rule 526 for Interim Response Activities.

4.2 PART 201 RULE 526 REQUIREMENTS

Rule 526 of the Part 201 rules allows for IRAs of the type described above to be performed. In fact, circumstances at the Site are such that an IRA is necessary to prevent a discharge of CVOCs through groundwater to surface water at concentrations exceeding criteria protective of acute impacts (which would be a condition requiring an IRA pursuant to (4)(d) of the rule, and require immediate reporting and control actions per Rule 716.)

Although MDEQ approval is not required to implement many IRA actions, the requirements of Part 31 relative to discharges of items into groundwater does impose the need for approval of this remedial action (IRA) as described above. Rule 526 at (5) specifies five elements required if MDEQ approval of a plan for an IRA is desired. The additional elements identified at (6) and (7) of Rule 526 are not required, as the remedial action (IRA) is not proposed to accomplish full compliance with cleanup requirements for the Site.

Section 3.0 provides the required Rule 526 (5) (a-e) elements for your consideration.

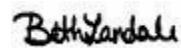
5.0 CLOSING

Your consideration and approval of the remedial action (IRA) described in Section 3.0 is requested so that actions can be immediately implemented to prevent CVOCs in groundwater from venting to surface water at concentrations exceeding criteria protective of acute aquatic impacts. We believe the chemical oxidation of the groundwater CVOCs as described in this letter is the best means of preventing the discharge to surface water above acute criteria. We understand the injection of oxidant into the groundwater requires MDEQ approval to be compliant with Part 31 of Act 451, and that RRD can provide that approval pursuant to the Part 22 rules for Part 31, and the authorities of Part 201.

As other information provided to RRD has illustrated, GM has undertaken considerable efforts to protect and improve the quality of Tyler Pond, and your assistance and support of those actions has been appreciated. We look forward to continuing to work for the protection of this resource, both in the short term through the immediate destruction of CVOCs in nearby groundwater, and in the long term through completing remedial actions (IRAs) at upland areas.

