above ground storage tank air quality asbestos/lead-based paint baseline environmental assessment brownfield redevelopment building/infrastructure restoration caisson/piles coatings concrete construction materials services corrosion dewatering drilling due care analysis earth retention system environmental compliance environmental site assessment facility asset management failure analyses forensic engineering foundation engineering geodynamic/vibration geophysical survey geosynthetic greyfield redevelopment ground modification hydrogeologic evaluation industrial hygiene indoor air quality/mold instrumentation masonry/stone metals nondestructive testing pavement evaluation/design property condition assessment regulatory compliance remediation risk assessment roof system management sealants/waterproofing settlement analysis slope stability storm water management structural steel/welding underground storage tank

## PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

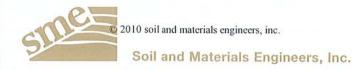
9800 PLYMOUTH-ANN ARBOR ROAD PLYMOUTH (SUPERIOR TOWNSHIP), MI

# Prepared for:

Washtenaw County 110 North Fourth Avenue Ann Arbor, Michigan 48107

SME Project Number: PE60262A-06

September 13, 2010



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#### 1.0 SUMMARY

SME performed a Phase I Environmental Site Assessment (ESA) of 9800 Plymouth Road, in Plymouth (Superior Township), Washtenaw County, Michigan hereinafter referred to as "the Property," in conformance with the scope and limitations of ASTM Practice E 1527-05. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. The findings of SME's ESA are summarized below. A Property Location Map (Figure 1) is included in Appendix A.

The User of this Phase I ESA is Washtenaw County, Michigan. The User's representative provided information about some or all of the following issues in support of all appropriate inquiry into environmental conditions on the Property: 1) reason for this Phase I ESA; 2) environmental cleanup liens and activity/use limitations (AULs) recorded for the Property; 3) specialized knowledge and experience of the User indicative of potential RECs associated with the Property; 4) relationship of purchase price to market value; 5) commonly known or reasonably ascertainable information about environmental conditions on the Property; and 6) legal/administrative proceedings related to hazardous substances, petroleum products, or environmental compliance issues in, on or emanating from the Property.

SME reviewed the history of Property use, from the present back to 1937, which was the obvious first developed use of the Property. The Property was used as an orchard from at least 1937 until sometime before 1955. The current buildings were constructed in 1955. Various companies occupied the Property from 1955 to 2007; operations are not known. An on-site well and septic field were reportedly used from 1955 until the most recent occupant left the site in 2007. SME identified the potential for environmental impact from unreported and/or undetected releases of hazardous substances and/or petroleum products associated with 1) unknown historical industrial uses and 2) discharge of process water and other materials to the septic field as a suspect REC in connection with the Property.

SME conducted a site reconnaissance seeking visual evidence of suspect RECs on the Property and observable surrounding areas. The Property was developed with two vacant buildings. Based on visual observations, SME identified the potential for environmental impact from 1) historical use of a dust collection system, paint booth, and parts washer, 2) the possible former and/or current presence of a UST on the north side of the building, and 3) presence of debris in the creek bed on the south Property boundary as a suspect REC in connection with the Property.

SME interviewed the current owner of the Property and representatives of the Washtenaw County Health Department. No suspect RECs were identified through these interviews.



We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of 9800 Plymouth-Ann Arbor Road, the property. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property except for the following:

- The Property's status as a "facility," as a result of known arsenic, lead, and selenium contamination (Section 5.2.4).
- The historical Property use as an orchard and the potential for contamination including but not limited to arsenic, copper, lead, and mercury from associated uses of herbicides, fungicides, pesticides, and specifically insecticides (Section 5.4.2).
- The potential for environmental impact from unreported and/or undetected releases of hazardous substances and/or petroleum products associated with the following:
  - ➤ The historical Property use as an orchard and the potential for contamination including but not limited to arsenic, copper, lead, and mercury from associated uses of herbicides, fungicides, pesticides, and specifically insecticides (Section 5.4.2).
  - ➤ Unknown historical uses of the Property since 1955 by numerous former owners (Section 5.4.2).
  - ➤ Historical use of a dust collection system, paint booth, and parts washer (Sections 6.3.6 and 6.4.7).
  - ➤ Use of a septic field (Section 5.4.2).
  - > Soil piles in the central portion of the Property (Section 6.3.6).
  - Debris in the creek bed at the south Property boundary (Section 6.3.6).
  - ➤ Potential for historical use and current presence of a UST on the north side of the manufacturing building (Section 6.3.2).

SME's Project Team was as follows:

Preparer: Rhonda F. Miller, CHMM

Environmental Professional (EP): Rhonda F. Miller, CHMM

Senior Technical Reviewer: Keith Egan, CP#259



#### 2.0 INTRODUCTION

SME performed a Phase I Environmental Site Assessment (ESA) of the property located at 9800 Plymouth-Ann Arbor Road in Superior Township, Washtenaw County, Michigan, hereinafter referred to as the Property. The Phase I ESA was conducted according to the ASTM International (ASTM) Practice E 1527-05 (Practice), which is accepted in the U.S. Environmental Protection Agency regulations as satisfying one component of the requirements of All Appropriate Inquiries (AAI) under the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA).

The assessment described in this report, funded by a Hazardous Substances Assessment Grant awarded to Downriver Community Conference Brownfield Coalition (DCCBC) by the U.S. Environmental Protection Agency (USEPA), will be used to support redevelopment of the Property. Ms. Paula Boase of DCCBC authorized the conduct of this Phase I ESA to identify and evaluate potential environmental concerns associated with the Property prior to its sale by Washtenaw County (the User).

### 2.1 Purpose

The purpose of this Phase I ESA was to satisfy relevant AAI requirements for the User of this report. One of the primary objectives was to identify recognized environmental conditions (RECs) in connection with the Property and assess the relative significance of the identified REC(s). The Practice defines a REC as:

...the presence or likely presence of any hazardous substances\* or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

\*For the purposes of this Phase I ESA, a hazardous substance is a substance as defined in the ASTM Practice E 1527-05.



### 2.2 Detailed Scope of Services

This Phase I ESA was conducted in conformance with the ASTM Standard Practice on Environmental Site Assessments for Commercial Real Estate designation E 1527-05, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." This Phase I ESA does not address the non-scope considerations as defined by Section 13 of the Practice.

The Environmental Professional responsible for the conduct of this Phase I ESA was Ms. Rhonda F. Miller, CHMM. The site reconnaissance and interviews were also performed by Ms. Miller. The report was reviewed by Mr. Keith Egan, CP# 259. Resumes of Ms. Miller and Mr. Egan are attached in Appendix F.

#### 2.3 Significant Assumptions

Pursuant to the Practice, SME assumes that the information provided by all sources and parties, including the User, is accurate and complete, except where obvious inconsistencies or inaccuracies were identified.

### 2.4 Limitations and Exceptions

SME encountered the following limitations during the reconnaissance: heavy vegetation on the southern portion of the Property, dry good storage in the warehouse portion of the manufacturing building, and lack of lighting in the manufacturing building.

The Practice's scope of services was implemented.

#### 2.5 Special Terms and Conditions

No special terms and conditions were imposed on SME as part of this Phase I ESA.