Yours truly,

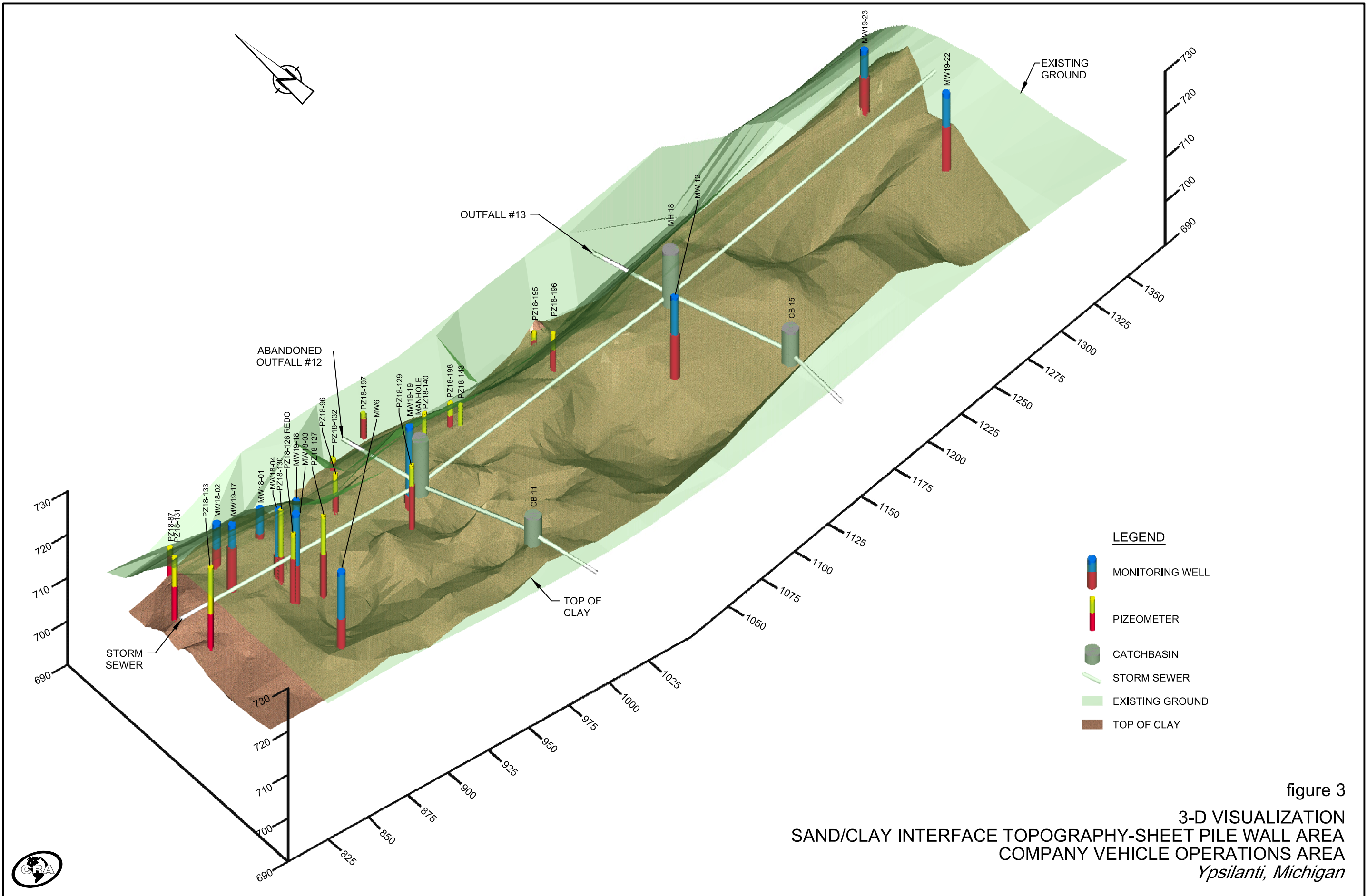
CONESTOGA-ROVERS & ASSOCIATES

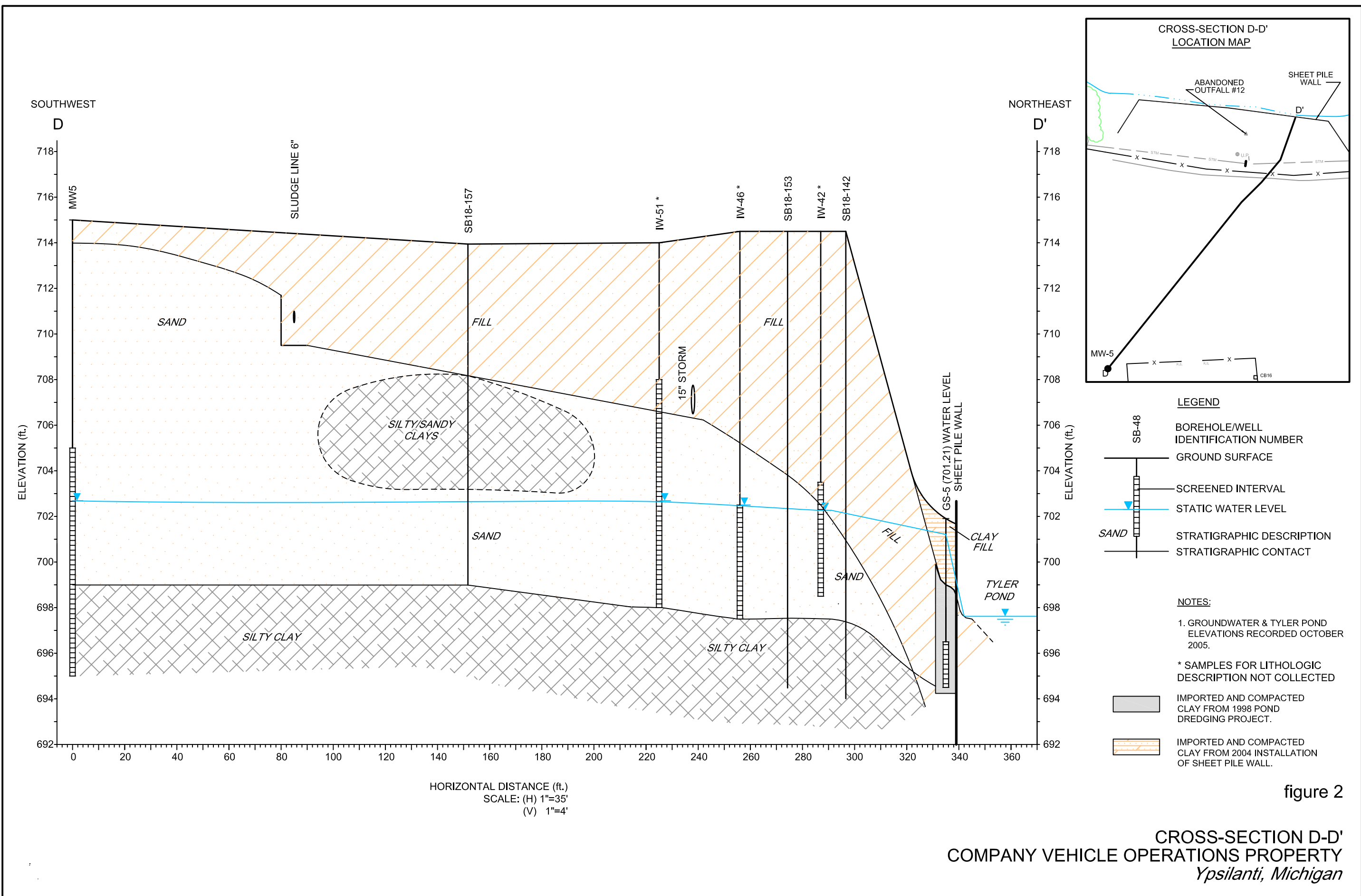


Frederick W. Blickle

gk/bw/2/Det.
Encl.

c.c.: Ken Richards, GM
Beth Landale, CRA
Gary Klepper, CRA





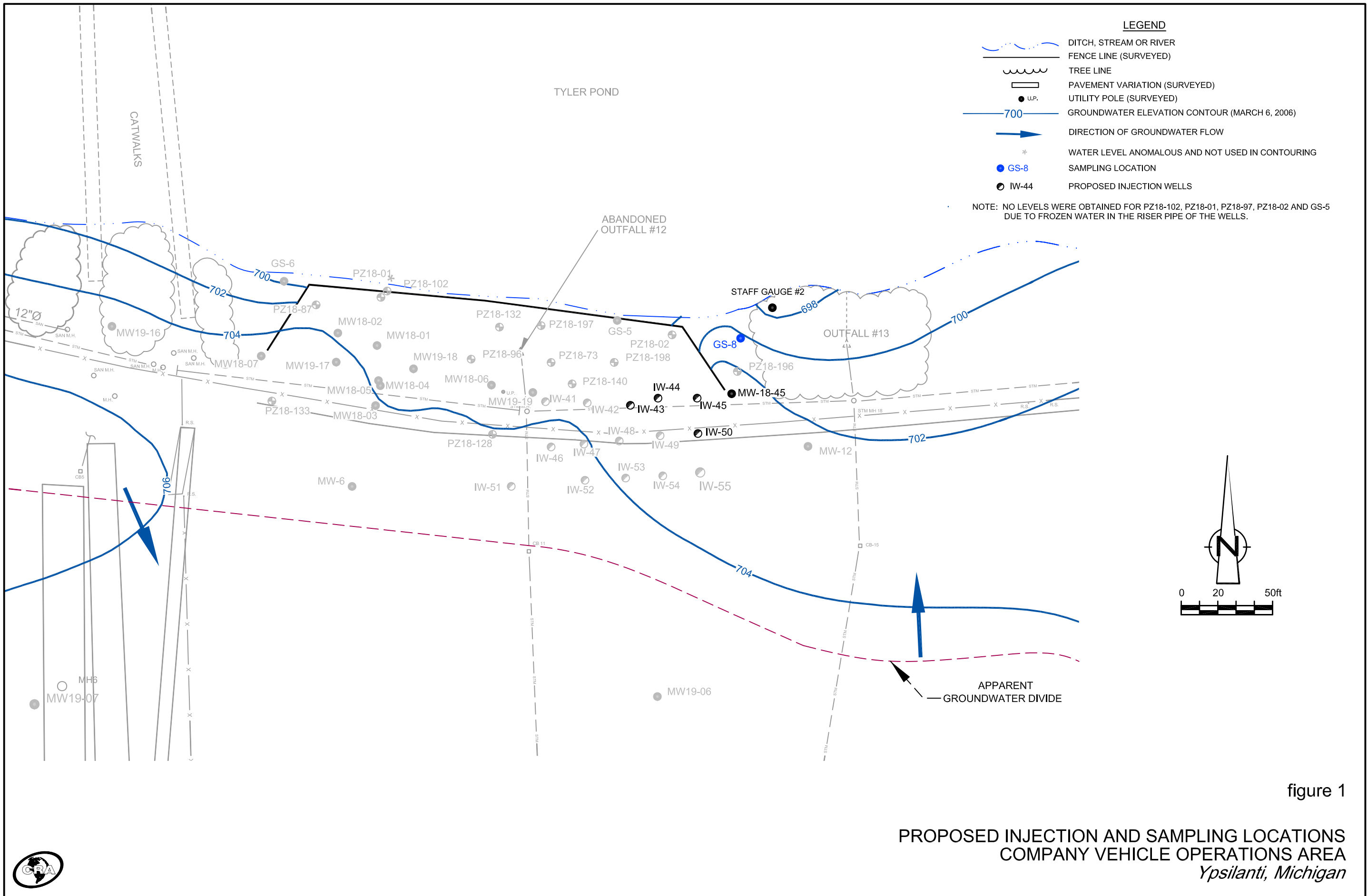


TABLE 1
2005-2006 GROUNDWATER ANALYTICAL RESULTS - VOCs
SHEET PILE WALL AREA
COMPANY VEHICLE OPERATIONS AREA
YPSILANTI, MICHIGAN