#### 2.6 Reliance

SME has prepared this report to be used and relied upon solely and exclusively by Washtenaw County (the User), and one future purchaser in accordance with terms and conditions agreed upon for the project. No other party may rely upon SME's opinions, conclusions or reports unless SME has agreed to such reliance in writing.



#### 3.0 PROPERTY DESCRIPTION

The following are descriptions of the Property, uses and conditions of the Property, and uses of the adjoining sites at the time of this Phase I ESA.

### 3.1 Property Location and Legal Description

The Property was located at 9800 Plymouth Road, Plymouth (Superior Township), Michigan. The legal description of the Property, tax identification number J-10-02-400-014, is attached in Appendix C.

### 3.2 Property and Vicinity Characteristics

The Property consisted of approximately 3.8 acres of land developed with two buildings. The remainder of the Property was developed with paved parking and landscaped areas. The Property was located in a rural setting.

A current Property Features Diagram was developed from the observations, field notes, photographs, and/or historical information collected during conduct of this Phase I ESA. It is included as Figure 2 in Appendix A.

### 3.3 Current Use of the Property

The Property is currently unoccupied. One single-story, approximately 19,200 square foot building occupies the northern portion of the Property. The building is constructed of bricks and block on a concrete slab. One approximately 2,400 square foot building is situated near the northwest corner of the Property; the building is constructed of metal and block on a concrete slab. The Property is accessed via a single entrance on Plymouth Road.



# 3.4 Current Uses of the Adjoining Sites

Known current uses of adjoining sites are summarized in the following table:

Direction	Name Address	Activity
North	Grass and tree covered land	None observed
East	Plymouth Nursery 9900 Plymouth Road	Retail nursery sales
South	Plymouth Nursery 9900 Plymouth Road	Retail nursery sales
West	Residential structure 9780 Plymouth Road	Residential

#### 4.0 USER PROVIDED INFORMATION

As part of AAI the User has the statutory responsibility, above and beyond the Phase I ESA conducted under supervision of an EP, to provide information about the following issues in support of all appropriate inquiry into environmental conditions on the Property:

- Reason for this Phase I ESA;
- Environmental cleanup liens and activity/use limitations (AULs) recorded for the Property;
- Specialized knowledge and experience of the User indicative of potential RECs associated with the Property;
- Relationship of purchase price to market value;
- Commonly known or reasonably ascertainable information about environmental conditions on the Property; and
- Legal/administrative proceedings related to hazardous substances, petroleum products, or environmental compliance issues in, on or emanating from the Property.

The User information was provided through completion of the **User Questionnaire** attached in Appendix E. Information provided by Mr. Ben Kraft, the User's Representative is summarized in the following subsections.

#### 4.1 Reason for the Phase I ESA

Mr. Kraft reported that the reason for this Phase I ESA of the Property was to support a future purchaser's all appropriate inquiry into environmental conditions of the Property, a component of the future purchaser's effort to qualify for one of the landowner liability protections to CERCLA applicable to the planned purchase of the Property.

### 4.2 Recorded Environmental Cleanup Liens and AULs

Mr. Kraft reported that Washtenaw County reviewed recorded land title records on file with the County Register of Deeds for the purpose of identifying recorded environmental cleanup liens and AULs related to the Property. No recorded environmental cleanup liens or AULs related to the Property were reported by the User.



### 4.3 Specialized Knowledge and Experience

Mr. Kraft reported having no specialized knowledge or experience that would indicate, or create suspicion of, the presence environmental contamination on the Property.

### 4.4 Relationship of Purchase Price to Value

Mr. Kraft reported that the purchase price of the Property was below fair market value. The Property, foreclosed by Washtenaw County for non-payment of property taxes, will be sold at auction to recoup the outstanding taxes.

### 4.5 Commonly Known or Reasonably Ascertainable Information

Mr. Kraft reported that he was aware of a "large, v-vessel" in back of the larger building, and that a company named Merchants Automatic Products previously owned the Property.

### 4.6 Proceedings Involving the Property

Mr. Kraft, based on personal knowledge and experience related to the Property, reported no known pending, threatened, or past litigation, administrative proceedings, or violations of environmental laws and regulations related to hazardous substances or petroleum products in, on, or arising from the Property.



#### 5.0 RECORDS REVIEW

### 5.1 Environmental Record Sources

SME retained Environmental Data Resources, Inc. (EDR) to query the state, federal, and tribal regulatory agency lists of environmental sites identified in the Practice to identify regulated and/or environmentally impacted sites within the specified approximate minimum search distances. Results from the following databases were reported:

- 1. United States Environmental Protection Agency (USEPA) Superfund National Priority List 1-mile search distance. (NPL)
- 2. USEPA Superfund Delisted National Priority List 1/2-mile search distance. (NPL Delisted)
- 3. USEPA Superfund Comprehensive Environmental Response, Compensation and Liability Information System Hazardous Waste Sites 1/2-mile search distance. (CERCLIS)
- 4. USEPA Superfund CERCLIS Archive No Further Remedial Action Planned Sites 1/2-mile search distance. (CERCLIS-NFRAP)
- 5. Federal Resource Conservation and Recovery Information System (RCRIS) Corrective Action Facilities List 1-mile search distance. (CORRACTS)
- 6. USEPA RCRA Treatment Storage and Disposal Facilities List 1/2-mile search distance. (RCRA-TSD)
- 7. USEPA Federal Resource Conservation and Recovery Act of 1976 Large Quantity Generators (LQG), Small Quantity Generators (SQG), and Conditionally Exempt Generator (CEG) List for Michigan Property and adjoining sites. (RCRA-LQG/RCRA-SQG/RCRA-CESQG)
- 8. Federal Institutional Control / Engineering Control Registries Property only.
- 9. USEPA Emergency Response Notification System List Property only. (ERNS)
- 10. State / Tribal Sites of Environmental Contamination 1-mile search distance (State Contaminated Site or Tribal Contaminated Site)
- 11. State / Tribal Solid Waste Landfills 1/2-mile search distance. (State Landfill or Tribal Landfill)



- 12. State / Tribal Open and Closed Leaking Underground Storage Tank Sites 1/2-mile search distance. (State Open LUST/Closed LUST or Tribal Open LUST/Closed LUST)
- 13. State / Tribal Registered Underground Storage Tanks Property and adjoining sites. (State Registered UST or Tribal Registered UST)
- 14. State / Tribal Institutional Control / Engineering Control Registries Property only.
- 15. State / Tribal Voluntary Action/Cleanup Program Sites 1/2 mile search distance. (State VAP/VCP or Tribal VAP/VCP)
- 16. State / Tribal Brownfield Sites 1/2 mile search distance. (State Brownfield Site or Tribal Brownfield Site)
- 17. MDNRE Baseline Environmental Assessment List Property and adjoining sites. (BEA)

These information sources were available unless otherwise noted above. The EDR report includes site maps indicating the location of these listed sites relative to the Property, and dates the lists were updated. The EDR report is included in Appendix D.

A former Property owner, Programmed Products Corporation, was identified as a former small-quantity generator of hazardous wastes. No violations were reported. The former SQG status does not represent a REC in connection with the Property.

The Property was also identified as a BEA site. A Category N BEA was submitted to the MDNRE in 2005. See Section 5.2.3 for a further discussion of the BEA.