		1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	DBCP	EB	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	MEK	2-Hexanone	MIK	Acetone
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Location	Date																	
	GS-6	6/22/2005	0.062 U	0.062 U	0.062 U	0.062 U	0.31 U	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	1.6 U	3.1 U	3.1 UJ	R
		10/6/2005	0.071 U	0.071 U	0.071 U	0.071 U	0.36 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	1.8 U	3.6 U	3.6 U	0.38 J
		12/14/2005	0.063 U	0.063 U	0.063 U	0.063 U	0.31 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	1.6 U	3.1 U	3.1 U	1.6 U
		3/8/2006	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	3.6 U	7.1 U	7.1 U	3.6 U
	3/9/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GS-8	3/8/2006	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	3.6 U	7.1 U	7.1 U	3.6 U
IW-44	3/11/2005	0.05 U	0.05 U	0.05 U	0.05 U	0.017 J*	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.3 U	2.5 U	2.5 U	1.3 U
	6/23/2005	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.9 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	9.6 U	19 U	19 U	9.6 U
	10/6/2005	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	21 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	100 U	210 U	210 U	20 J**
	12/14/2005	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	42 U	83 U	83 U	42 U
	3/8/2006	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	62 U	120 U	120 U	62 U
IW-46	3/10/2005	0.001 U	0.001 U	0.001 U	0.001 U	0.00013 J	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.05 U	0.05 U	0.025 U
	6/23/2005	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	4.2 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	21 U	42 U	42 U	21 U
	10/5/2005	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	3.6 U / 3.6 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	18 U / 18 U	36 U / 36 U	36 U / 36 U	3.5 J / 3.6 J**
	3/8/2006	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	6.2 U	12 U	12 U	6.2 U
	3/10/2005	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.16 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.78 U	1.6 U	1.6 U	0.78 U
MW-6	6/23/2005	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.3 U	2.5 U	2.5 U	1.3 U
	10/5/2005	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.3 U	2.5 U	2.5 U	1.3 U
	12/14/2005	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.3 U	2.5 U	2.5 U	1.3 U
	3/8/2006	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.2 U	2.5 UJ	2.5 U	1.2 U
	3/8/2006	0.01 U	0.01 U	0.01 U	0.01 U	0.0018 J	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.25 U	0.5 U	0.5 U	0.25 U
MW18-07	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	8.3 U	17 U	17 U	8.3 U
MW-18-45	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	8.3 U	17 U	17 U	8.3 U
	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	8.3 U	17 U	17 U	8.3 U
	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	8.3 U	17 U	17 U	8.3 U
	10/6/2005	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	8.9 U	18 U	18 U	1.8 J**
	12/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	6.3 U	13 U	13 U	6.3 U
	3/8/2006	1.7 U	1.7 U	1.7 U	1.7 U	0.34 J**	8.3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	42 U	83 U	83 U	42 U
PZ18-131	6/22/2005	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.12 U	0.25 U	0.25 UJ	R
PZ18-133	10/6/2005	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.00035 J	0.001 U	0.001 U	0.001 U	0.025 U	0.05 U	0.05 U	0.001 J
	12/14/2005	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.05 U	0.05 U	0.025 U
PZ18-195	6/22/2005	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.56 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	2.8 U	5.6 U	5.6 UJ	R
	10/6/2005	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.3 U	2.5 U	2.5 U	0.23 J
	12/14/2005	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.63 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	3.1 U	6.3 U	6.3 U	3.1 U
Res DW	a	0.2 A	0.0085	0.005 A	0.88	0.007 A	0.07 A	0.0002 A	0.00005 A	0.6 A	0.005 A	0.005 A	0.0066	0.075 A	13	1	1.8	0.73
GSI	b	0.2	0.078 X	0.33 X	0.74	0.065 X	0.03		0.0002 X	0.016	0.36 X	0.29 X	0.038	0.013	2.2		ID	1.7
FAV	c	1.6	1.8	5.6	13	2.3	0.2	NA		0.28	15	4.0	0.2	0.2	40	NA	ID	30

Notes:

The analytical data is compared with Michigan Department of Environmental Quality (MDEQ) Part 201 Generic Cleanup Criteria and Screening levels - 06/27/05

* Samples were collected to determine the vertical groundwater profile at depths 12.8, 13.8, 14.8, and 15.5 below top of casing on 08/11/2005

a Constituent(s) exceeding the residential drinking water criteria

b constituent(s) exceeding the Groundwater Surface Water Interface Criteria

c Constituent(s) exceeding the Final Acute Value

ab Constituents exceeding the Residential drinking water and groundwater surface water criteria

abc Constituent exceeding the residential drinking water, groundwater surface water criteria, and final acute values

A Criterion is the state of Michigan drinking water standard established pursuant to section 5 of 1976 PA 399, MCL 325.1005

FAV Final Acute Value

GSI Groundwater Surface Water Interface

Res DW Residential Drinking Water Criteria

W Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water

X The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

ID Insufficient data to develop criterion

J Estimated concentration

NA Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.

U Not present at or above the associated value

UJ Estimated reporting limit

BDCM Bromodichloromethane

CDFM (CFC-12) Dichlorodifluoromethane (CFC-12)

cis-1,2-DCE cis-1,2-Dichloroethene

CMC Chloromethane (Methyl Chloride)

DBCP 1,2-Dibromo-3-chloropropane

EB 1,2-Dibromoethane (Ethylene Dibromide)

MB Bromomethane (Methyl Bromide)

MC Methylene Chloride

MEK 2-Butanone (Methyl Ethyl Ketone)

MIK 4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)

MTBE Methyl Tert Butyl Ether

TCE Trichloroethene

TCFM (CFC-11) Trichlorofluoromethane (CFC-11)

TCM Trichloromethane

TFCE (Freon 113) Trifluorotrichloroethane (Freon 113)

trans-1,2-DCE trans-1,2-Dichloroethene

* Well, GS-6, was resampled on 05/11/2006 for PCBs analysis

** Wells, PZ18-195 and PZ18-131, were abandoned and replaced by GS-8 and MW18-07, respectively.

TABLE 1
2005-2006 GROUNDWATER ANALYTICAL RESULTS - VOCs
SHEET PILE WALL AREA
COMPANY VEHICLE OPERATIONS AREA
YPSILANTI, MICHIGAN