Based on the clay soil profile in the area of the Property and/or distance from the Property, the remaining sites do not appear to represent suspect RECs in connection with the Property. In SME's opinion, it was not necessary to review records for the listed sites.

## 5.2 Additional Environmental Record Sources

## 5.2.1 County Environmental Health Department

On July 23, 2010, SME contacted the Washtenaw County Environmental Health Department (WCEHD) via facsimile transmission and requested all available information pertaining to environmental concerns associated with the Property and surrounding area, including information on septic systems and water wells, if any, located on the Property. Ms. Anita Heath, with the WCEHD, indicated that no records were available for the Property.



### 5.2.2 Fire Department

On July 23, 2010, SME contacted the Superior Township Fire Department via e-mail transmission and requested all available records associated with the Property and surrounding properties.

Fire Marshall Wayne Dickinson indicated no records were available for the Property.

### 5.2.3 MDNRE Geological Survey Division

SME queried the MDNRE-Geological Survey Division's (GSD) Oil and Gas Information System – Online Data Query for oil and gas permits/wells for the Property's township, range and section number. According to the July 16, 2010, query results, no known oil and/or gas well permits were recorded for the Property section number.

#### 5.2.4 Other Record Sources

SME reviewed a May 13, 2005, Category "N" Baseline Environmental Assessment (BEA) prepared for the Property by August Mack Environmental Inc. (AME). Five soil samples and two groundwater samples were collected and analyzed for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and the 8 RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). The following Part 201 generic residential cleanup criteria exceedances were reported:

- Groundwater surface water interface criteria for selenium in two soil samples
- Direct contact criteria for arsenic in four soil samples
- Drinking water criteria for lead in one groundwater sample

The Property's status as a "facility," as a result of the known contamination, represents a REC in connection with the Property.

#### 5.3 Physical Setting Source(s)

#### 5.3.1 USGS – Current 7.5 Minute Topographic Map

SME reviewed a United States Geological Survey (USGS) topographic map to evaluate the physical setting of the Property. According to the USGS 7.5 minute series Topographic Map Denton Quadrangle, Michigan, compiled in 1969 and photo revised in 1972 and 1980, the Property sloped south to north from an elevation of approximately 840 feet above mean sea level (MSL) to 860 feet above mean sea level (MSL). Two buildings were depicted on the Property. Numerous wetland areas were depicted within a one-mile radius of the Property.



### 5.3.2 Other Non-Practice Physical Setting Sources

Based on review of AME's 2005 BEA, the general soil profile at the Property was approximately 1 foot of sand underlain by clay to the explored depth of the borings at 15 feet. Groundwater, when encountered, was approximately 10 feet below ground surface.

## 5.4 Historical Use Information on the Property

The objective of consulting historical record sources is to develop a history of the Property's previous uses from the present back to the obvious first developed use of the Property or back to 1940, whichever was earlier. As defined in the Practice, "developed use" includes agricultural uses and placement of fill. The information reviewed was from reasonably ascertainable standard sources, defined in the Practice as publicly available, obtainable from its source within reasonable time and cost constraints, and practicably reviewable.

Data failures encountered, as defined by the Practice, are described under each appropriate Practice historical source. The Practice requires review of only as many of the standard historical sources as are reasonably ascertainable and likely to be useful.

#### 5.4.1 Standard Historical Sources

The sources reviewed to determine the historical uses of the Property and related environmental issues are summarized below. A summary of findings from these reviews is presented in section 5.4.2.

- **Aerial Photographs:** SME reviewed aerial photographs, obtained from EDR, dated 1937, 1940, 1949, 1955, 1963, 1969, 1978, 1985, 1993, 2000, 2005, and 2006.
- **Fire Insurance Maps:** According to EDR, no fire insurance maps for the Property were available.
- Property Tax Files: SME visited the Superior Township assessor's office and requested all available records pertaining to the Property. SME reviewed the provided records, which were comprised of an assessor's field sheet and a Mortgage Inspection diagram.
- Recorded Land Title Records: SME did not review land title records because information regarding the history of the Property was obtained from other historical sources identified herein. In addition, land title records typically provide information regarding ownership, but not use, of a property.
- USGS Topographic Maps: SME reviewed the USGS 7.5 minute series Topographic Map Denton Quadrangle, Michigan, compiled in 1969 and photo revised in 1972 and 1980.



- Local Street Directories: SME reviewed local street directories for the years 1967, 1974, 1980, 1990, 1994, 1999, 2000, 2004, and 2005 at the Bresser's office in Detroit, Michigan. Directories prior to 1967 and after 2005 were not available
- Building Department Records: SME visited the Superior Township building department and requested all available records pertaining to the Property. SME reviewed the provided records, which were comprised of various plumbing and electrical permits.
- **Zoning/Land Use Records:** According to the on-line Superior Township Zoning Map, the Property was zoned O-1 Office District.
- Other Historical Sources: SME did not review other historical sources because sufficient information regarding the history of the Property was obtained from the aforementioned historical sources.

# 5.4.2 Historical Usage Summary

A summary of historical usage of the Property, back to 1937, the date of earliest readily available records as described above, is presented in the following table:

#### HISTORICAL USAGE SUMMARY

Year / Period	Identified / Inferred Use	Source (Date)
1937 - 1949	The Property was developed as an orchard.	Aerial Photographs (1937, 1940, 1949)
1955 - 2007	Two buildings were constructed in 1955. The Property used an on-site well and septic field. The Property was historically used by Superior Warehouse Corporation, W.E. Hennells Company, Tension Structures, Charles H. Stone, Merchant's Automatic Products, Programmed Products, GLAS Investments.	Aerial Photographs (1955, 1963, 1969, 1978, 1985, 1993, 2000, 2005, 2006) Topographic Maps (1969, 1972, 1980) Township Records City Directories (1967, 1974, 1980, 1990, 1994, 1999, 2000, 2004, 2005)



The Property was used as an orchard from at least 1937 until sometime before 1955. The current buildings were constructed in 1955. Various companies occupied the Property from 1955 to 2007. Programmed Products reportedly specialized in fire-damaged electrical appliance and equipment restoration. GLAS Investments conducted land surveys. Operations conducted by other occupants are not known. The on-site well and septic field were reportedly used from 1955 until the most recent occupant, GLAS Investments, left the site in 2007. The potential for environmental impact from unreported and/or undetected releases of hazardous substances and/or petroleum products associated with 1) unknown historical industrial uses and 2) discharge of process water and other materials to the septic field represents a suspect REC in connection with the Property.

The historical research reported above was sufficient to develop a history of the previous uses of the Property in order to help identify the likelihood of past uses having resulted in the creation of RECs in connection with the Property.

### 5.5 Historical Use Information on the Adjoining Sites

An attempt was made to assess the historical uses of adjoining sites by reviewing records referenced in Section 5.4. No adjoining sites of concern (suspect RECs) were identified in the course of researching the Property itself.



#### 6.0 SITE RECONNAISSANCE

The site reconnaissance was conducted to identify evidence of the presence of suspect RECs in connection with the Property. Descriptions of the current Property use and conditions, including the use, storage, and/or treatment of hazardous substances and/or petroleum products and the generation, storage/accumulation, and/or disposal of chemical, petroleum or other contaminated wastes are presented in the following sections.

### 6.1 Methodology and Limitations

On July 23, 2010, Ms. Rhonda F. Miller, CHMM and Mr. Paul D. Roberts of SME conducted a reconnaissance of the Property and observed Property conditions and features in an effort to identify RECs in connection with the Property. SME was accompanied by Mr. Ben Kraft, with the Washtenaw County Treasurer's Office, during the reconnaissance. SME walked around and through the buildings and then traversed the Property exterior. Photographs taken during the reconnaissance, which illustrate observed Property conditions and surrounding areas, are contained in Appendix B. SME encountered the following limitations during the reconnaissance: heavy vegetation on the southern portion of the Property, dry good storage in the warehouse portion of the manufacturing building, and lack of lighting in the manufacturing building.

#### 6.2 General Property Setting

The Property was developed with two vacant buildings. The remainder of the Property was developed with paved parking and landscaped areas. The Property was located in a rural setting.

# **6.3 Exterior Observations**

The two buildings, one manufacturing building and one storage building, were situated on the north side of the Property, along Plymouth Road. Heavily vegetated covered the southern portion of the Property. During the Property reconnaissance, SME observed no evidence of stained soils or pavements, or areas of stressed vegetation.

### 6.3.1 Chemical Use and Storage

SME observed no exterior use and/or storage of chemicals.



#### 6.3.2 USTs/ASTs

SME observed a fill port and broken black top material on the north side of the manufacturing building. The potential for environmental impact associated with the possible presence of a UST represents a suspect REC in connection with the Property.

SME observed no other exterior evidence of USTs or ASTs.

### **6.3.3 PCB Containing Equipment**

SME observed no exterior evidence of equipment containing polychlorinated biphenyl (PCB).

#### 6.3.4 Pits, Ponds, and Lagoons

SME observed no visual evidence of pits, ponds, or lagoons.

### 6.3.5 Waste Generation, Treatment, Storage, and Disposal

SME observed no exterior visual evidence of the generation, treatment, storage, or disposal of liquid or solid wastes.

#### **6.3.6 Other Exterior Features**

SME observed numerous soil piles south of the manufacturing building, in the central portion of the Property. SME also observed what appeared to be a rusted dust collection system mounted on the exterior south wall, near the southwest corner of the building. In addition, SME observed debris in the mostly dry creek bed at the south Property boundary. The potential for environmental impact from unreported and/or undetected releases of hazardous substances and/or petroleum products 1) associated with the unknown source of the soil piles, and 2) from the dust collection system and dumping of materials into the creek bed represent a suspect REC in connection with the Property.

### **6.4 Interior Observations**

The buildings were unoccupied at the time of SME's reconnaissance. The storage building was in a severe state of disrepair; sections of the roof had caved in and some windows and doors were missing.

SME observed a chair, electrical cord, and personal belongings indicative of a homeless person's living quarters in the southeast corner of the manufacturing building.

### 6.4.1 Chemical Use and Storage

SME observed no use and/or storage of chemicals in the buildings.



#### 6.4.2 USTs/ASTs

SME observed no evidence of USTs or ASTs in the buildings.

### **6.4.3 PCB Containing Equipment**

SME observed no visual evidence of PCB containing equipment in the buildings.

### 6.4.4 Drains and Sumps

SME observed no visual evidence of drains or sumps in the buildings.

### 6.4.5 Waste Generation, Treatment, Storage, and Disposal

SME observed old furniture and office equipment throughout the office and warehouse sections of the manufacturing building. SME observed no other visual evidence of the generation, treatment, storage, or disposal of liquid or solid wastes, in the buildings.

## 6.4.6 Heating/Cooling

SME observed natural gas-fired forced-air furnaces in both buildings and overhead space heaters in the warehouse section of the manufacturing building.

#### **6.4.7 Other Interior Features**

SME observed a paint booth along the south interior wall of the manufacturing building. A stack on top of the booth vented through the roof to the atmosphere. SME also observed a parts washer in an adjoining room. SME observed no drains within the parts washer. Lack of lighting and storage of fiberglass insulation under the parts washer prevented SME from observing the floor under the parts washer.



# 6.5 Adjoining Sites Observations

SME observed adjoining sites from the Property boundaries and public right-of-ways for evidence of RECs. The reconnaissance did not include physically accessing the adjoining sites; therefore, SME was unable to view all portions of adjoining sites. SME identified no suspect RECs in connection with the adjoining sites. The adjoining sites are summarized in the following table:

Direction	Name Address	Activity
North	Grass and tree covered land	None observed
East	Plymouth Nursery	Retail nursery sales
	9900 Plymouth Road	
South	Plymouth Nursery	Retail nursery sales
	9900 Plymouth Road	
West	Residential structure	Residential
	9780 Plymouth Road	



#### 7.0 INTERVIEWS

As part of the conduct of this Phase I ESA, SME interviewed the following pertinent individuals other than the User of this report:

- Current Property owner (or representative) Mr. Ben Kraft, Washtenaw County Treasurer's Office
- State and/or local government officials Ms. Anita Heath, Washtenaw County Environmental Health Department

# 7.1 Interviews with Owner/Site Manager/Occupant

SME interviewed Mr. Kraft during the site reconnaissance, seeking the following information:

- Whether Mr. Kraft knew of existence of environmental reports and permits; UST, AST, and underground injection system registrations; material safety data sheets; community right-to-know plans; safety and spill prevention plans; hydrogeologic reports; notices of past or current violations of environmental laws; hazardous waste generator notices or reports; geotechnical studies; risk assessments; and, recorded activity and use limitations.
- If Mr. Kraft had knowledge regarding historical use, occupants, and operations.
- Whether Mr. Kraft knew of any pending, threatened, or past litigation and/or administrative proceedings; or governmental notices regarding any possible violation of environmental laws or possible liability related to hazardous substances or petroleum products in, on, or from the Property.

Other than the information Mr. Kraft included in the User questionnaire regarding the dust collection system, he had no other knowledge related to the above issues

#### 7.2 Interviews with Local Government Officials

SME interviewed Ms. Heath and asked whether she had any environmental concerns associated with the Property and surrounding area. Ms. Heath indicated she was not aware of environmentally related incidents having occurred on the Property.

#### 7.3 Interviews with Others

No other interviews were performed as part of this Phase I ESA.



#### 8.0 FINDINGS AND OPINIONS

SME has completed a Phase I ESA of the Property located at 9800 Plymouth-Ann Arbor Road in Plymouth (Superior Township), Washtenaw County, Michigan. At the time of SME's reconnaissance, the northern portion of the Property was developed with two buildings and paved and gravel parking areas. The remainder of the Property was comprised of heavily vegetated land. Data failures, data gaps, and limitations identified during this Phase I ESA are discussed below.

Based on the results of the Phase I ESA, in SME's opinion, the following suspect RECs were identified in connection with the Property:

- Five soil samples and two groundwater samples were collected during subsurface assessment activities in 2005 (Section 5.2.4). Based on analytical results reported in the subsequent 2005 BEA, the Property meets the definition of a "facility" based on the following reported analytical results:
  - > Groundwater surface water interface criteria for selenium in two soil samples.
  - > Direct contact criteria for arsenic in four soil samples.
  - > Drinking water criteria for lead in one groundwater sample.

In SME's opinion, the Property's status as a "facility," as a result of the known contamination, represents a REC in connection with the Property.