		Benzene	BDCM	Bromoform	MB	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	TCM	CMC	cis-1,2-DCE	cis-1,3-Dichloropropene	Cyclohexane	Dibromochloromethane	CDPM (CFC-12)	Ethylbenzene	Isopropylbenzene
Location	Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-6	6/22/2005	0.062 U	0.062 U	0.062 U	0.062 U	0.31 U	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	1.6 ^{ab}	0.062 U	0.062 U	0.062 U	0.062 UJ	0.014 J	0.31 U
	10/6/2005	0.071 U	0.071 U	0.071 U	0.071 U	0.36 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	1 ^{ab}	0.071 UJ	0.071 U	0.071 U	0.071 U	0.013 J	0.36 U
	12/14/2005	0.063 U	0.063 U	0.063 U	0.063 U	0.31 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.83 ^{ab}	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.31 U
	3/8/2006	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	2.3 ^{ab}	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U
	3/9/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GS-8	3/8/2006	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	4.5 ^{ab}	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U
IW-44	3/11/2005	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	9.8 ^{ab}	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U
	6/23/2005	0.38 U	0.38 U	0.38 U	0.38 U	1.9 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	6.6 ^{ab}	0.38 U	0.38 U	0.38 U	0.38 U	0.17 J ^{ab}	1.9 U
	10/6/2005	4.2 U	4.2 U	4.2 U	4.2 U	21 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	73 ^{ab}	4.2 UJ	4.2 U	4.2 U	4.2 U	4.2 U	21 U
	12/14/2005	1.7 U	1.7 U	1.7 U	1.7 U	8.3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	21 ^{ab}	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.3 U
	3/8/2006	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	65 ^{ab}	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
IW-46	3/10/2005	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8.5 ^{ab}	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U
	6/23/2005	0.83 U	0.83 U	0.83 U	0.83 U	4.2 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	16 ^{ab}	0.83 U	0.83 U	0.83 U	0.83 U	0.41 J ^{ab}	4.2 U
	10/5/2005	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	3.6 U / 3.6 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	4.6 / 4.8 ^{ab}	0.71 UJ / 0.71 UJ	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	3.6 U / 3.6 U
	3/8/2006	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	5.4 ^{ab}	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U
	3/10/2005	0.01 J ^a	0.031 U	0.031 U	0.031 U	0.16 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.075 ^a	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.16 U
MW-6	6/23/2005	0.012 J ^a	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 ^a	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U
	10/5/2005	0.012 J ^a	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.29 ^a	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U
	12/14/2005	0.011 J ^a	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.24 ^a	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U
	3/8/2006	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.23 ^a	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U
	3/8/2006	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.27	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
MW-18-45	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	7.4 ^{ab}	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U
	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	7.5 ^{ab}	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U
	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	6.5 ^{ab}	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U
	8/11/2005*	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	7.8 ^{ab}	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U
	10/6/2005	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	6.8 ^{ab}	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U
PZ18-131	12/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	4 ^{ab}	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U
	3/8/2006	1.7 U	1.7 U	1.7 U	1.7 U	8.3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	48 ^{ab}	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.3 U
	6/22/2005	0.005 U	0.005 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.13 ^a	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.025 U
	PZ18-133	10/6/2005	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.015	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U
	12/14/2005	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0046	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U
PZ18-195	6/22/2005	0.11 U	0.11 U	0.11 U	0.11 U	0.56 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	2.8 ^{ab}	0.11 U	0.11 U	0.11 U	0.11 UJ	0.11 U	0.56 U
	10/6/2005	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.2 ^{ab}	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U
	12/14/2005	0.13 U	0.13 U	0.13 U	0.13 U	0.63 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	1.6 ^{ab}	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.63 U
Res DW	a	0.005 A	0.08 A,W	0.08 A,W	0.01	0.8	0.005 A	0.1 A	0.43	0.08 A,W	0.26	0.07 A			0.08 A,W	1.7	0.074 E	0.8
GSI	b	0.2 X	ID	ID	0.035	ID	0.045 X	0.047	ID	0.17 X	ID	0.62			ID	ID	0.018	ID
FAV	c	1.8	ID	ID	0.64	ID	1.6	ID	0.85	ID	2.6	11	NA		ID	ID	0.32	ID

Notes:

- The analytical data is compared with Michigan Department of Environmental Quality (MDEQ) Part 201 Generic Cleanup Criteria and Screening levels - 06/27/05
- * Samples were collected to determine the vertical groundwater profile at depths 12.8, 13.8, 14.8, and 15.5 below top of casing on 08/11/2005
- a Constituent(s) exceeding the residential drinking water criteria
- b constituent(s) exceeding the Groundwater Surface Water Interface Criteria
- c Constituent(s) exceeding the Final Acute Value
- ab Constituents exceeding the Residential drinking water and groundwater surface water criteria
- abc Constituent exceeding the residential drinking water, groundwater surface water criteria, and final acute values
- A Criterion is the state of Michigan drinking water standard established pursuant to section 5 of 1976 PA 399, MCL 325.1005
- FAV Final Acute Value
- GSI Groundwater Surface Water Interface
- Res DW Residential Drinking Water Criteria
- W Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water
- X The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.
- ID Insufficient data to develop criterion
- J Estimated concentration
- NA Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.
- U Not present at or above the associated value
- UJ Estimated reporting limit
- BDCM Bromodichloromethane
- CDFM (CFC-12) Dichlorodifluoromethane (CFC-12)
- cis-1,2-DCE cis-1,2-Dichloroethene
- CMC Chloromethane (Methyl Chloride)
- DBCP 1,2-Dibromo-3-chloropropane
- EB 1,2-Dibromoethane (Ethylene Dibromide)
- MB Bromomethane (Methyl Bromide)
- MC Methylene Chloride
- MEK 2-Butanone (Methyl Ethyl Ketone)
- MIK 4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
- MTBE Methyl Tert Butyl Ether
- TCE Trichloroethene
- TCFM (CFC-11) Trichlorofluoromethane (CFC-11)
- TCM Trichloromethane
- TFITCE (Freon 113) Trifluorotrichloroethane (Freon 113)
- trans-1,2-DCE trans-1,2-Dichloroethene

TABLE 1
2005-2006 GROUNDWATER ANALYTICAL RESULTS - VOCs
SHEET PILE WALL AREA
COMPANY VEHICLE OPERATIONS AREA
YPSILANTI, MICHIGAN