- The Property was developed as an orchard from at least 1937 until sometime prior to 1955 (Section 5.4.2). Based on environmental industry documentation and SME's experience, the historical use of herbicides, fungicides, pesticides, and specifically insecticides on orchards, can result in metals contamination including but not limited to arsenic, copper, lead, and mercury. Therefore, in SME's opinion, the historical Property use as an orchard represents a REC in connection with the Property.
- Two buildings, constructed in 1955, were historically occupied by numerous owners (Section 5.4.2). Historical operations are unknown; however, SME observed a dust collection system, paint booth, and parts washer during the site reconnaissance (Sections 6.3.6 and 6.4.7). In addition, a septic field has been situated on the Property since construction of the buildings (Section 5.4.2). According to Township records, the Property is not currently, nor previously, connected to municipal sewer services. Furthermore, SME observed numerous piles in the central portion of the Property (Section 6.3.6), as well as scattered debris in the mostly dry creek bed along the south Property boundary. In SME's opinion, the potential for environmental impact from unreported and/or undetected releases of hazardous substances and/or petroleum products associated with 1) unknown historical uses, 2) use of a dust collection



- system, paint booth, and parts washer, 3) use of a septic field, 4) soil piles in the central portion of the Property, and 5) debris in the creek bed represents a REC in connection with the Property.
- SME observed a vent pipe and broken black top paving material on the north exterior wall of the manufacturing building (Section 6.3.2). In SME's opinion, the potential for environmental impact from unreported and/or undetected releases of hazardous substances and/or petroleum products associated with the potential historical use and current presence of a UST represents a REC in connection with the Property.

SME identified the unknown first developed use of the Property as a data gap in connection with this Phase I ESA. Based on review of record sources documented in this report, in SME's opinion the first developed use was likely as an orchard; therefore, this data gap did not impair our ability to identify RECs in connection with the Property.

SME encountered the following limitations during the reconnaissance: heavy vegetation on the southern portion of the Property, dry good storage in the warehouse portion of the manufacturing building, and lack of lighting in the manufacturing building. Based on review of record sources documented in this report and SME's observations, the limitations did not impair our ability to identify RECs in connection with the Property.



#### 9.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of 9800 Plymouth-Ann Arbor Road, the property. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property except for the following:

- The Property's status as a "facility," as a result of known arsenic, lead, and selenium contamination (Section 5.2.4).
- The historical Property use as an orchard and the potential for contamination including but not limited to arsenic, copper, lead, and mercury from associated uses of herbicides, fungicides, pesticides, and specifically insecticides (Section 5.4.2).
- The potential for environmental impact from unreported and/or undetected releases of hazardous substances and/or petroleum products associated with the following:
  - ➤ The historical Property use as an orchard and the potential for contamination including but not limited to arsenic, copper, lead, and mercury from associated uses of herbicides, fungicides, pesticides, and specifically insecticides (Section 5.4.2).
  - ➤ Unknown historical uses of the Property since 1955 by numerous former owners (Section 5.4.2).
  - ➤ Historical use of a dust collection system, paint booth, and parts washer (Sections 6.3.6 and 6.4.7).
  - ➤ Use of a septic field (Section 5.4.2).
  - > Soil piles in the central portion of the Property (Section 6.3.6).
  - Debris in the creek bed at the south Property boundary (Section 6.3.6).
  - ➤ Potential for historical use and current presence of a UST on the north side of the manufacturing building (Section 6.3.2).

In SME's opinion no data gap or limitation was identified in the course of this Phase I ESA that would impair the identification of RECs in connection with the Property.



### 10.0 DEVIATIONS

No deviations occurred as part of this Phase I ESA.

### 11.0 ADDITIONAL SERVICES

No additional services were provided in conjunction with this Phase I ESA.

#### 12.0 REFERENCES

ASTM International, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, November 1, 2005.



#### 13.0 GENERAL COMMENTS

SME conducted this Phase I ESA to identify RECs in connection with the Property and to assess the relative significance of the identified RECs. The findings, opinions, conclusions, and recommendations presented in this report are based upon observations noted during the site visit, and information obtained during the performance of the scope of services on the dates indicated. In the process of obtaining the field and historical information in preparation of this report, procedures were followed that represent reasonable and accepted environmental practices and principles, in a manner consistent with that level of care and skill ordinarily exercised by members of these professions currently practicing under similar conditions. Records reviewed at various locations as identified within the text of this report, include only those records that were provided to SME by the referenced department on the date indicated. As such, the records provided to SME may not represent all records available at a given source. Appropriate inquiry was made into the past uses of the Property consistent with good commercial or customary practice. As is typical with Phase I ESAs, SME conducted no testing or subsurface evaluation for this assessment.

Due to unknown or latent conditions on the Property, or on adjacent or nearby properties, which may become evident in the future, SME does not represent the Property is free of contamination or hazardous waste material. It should also be noted the Property conditions may change over time. Should additional surface, subsurface, chemical, or other data become available after the date of issue of this report, the findings, conclusions and recommendations contained in this report may have to be modified. SME should be retained to review the new information and adjust our opinion and recommendations accordingly.

All reports, field data, field notes, laboratory test data, calculations, estimates and other documents prepared by SME as instruments of service are the property of SME. No parties other than those specifically identified in this report may rely upon SME's opinions, conclusions or reports unless SME has agreed to such reliance in writing. In any event, any reliance will be subject to the terms and conditions set forth in SME's General Conditions (01/09).



### SME Project Number: PE60262A-06 September 13, 2010

# SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the Practices and practices set forth in 40 CFR Part 312.

Rhonda F. Miller, CHMM

Project Consultant



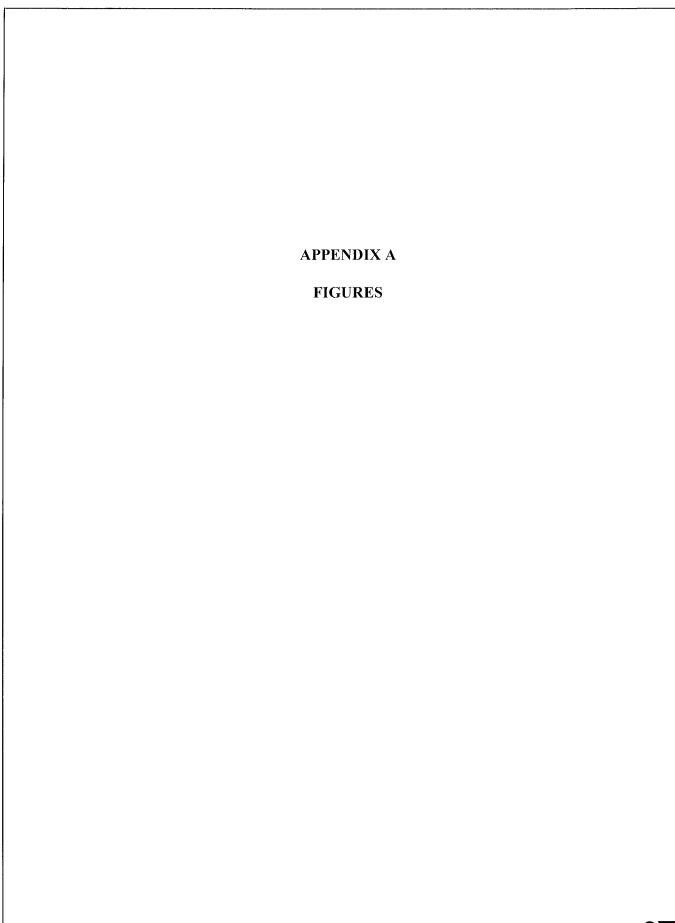
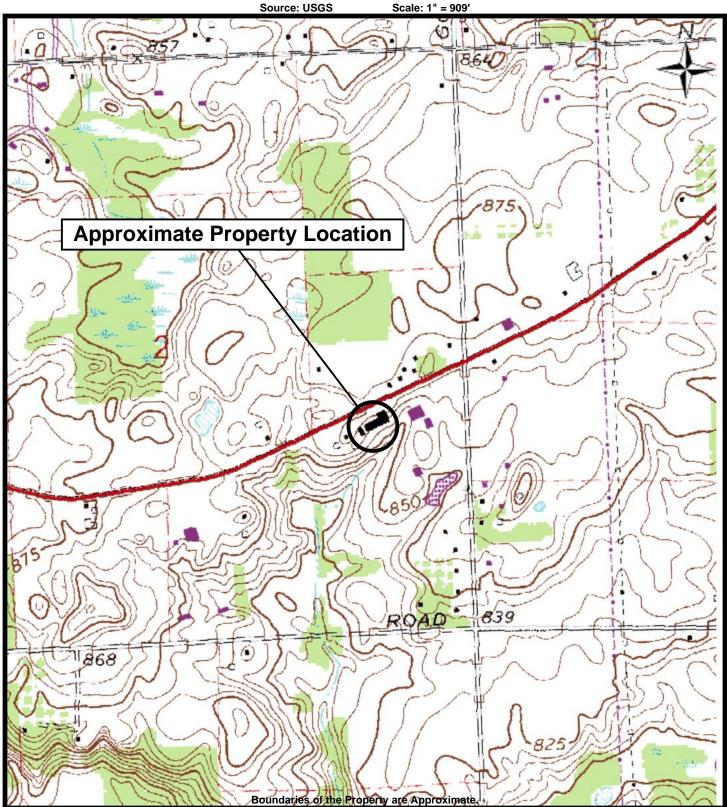




Image Provided by Environmental Data Resources, Inc.





### **Property Location Map**

9800 Plymouth-Ann Arbor Road Plymouth (Superior Township), MI 48170

PREPARED FOR: Washtenaw County

PROJ. MGR: DRC DATE: 07/15/2010
DRAWN BY: RFM PROJ. #: PE60262A-06

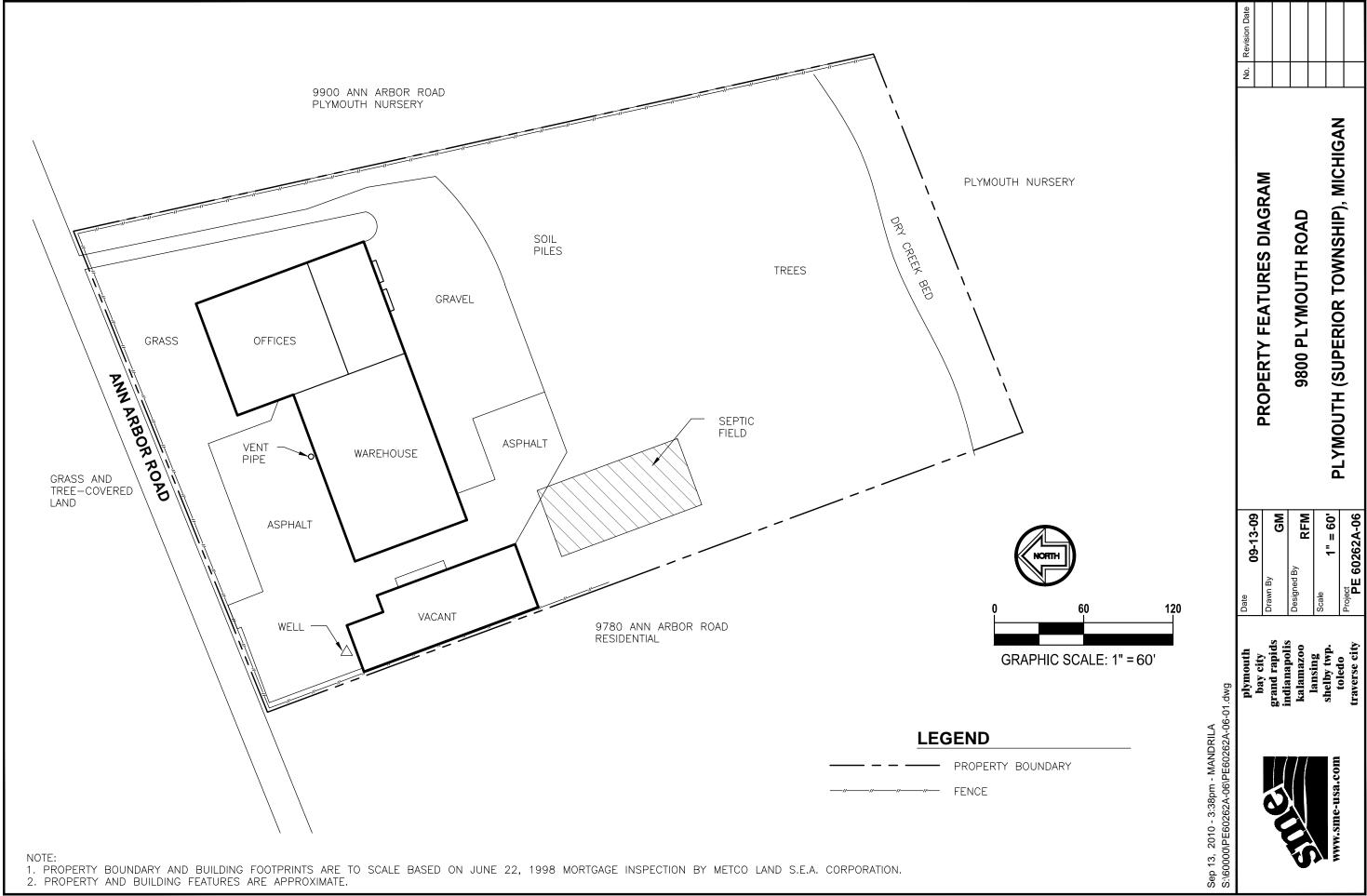
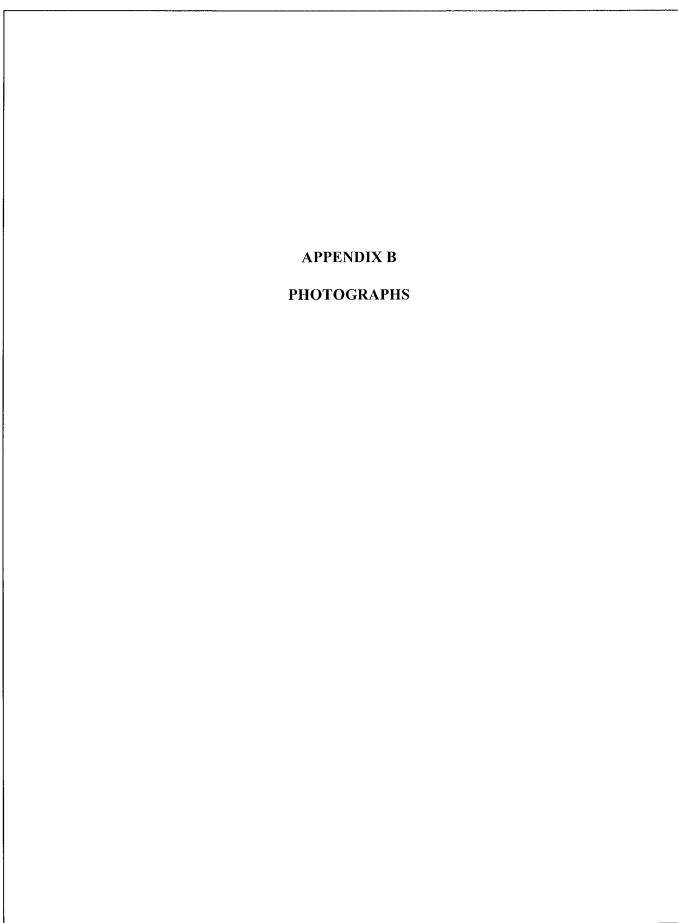
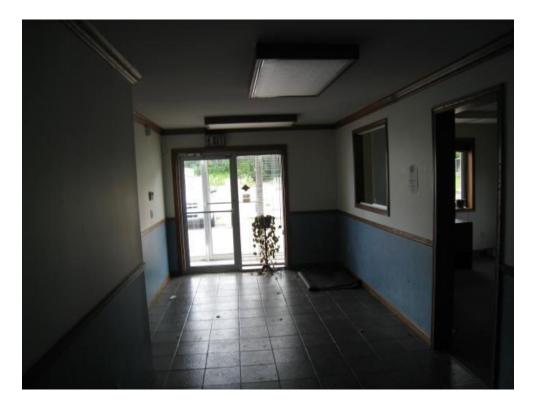