		Methyl acetate mg/L	Methyl cyclohexane mg/L	MTBE mg/L	MC mg/L	m-xylene mg/L	o-Xylene mg/L	Styrene mg/L	Tetrachloroethene mg/L	Toluene mg/L	trans-1,2-DCE mg/L	trans-1,3-Dichloropropene mg/L	TCE mg/L	TCFM (CFC-11) mg/L	TCE (Freon 113) mg/L	Vinyl chloride mg/L	Xylene (total) mg/L
Location	Date																
GS-6	6/22/2005	0.62 U	0.062 U	0.31 U	0.31 U	--	--	0.062 U	0.062 U	0.017 J	0.016 J	0.062 U	0.062 U	0.062 U	0.062 U	1.1 ^{ab}	0.069 J ^b
	10/6/2005	0.71 UJ	0.071 U	0.36 U	0.36 U	0.033 J	0.024 J	0.071 U	0.071 U	0.0098 J	0.017 J	0.071 UJ	0.071 U	0.071 U	0.071 U	1.3 ^{ab}	0.059 J ^b
	12/14/2005	0.63 U	0.063 U	0.31 U	0.31 U	0.13 U	0.063 U	0.063 U	0.063 U	0.063 U	0.011 J	0.063 U	0.063 U	0.063 U	0.063 U	0.83 ^{ab}	0.19 U
	3/8/2006	1.4 U	0.14 U	0.71 U	0.71 U	--	--	0.14 U	0.14 U	0.14 U	0.041 J	0.14 U	0.14 U	0.14 U	0.14 U	3.9 ^{ab}	0.29 U
	3/9/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GS-8	5/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/8/2006	1.4 U	0.14 U	0.71 U	0.71 U	--	--	0.14 U	0.14 U	0.14 U	0.038 J	0.14 U	0.65 ^{ab}	0.14 U	0.14 U	2.2 ^{ab}	0.29 U
	3/11/2005	0.5 U	0.05 U	0.25 U	0.25 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.18 ^a	0.05 U	0.63 ^{ab}	0.05 U	0.05 U	5.1 ^{ab}	0.15 U
	6/23/2005	3.8 U	0.38 U	1.9 U	1.9 U	0.28 J ^b	0.12 J ^b	0.38 U	0.38 U	0.38 U	0.22 J ^a	0.38 U	0.63 ^{ab}	0.38 U	0.38 U	8.5 ^{ab}	0.43 J ^{ab}
	10/6/2005	42 UJ	4.2 U	21 U	21 U	8.3 U	4.2 U	4.2 U	4.2 U	4.2 U	0.8 J ^a	4.2 UJ	1.6 J ^{ab}	4.2 U	4.2 U	18 ^{abc}	13 U
IW-44	12/14/2005	17 U	1.7 U	8.3 U	8.3 U	3.3 U	1.7 U	1.7 U	1.7 U	1.7 U	0.19 J ^a	1.7 U	0.19 J ^a	1.7 U	1.7 U	1.7 U	5 U
	3/8/2006	25 U	2.5 U	12 U	12 U	--	--	2.5 U	2.5 U	2.5 U	0.96 J ^a	2.5 U	11 ^{abc}	2.5 U	2.5 U	6 ^{ab}	5 U
	3/10/2005	0.01 U	0.001 U	0.005 U	0.005 U	0.002 U	0.00019 J	0.001 U	0.001 U	0.001 U	0.0016	0.001 U	0.00058 J	0.001 U	0.001 U	5.5 ^{ab}	0.00019 J
	6/23/2005	8.3 U	0.83 U	4.2 U	4.2 U	0.67 J ^{ab}	0.3 J ^{ab}	0.83 U	0.83 U	0.12 J	0.21 J ^a	0.83 U	0.094 J ^a	0.83 U	0.83 U	9 ^{ab}	1.1 J ^{abc}
	10/5/2005	7.1 UJ / 7.1 UJ	0.71 U / 0.71 U	3.6 U / 3.6 U	0.11 J / 3.6 U	1.4 U / 1.4 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.71 U / 0.71 U	0.15 J / 0.16 Ja	0.71 UJ / 0.71 UJ	0.081 J / 0.12 Ja	0.71 U / 0.71 U	0.71 U / 0.71 U	11 / 11abc	2.1 U / 2.1 U
MW-6	3/8/2006	2.5 U	0.25 U	1.2 U	1.2 U	--	--	0.25 U	0.25 U	0.25 U	0.24 J ^a	0.25 U	0.081 J ^a	0.25 U	0.25 U	7.2 ^{ab}	0.5 U
	3/10/2005	0.31 U	0.031 U	0.16 U	0.16 U	0.063 U	0.031 U	0.031 U	0.031 U	0.031 U	0.0033 J	0.031 U	0.043 ^a	0.031 U	0.031 U	0.39 ^{ab}	0.094 U
	6/23/2005	0.5 U	0.05 U	0.25 U	0.25 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0057 J	0.05 U	0.038 J ^a	0.05 U	0.05 U	0.67 ^{ab}	0.15 U
	10/5/2005	0.5 U	0.05 U	0.25 U	0.25 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.011 J	0.05 U	0.025 J ^a	0.05 U	0.05 U	0.92 ^{ab}	0.15 U
	12/14/2005	0.5 U	0.05 U	0.25 U	0.25 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.011 J	0.05 U	0.056 ^a	0.05 U	0.05 U	0.86 ^{ab}	0.15 U
MW18-07	3/8/2006	0.5 U	0.05 U	0.25 U	0.25 U	--	--	0.05 U	0.05 U	0.05 U	0.0087 J	0.05 U	0.043 J ^a	0.05 U	0.05 U	1.1 J ^{ab}	0.1 U
	3/8/2006	0.1 U	0.01 U	0.05 U	0.05 U	--	--	0.01 U	0.01 U	0.01 U	0.11 ^a	0.01 U	0.047	0.01 U	0.01 U	0.13	0.02 U
	8/11/2005*	3.3 U	0.33 U	1.7 U	1.7 U	--	--	0.33 U	0.33 U	0.33 U	0.17 J ^a	0.33 U	3.4 ^{ab}	0.33 U	0.33 U	1.5 ^{ab}	0.67 U
	8/11/2005*	3.3 U	0.33 U	1.7 U	1.7 U	--	--	0.33 U	0.33 U	0.33 U	0.17 J ^a	0.33 U	3.5 ^{ab}	0.33 U	0.33 U	1.5 ^{ab}	0.67 U
	8/11/2005*	3.3 U	0.33 U	1.7 U	1.7 U	--	--	0.33 U	0.33 U	0.33 U	0.12 J ^a	0.33 U	3.1 ^{ab}	0.33 U	0.33 U	1.4 ^{ab}	0.67 U
MW-18-45	8/11/2005*	3.3 U	0.33 U	1.7 U	1.7 U	--	--	0.33 U	0.33 U	0.33 U	0.17 J ^a	0.33 U	3.7 ^{abc}	0.33 U	0.33 U	1.6 ^{ab}	0.67 U
	10/6/2005	3.6 UJ	0.36 U	1.8 U	1.8 U	0.71 U	0.36 U	0.36 U	0.36 U	0.36 U	0.085 J	0.36 UJ	2.9 ^{ab}	0.36 U	0.36 U	1.6 ^{ab}	1.1 U
	12/14/2005	2.5 U	0.25 U	1.3 U	1.3 U	0.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.031 J	0.25 U	0.53 ^{ab}	0.25 U	0.25 U	2.3 ^{ab}	0.75 U
	3/8/2006	17 U	1.7 U	8.3 U	8.3 U	--	--	1.7 U	1.7 U	1.7 U	0.43 J ^a	1.7 U	4.7 ^{abc}	1.7 U	1.7 U	6.5 ^{ab}	3.3 U
	6/22/2005	0.05 U	0.005 U	0.025 U	0.025 U	--	--	0.005 U	0.005 U	0.005 U	0.087	0.005 U	0.0075 U	0.005 U	0.005 U	0.14 ^{ab}	0.01 U
PZ18-131	6/22/2005	0.05 U	0.005 U	0.025 U	0.025 U	--	--	0.005 U	0.005 U	0.005 U	0.087	0.005 U	0.0075 U	0.005 U	0.005 U	0.14 ^{ab}	0.01 U
PZ18-133	10/6/2005	0.01 U	0.001 U	0.005 U	0.005 U	0.002 U	0.001 U	0.001 U	0.001 U	0.0001 J	0.00089 J	0.001 U	0.022 ^a	0.001 U	0.001 U	0.00097 J	0.003 U
	12/14/2005	0.01 U	0.001 U	0.005 U	0.005 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0003 J	0.001 U	0.0095 ^a	0.001 U	0.001 U	0.001 U	0.003 U
PZ18-195	6/22/2005	1.1 U	0.11 U	0.56 U	0.56 U	--	--	0.11 U	0.11 U	0.11 U	0.036 J	0.11 U	0.11 U	0.11 U	0.11 U	0.11 ^{ab}	0.22 U
	10/6/2005	0.5 UJ	0.05 U	0.25 U	0.011 J ^a	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0096 J	0.05 UJ	0.05 U	0.05 U	0.05 U	0.099 ^{ab}	0.15 U
	12/14/2005	1.3 U	0.13 U	0.63 U	0.63 U	0.25 U	0.13 U	0.13 U	0.13 U	0.13 U	0.019 J	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.38 U
Res DW	a			0.04 E	0.005 A	0.28 E	0.28 E	0.1 A	0.005 A	0.79 E	0.1 A		0.005 A	2.6	170 S	0.002 A	0.28 E
GSI	b			0.73 X	0.94 X	0.035	0.035	0.08	0.045 X	0.14	1.5		0.2 X		0.032	0.015	0.035
FAV	c				17			2.9	0.71	1.7	28	NA	3.5			17	0.63

Notes:

- The analytical data is compared with Michigan Department of Environmental Quality (MDEQ) Part 201 Generic Cleanup Criteria and Screening levels - 06/27/05
- * Samples were collected to determine the vertical groundwater profile at depths 12.8, 13.8, 14.8, and 15.5 below top of casing on 08/11/2005
- ^a Constituent(s) exceeding the residential drinking water criteria
- ^b constituent(s) exceeding the Groundwater Surface Water Interface Criteria
- ^c Constituent(s) exceeding the Final Acute Value
- ^{ab} Constituents exceeding the Residential drinking water and groundwater surface water criteria
- ^{abc} Constituent exceeding the residential drinking water, groundwater surface water criteria, and final acute values
- A Criterion is the state of Michigan drinking water standard established pursuant to section 5 of 1976 PA 399, MCL 325.1005
- FAV Final Acute Value
- GSI Groundwater Surface Water Interface
- Res DW Residential Drinking Water Criteria
- W Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water
- X The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.
- ID Insufficient data to develop criterion
- J Estimated concentration
- NA Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.
- U Not present at or above the associated value
- UJ Estimated reporting limit
- BDCM Bromodichloromethane
- CDFM (CFC-12) Dichlorodifluoromethane (CFC-12)
- cis-1,2-DCE cis-1,2-Dichloroethene
- CMC Chloromethane (Methyl Chloride)
- DBCP 1,2-Dibromo-3-chloropropane
- EB 1,2-Dibromoethane (Ethylene Dibromide)
- MB Bromomethane (Methyl Bromide)
- MC Methylene Chloride
- MEK 2-Butanone (Methyl Ethyl Ketone)
- MIK 4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
- MTBE Methyl Tert Butyl Ether
- TCE Trichloroethene
- TCFM (CFC-11) Trichlorofluoromethane (CFC-11)
- TCM Trichloromethane
- TFTCE (Freon 113) Trifluorotrichloroethane (Freon 113)
- trans-1,2-DCE trans-1,2-Dichloroethene

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - SVOCs, METALS, AND PCBs
COMPANY VEHICLE OPERATIONS AREA
YPSILANTI, MICHIGAN

Sample Location: Sample ID:	Res DW	CSI	FAV	GS-6 WG-17303-030806-LA-0953 & WG-17303-030906-LA-0953	GS-6* WG-17303-051106-NRS-001	GS-8 WG-17303-030806-NR-0955	MW-18-45 WG-17303-030806-NR-0959	IW-44 WG-17303-030806-NR-0957	IW-46 WG-17303-030806-NR-0956	MW-6 WG-17303-030806-NR-0958	MW18-07 WG-17303-030806-LA-0960
Sample Date:				3/8/2006 & 3/9/2006	5/11/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006
Sample Type:											
Parameter:	Units	a	b	c							
SVOCs											
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/L					0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2,4,5-Trichlorophenol	mg/L	0.73				0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2,4,6-Trichlorophenol	mg/L	0.12	0.0044			0.016 U	--	0.004 U	0.004 U	0.004 U	0.004 U
2,4-Dichlorophenol	mg/L	0.073	0.019			0.04 U	--	0.01 U	0.01 U	0.01 U	0.01 U
2,4-Dimethylphenol	mg/L	0.37	0.38			0.0032 J	--	0.005 U	0.005 U	0.005 U	0.005 U
2,4-Dinitrophenol	mg/L					0.08 U	--	0.02 U	0.02 U	0.02 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.0077				0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2,6-Dinitrotoluene	mg/L					0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2-Chloronaphthalene	mg/L	1.8				0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorophenol	mg/L	0.045	0.022			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylnaphthalene	mg/L	0.26	ID			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylphenol	mg/L	0.37	0.071			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
2-Nitroaniline	mg/L					0.08 U	--	0.02 U	0.02 U	0.02 U	0.02 U
2-Nitrophenol	mg/L	0.02	ID			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
3,3'-Dichlorobenzidine	mg/L	0.0011	0.0003 M,X			0.016 U	--	0.004 U	0.004 U	0.004 U	0.004 U
3-Nitroaniline	mg/L					0.08 U	--	0.02 U	0.02 U	0.02 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.02 M				0.08 U	--	0.02 U	0.02 U	0.02 U	0.02 U
4-Bromophenyl phenyl ether	mg/L					0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloro-3-methylphenol	mg/L	0.15	0.0074			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloroaniline	mg/L					0.04 U	--	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorophenyl phenyl ether	mg/L					0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
4-Methylphenol	mg/L	0.37	0.071			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
4-Nitroaniline	mg/L					0.08 U	--	0.02 U	0.02 U	0.02 U	0.02 U
4-Nitrophenol	mg/L					0.08 U	--	0.02 U	0.02 U	0.02 U	0.02 U
Acenaphthene	mg/L	1.3	0.019			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Acenaphthylene	mg/L	0.052	ID			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Acetophenone	mg/L	1.5				0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Anthracene	mg/L	0.043 S	ID			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Atrazine	mg/L	0.003 A	0.0073 X			0.012 U	--	0.003 U	0.003 U	0.003 U	0.003 U
Benzaldehyde	mg/L					0.04 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)anthracene	mg/L	0.0021	ID			0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Benzo(a)pyrene	mg/L	0.005 A	ID			0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Benzo(b)fluoranthene	mg/L	0.0015 S,AA	ID			0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Benzo(g,h,i)perylene	mg/L	0.001 M				0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Benzo(k)fluoranthene	mg/L	0.001 M				0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Biphenyl	mg/L					0.04 U	--	0.01 U	0.01 U	0.01 U	0.01 U
bis(2-Chloroethoxy)methane	mg/L					0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
bis(2-Chloroethyl)ether	mg/L	0.002	0.015 X			0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
bis(2-Ethylhexyl)phthalate	mg/L	0.006 A	0.032			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Butyl benzylphthalate	mg/L	1.2	0.014 X			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Caprolactam	mg/L	5.8				0.04 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Carbazole	mg/L	0.085	0.01 M			0.04 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	mg/L	0.0016 S	ID			0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Dibenz(a,h)anthracene	mg/L	0.002 M	ID			0.008 U	--	0.002 U	0.002 U	0.002 U	0.002 U
Dibenzofuran	mg/L	ID	0.004			0.016 U	--	0.004 U	0.004 U	0.004 U	0.004 U
Diethyl phthalate	mg/L	5.5	0.11			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Dimethyl phthalate	mg/L	73				0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Di-n-butylphthalate	mg/L	0.88	0.0097			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Di-n-octyl phthalate	mg/L	0.13	ID			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Fluoranthene	mg/L	0.21 S	0.0016			0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Fluorene	mg/L	0.88	0.012			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Hexachlorobenzene	mg/L	0.001 A	0.0002 M			0.0008 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Hexachlorobutadiene	mg/L	0.015	0.00005			0.004 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorocyclopentadiene	mg/L	0.05 A	ID			R	--	0.005 U	0.005 U	R	0.005 U
Hexachloroethane	mg/L	0.0073	0.0067 X			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Indeno(1,2,3-cd)pyrene	mg/L	0.002 M	ID			0.008 U	--	0.002 U	0.002 U	0.002 U	0.002 U
Isophorone	mg/L	0.77	0.57 X			0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Naphthalene	mg/L	0.52	0.013	0.2		0.02 U	--	0.005 U	0.005 U	0.00063 J	0.005 U
Nitrobenzene	mg/L	0.0034	0.18 X			0.012 U	--	0.003 U	0.003 U	0.003 U	0.003 U
N-Nitrosodi-n-propylamine	mg/L	0.005 M				0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
N-Nitrosodiphenylamine	mg/L	0.27				0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Pentachlorophenol	mg/L	0.001 A	0.0018	0.022		0.02 U	--	0.005 U	0.005 U	0.005 UJ	0.005 U
Phenanthrene	mg/L	0.052	0.0024			0.008 U	--	0.002 U	0.002 U	0.002 U	0.002 U