Figure No. 2







**PHOTO NO. 1:** Southeast entrance (office area) of the manufacturing building.



**PHOTO NO. 2:** Front of manufacturing building, along Plymouth Road.

SME Project Number: PE60262A-06
Photograph by: Rhonda F. Miller
Date: July 23, 2010

Project: 9800 Plymouth Road

Location: Plymouth(Superior Township),



**PHOTO NO. 3:** Rear of the manufacturing building.



**PHOTO NO. 4:** Vent pipe and broken black top at north side of manufacturing.

SME Project Number: PE60262A-06
Photograph by: Rhonda F. Miller
Date: July 23, 2010

Project: 9800 Plymouth Road

Location: Plymouth(Superior Township),



**PHOTO NO. 5:** Loading dock near southeast corner of manufacturing building.



**PHOTO NO. 6:** Dust collection system at southwest corner of manufacturing building.

SME Project Number: PE60262A-06

Photograph by: Rhonda F. Miller Date: July 23, 2010

Project: 9800 Plymouth Road

Location: Plymouth(Superior Township),



**PHOTO NO. 7:** Paint booth in manufacturing building.



**PHOTO NO. 8:** Parts washer in manufacturing building.

SME Project Number: PE60262A-06
Photograph by: Rhonda F. Miller
Date: July 23, 2010

Project: 9800 Plymouth Road

Location: Plymouth(Superior Township),



**PHOTO NO. 9:** Dry goods storage in manufacturing building.



**PHOTO NO. 10:** North interior of storage building.

SME Project Number: PE60262A-06
Photograph by: Rhonda F. Miller
Date: July 23, 2010

Project: 9800 Plymouth Road

Location: Plymouth(Superior Township),

Michigan



**PHOTO NO. 11:** East interior of storage building.



**PHOTO NO. 12:** Example of soil piles in central portion of Property.

SME Project Number: PE60262A-06
Photograph by: Rhonda F. Miller

Date: July 23, 2010

Project: 9800 Plymouth Road

Location: Plymouth(Superior Township),

Michigan



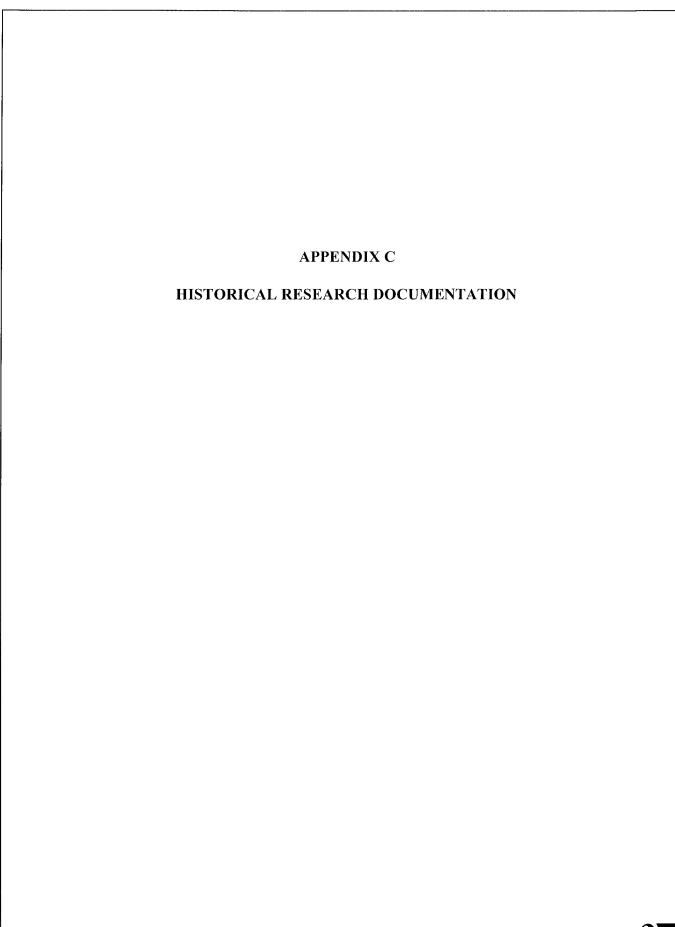
**PHOTO NO. 13:** Debris in creek bed along south Property boundary.