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - SVOCs, METALS, AND PCBs
COMPANY VEHICLE OPERATIONS AREA
YPSILANTI, MICHIGAN

Sample Location: Sample ID:	Res DW	GSI	FAV	GS-6 WG-17303-030806-LA-0953 & WG-17303-030906-LA-0953	GS-6* WG-17303-051106-NRS-001	GS-8 WG-17303-030806-NR-0955	MW-18-45 WG-17303-030806-NR-0959	IW-44 WG-17303-030806-NR-0957	IW-46 WG-17303-030806-NR-0956	MW-6 WG-17303-030806-NR-0958	MW18-07 WG-17303-030806-LA-0960
Sample Date:				3/8/2006 & 3/9/2006	5/11/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006
Sample Type:											
Parameter:	Units	a	b	c							
Phenol	mg/L	4.4	0.21		0.086	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Pyrene	mg/L	0.14 S	ID		0.02 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Metals											
Antimony	mg/L	0.006 A	0.13 X		0.0024	--	0.00059 J	0.00052 J	0.00031 J	0.00075 J	0.00064 J
Arsenic	mg/L	0.01 A	0.15 X		0.0087	--	0.0104 ^a	0.0046 J	0.0051	0.005 U	0.005 U
Barium	mg/L	2 A	1.866	10.65	0.174	--	0.342	0.219	0.0234 J	0.0063 J	0.126
Beryllium	mg/L	0.004 A	0.075	1.355	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium	mg/L	0.005 A	0.0025	0.037	0.00064 J	--	0.00077 J	0.001 U	0.001 U	0.001 U	0.00054 J
Chromium Total	mg/L	0.1 A	0.011		0.005	--	0.0144 ^a	0.005 U	0.005 U	0.005 U	0.005 U
Cobalt	mg/L	0.04	0.1		0.007 U	--	0.0107	0.0109	0.007 U	0.007 U	0.0032 J
Copper	mg/L	1 E	0.0287	0.097	0.0051	--	0.0067	0.0044	0.0042	0.0032 U	0.0036
Lead	mg/L	0.004 L	0.014	0.780	0.0119 ^a	--	0.0275 ^{ab}	0.003 U	0.003 U	0.003 U	0.003 U
Manganese	mg/L	0.05 E	3.6	27.60	0.228 ^a	--	2.36 ^a	2.5 ^a	9.3 ^{ab}	12.3 ^{ab}	0.342 ^a
Mercury	mg/L	0.002 A	0.0000013		0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.1 A	0.165	2.97	0.0216	--	0.0213	0.0068 J	0.0034 J	0.0067 J	0.02 U
Selenium	mg/L	0.05 A	0.005		0.005 U	--	0.0048 J	0.0056 ^a	0.0082 ^a	0.005 U	0.005 U
Silver	mg/L	0.034	0.0002 M		0.00011 J	--	0.0002 UJ	0.000063 J	0.000052 J	0.000062 J	0.0002 UJ
Thallium	mg/L	0.002 A	0.0037 X		0.001 U	--	0.000091 J	0.000075 J	0.001 U	0.001 U	0.000031 J
Vanadium	mg/L	0.0045	0.012		0.0047 ^a	--	0.0197 ^{ab}	0.004 U	0.0173 ^{ab}	0.0041	0.004 U
Zinc	mg/L	2.4	0.375	0.745	0.0294 U	--	0.122 U	0.02 U	0.0296 U	0.044 U	0.02 U
PCBs											
Aroclor-1016 (PCB-1016)	mg/L	0.0005 A	0.0002 M		0.0001 U D 0.0001 U	0.00017 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Aroclor-1221 (PCB-1221)	mg/L	0.0005 A	0.0002 M		0.0001 U D 0.0001 U	0.00017 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Aroclor-1232 (PCB-1232)	mg/L	0.0005 A	0.0002 M		0.0001 U D 0.0001 U	0.00017 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Aroclor-1242 (PCB-1242)	mg/L	0.0005 A	0.0002 M		0.0001 U D 0.0001 U	0.00017 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Aroclor-1248 (PCB-1248)	mg/L	0.0005 A	0.0002 M		0.00044 D 0.00057 ^a	0.00017 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Aroclor-1254 (PCB-1254)	mg/L	0.0005 A	0.0002 M		0.0001 U D 0.0001 U	0.00017 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Aroclor-1260 (PCB-1260)	mg/L	0.0005 A	0.0002 M		0.00041 D 0.00024 ^a	0.00022 ^a	0.00006 J	0.00004 J	0.0001 U	0.00019	0.000084 J

Notes: The analytical data is compared with Michigan Department of Environmental Quality (MDEQ) Part 201 Generic Cleanup Criteria and Screening Levels - 6/27/05

* Samples were collected to determine the vertical groundwater profile at depths 12.8, 13.8, 14.8, and 15.5 below top of casing on 08/11/2005

^a Constituent(s) exceeding the residential drinking water criteria

^b constituent(s) exceeding the Groundwater Surface Water Interface Criteria

^c Constituent(s) exceeding the Final Acute Value

^{ab} Constituents exceeding the Residential drinking water and groundwater surface water criteria

^{abc} Constituent exceeding the residential drinking water, groundwater surface water criteria, and final acute values

AA Comparison to these criteria may take into account an evaluation of whether the hazardous substances are adsorbed to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.

D Duplicate

E Criterion is the aesthetic drinking water value, as required by section 20120a(5) of the act

FAV Final Acute Value

GSI Groundwater Surface Water Interface Criteria

ID Insufficient data to develop criterion

J The associated value is an estimated concentration

L Criteria for lead are derived using a biologically based model, as allowed for under section 20120a (10) of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.

M Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

PCBs Polychlorinated Biphenyls

R Rejected

ResDW Residential and Commercial I Drinking Water Criteria

S Criterion defaults to the hazardous substance-specific water solubility limit

SVOCs Semi Volatile Organic Compounds

U Not present at or above the associated value

UJ The associated value is an estimated reporting limit

X The GSI shown in the generic cleanup criteria tables is not protective of surface water that is used as drinking water sources

* Well, GS-6, was resampled on 05/11/2006 for PCBs analysis

** Wells, PZ18-195 and Pz18-131, were abandoned and replaced by GS-8 and MW18-07, respectively.

APPENDIX A

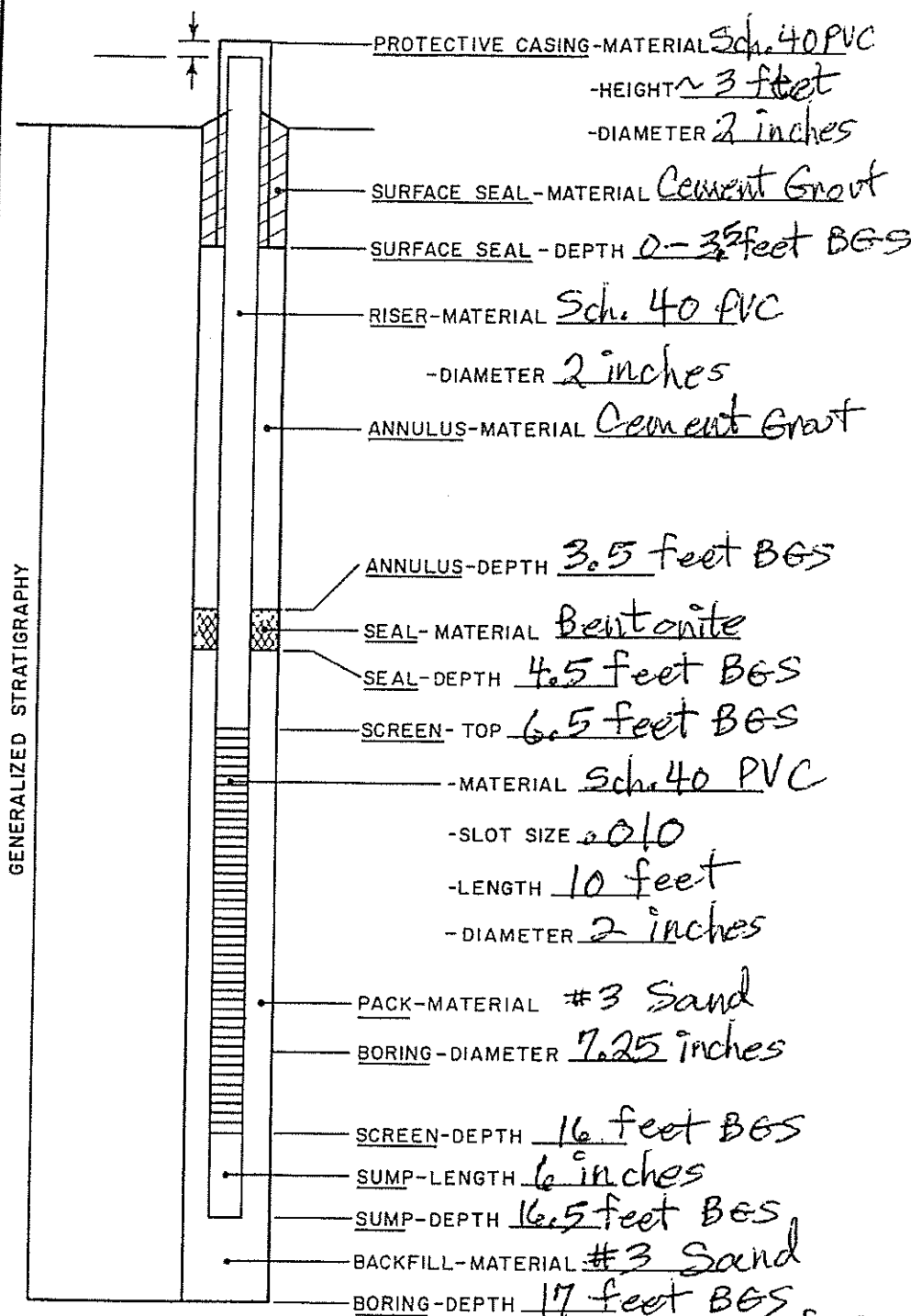
SOIL BORING RECORD
MONITORING WELL CONSTRUCTION DETAILS
STRATIGRAPHIC AND INSTRUMENTATION LOG

SOIL BORING RECORD

EXPLORATION FOR: <u>Subsurface Lithology</u>				LOCATION: Kaiser-Frazer Dump Area PAOC 18 Approx. 5' east and 3' north of SB-18-37 (See Weston Map - Figure 1) 71' west of outfall 13 and 17' north of fence. Willow Run GM Willow Run Facility Ypsilanti Township, Michigan	
DATE: <u>December 16, 1996</u>				WATER TABLE: Approx. 11' BGS COMMENTS: Duplicate 1M2 collected from SB-18-45 (6"-2') for Pb analysis. Duplicate 4M2 collected from SB-18-45 (4'-6') for PAH analysis. Equipment blank 4S from 0-4' sampling tube for PAH analysis. Equipment blank 5S from 4'-8' sampling tube for PAH and Pb analysis.	
BORING NO.: <u>SB-18-45/MW-18-45</u>					
RECORDED BY: <u>Alan Fass</u>					
DRILL TYPE: <u>Hand Auger</u>					
WEATHER: <u>Sunny, 29°, Wind - West 5 mph</u>					
SAMPLE NO.	DEPTH		Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG	
	FROM	TO			
1	0"	6"	Pb	0-1' Silty sand, some rock and coal slag fragments, dusky yellowish brown (10YR 2/2).	
2	6"	2'	Pb Dup Pb	1'-1.3' Paint sludge/waste.	
3	2'	4'	Pb	1'-3.5' Clayey silt - sandy silt, moderate yellowish brown (10YR 5/4).	
4	4'	6'	Pb, PAH Dup PAH	3.5'-3.75' Silty clay, black (N1), discolored, hydrocarbon-like odor 3.75'-4.5' Silty sand, dark yellowish brown.	
5	6'	8'	Pb	4.5'-8.5' Silty sand, dark yellowish orange.	
6	8'	10'	Pb	8.5'-10' Sandy silt, dark yellowish orange.	
7	10'	12'	Pb	10'-10.5' Silty clay, moderate yellowish brown, moist, friable. 10.5'-12.5' Clayey silt, pale yellowish brown, moist.	
8	12'	14'		12.5'-14' Silty sand, pale yellowish brown, wet.	
9	14'	17'		14'-15.5' Silty sand - sandy silt - pale yellowish brown. 15.5'-17' Organic silty clay, olive gray.	
				End of boring = 17' BGS	
REMARKS					
SS - Split Spoon					
BLS - Below Land Surface					
NR - Not Recorded					

SUBSURFACE FIELD LOG MONITORING WELL CONSTRUCTION DETAILS

SHEET 1 OF 1



MW-18-45
MONITORING WELL
Willow Run (Kaiser-
PROJECT: Frazier Dump
Area)
PROJECT NO: 480.75
BY: Alan Fass
DATE: 12/16/96

WATER LEVEL UPON COMPLETION 14.65 ft. below Top-of-Casing (T.O.C.)
DRILLER Brad Massavant - Superior Environmental
METHOD Hollow Stem Auger
RIG TYPE Simco Earthprobe 200
SAMPLING METHOD Bailer
DEVELOPMENT DATE 12/17/96
DEVELOPMENT METHOD Peristaltic Pump (Slow Develop)

BBL

BLASLAND, BOUCK & LEE, INC.
engineers & scientists



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: GM - CVO

HOLE DESIGNATION: GS-8

PROJECT NUMBER: 17303

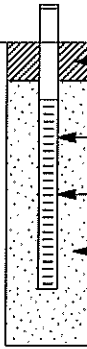
DATE COMPLETED: February 27, 2006

CLIENT: GENERAL MOTORS CORPORATION

DRILLING METHOD: HAND AUGER

LOCATION: YPSILANTI, MICHIGAN

FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	
2	SP-SANDS, trace silts, brown, moist to wet		 BENTONITE 3" BOREHOLE 2" PVC WELL CASING 2" PVC WELL SCREEN SAND PACK					
4	CH-CLAYS, high plasticity, firm, gray	2.50						
6								
8	END OF BOREHOLE @ 8.0ft BGS	8.00						
10			<u>WELL DETAILS</u> Screened interval: 1.50 to 6.50ft BGS Length: 5ft Diameter: 2in Slot Size: 0.010 Material: PVC Sand Pack: 1.00 to 8.00ft BGS Material: #5 SANDS					
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA CORP.GDT 5/23/06