SME Project Number: PE60262A-06
Photograph by: Rhonda F. Miller

Date: July 23, 2010
Project: 9800 Plymouth Road

Location: Plymouth(Superior Township),

Michigan





## **General Property Information**

Parcel: J -10-02-400-014

[Back to Non-Printer Friendly Version] [Send To Printer]

**Property Address** 

[collapse]

9800 PLYMOUTH-ANN ARBOR RD PLYMOUTH, MI 48170

**Owner Information** 

[collapse]

GLAS INVESTMENTS LLC 9800 W ANN ARBOR RD PLYMOUTH, MI 48170

Unit:

**Taxpayer Information** 

[collapse]

SEE OWNER INFORMATION

**General Information for Tax Year 2010** 

[collapse]

**Property Class: School District:**  201

82100 - PLYMOUTH WCC Taxable Value:

**Assessed Value:** 

\$246,400 \$246,400

State Equalized Value:

\$246,400

Map #

]-1

J

USER 1

Date of Last Name Chg:

01/25/2006

Date Filed:

**Principal Residence Exemption** 

(2010 May 1):

**Principal Residence Exemption** 

(2010 Final):

0.0000 %

0.0000 %

Previous Year Info		MBOR Assessed		Final Taxable
2009		\$312,200	\$312,200	\$312,200
2008	1	\$312,200	\$312,200	\$311,810

**Land Information** [collapse]

Acreage: **Zoning Code:**  3.82 O-1

Frontage: Depth:

0.00 Ft. 0.00 Ft.

Land Value:

\$145,000

Mortgage Code:

Land Improvements: Renaissance Zone:

\$0 NO

Lot Dimensions/Comments:

Legal Information for J -10-02-400-014

[collapse]

\*OLD SID - J 10-002-053-00 SU 2-12G-1 COM AT E 1/4 POST OF SEC, THS 1 DEG 05' E 338.42 FT IN E LINE OF SEC, TH S 66 DEG 09' W 732.70 FT IN CENT OF HWY FOR PL OF BEG, TH S 14 DEG 06'E 550.29 FT, TH S 66 DEG 09'W 266.27 FT, TH N 22 DEG 40' W 542.46 FT, TH N 66DEG 09' E 348.26 FT IN CENT OF HWY TO THE PL OF BEG, BEING PART OF E 1/2 OF SE 1/4 SEC 2 T2S-R7E 3.82 AC.

#### Sales Information

5 sale record(s) found.

Sale Date	Sale Price	Instrument	Grantor	Grantee	Terms Of Sale	Liber/Page
04/22/2005	\$645,000.00	WD	SUPERIOR ARBOR LLC	GLAS INVESTMENTS LLC	ARMS-LENGTH	4480/342

12/30/2003	\$0.00	CD	BANK ONE	SUPERIOR ARBOR LLC	UNDISCLOSED	4405/191
09/13/2001	\$760,667.00	SD	ANN ROAD 9800 LLC	BANK ONE	MORTGAGE SALE	4055/961
07/15/1998	\$388,000.00	WD	HZR ASSOCIATES	ANNROAD 9800, LLC	ARMS-LENGTH	3745-0541
01/04/1998	\$0.00	QC	RESZKA	RESZKA LLEWELLYN	RELATED SALE	3605-0233

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## **Building Information**

Parcel: J -10-02-400-014

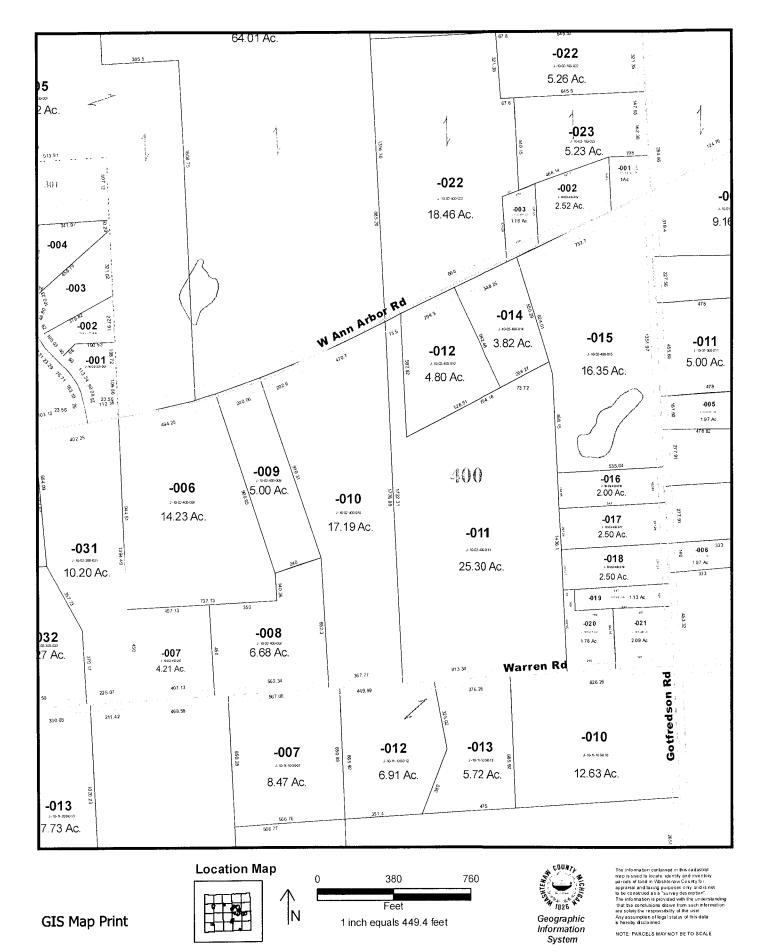
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#### 2 building(s) found.

<b>Description</b> 1		Floor Area	Yr Built	Est. TCV
Agricultural Building 1 - <i>Equipi</i>	ment Shop	2400 Sq. Ft.	0	\$8,020
<b>General Information</b>				
Floor Area: Perimeter:	2400 Sq. Ft. 220 Ft.	Estimated TCV: Height:	\$8,020 0 Ft.	:
Type: Year Built:	Equipment Shop 0	Class: Quality:	S Low Cost	
Percent Complete:	100%	Heat:	No Heating/Co	olina
Physical Percent Good: Economic Percent Good:	47% 70%	Functional Percent Good: Effective Age:	100% 33 yrs.	og
Commercial/Industrial Building  Manufacturing	1 - Industrial, Light	19200 Sq. Ft.	1950	\$339,81
General Information				
Floor Area: Occupancy:	19200 Sq. Ft. Industrial, Light Manufa	Estimated TCV: acturing Class:	\$339,817 C	
Stories Above Ground: Basement Wall Height:	1 N/A	Average Story Height:	10	
Year Built: Percent Complete:	1950 100%	Year Remodeled: Heat:	1989 Space Heat Radiant	ers,
Physical Percent Good: Economic Percent Good:	65% 90%	Functional Percent Good: Effective Age:	100% 28 yrs.	:

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IMPRO Sanitar Storm S Electri Gas Curb & Concre Dirt St 311,810 312,26 346, 40 CORRELATION OF APPROACT 209 193 T// Income 7 3.82 AC. 299,300 392, 200 299. 200-Send PP-statement 312, 200 246,400 342, 200 Total Land & Improvements A. /-Eost TOPOGRAPHY bull + evelu DEG 40 W 266.2 DEG 40 W 542.0 DEG 09 E 548.0 OF HWY TO THE BEING PART OF 1/4 Total Improvements 2 T2S-87E Landscaped Low Rolling Rocky Swampy Wooded 2010 Sand Dona Propagage Level Total Land 4 and SmE Totals 365,000 701 176, 700 STIP 1/194 187900 RS3900 Roll 124 400 1.75,000 DESCRIPTION Total 1,97,800 190,00 196,760 205,700 190,200 191,900 191,900 193,500 193,500 190,100 1007 Buildings Ы LAND VALUE COMPUTATIONS Influence Equiv Frontage Factor or Area 3.82 Ac. 10-002-053-00 0 1 3.45 4 PROGRAMED PRODUCTS CORP 2 J 10-02-400-014 016-PLYM JOON IN -19,400 E +1700 M. Year | Reason For Assent. Change 91 Land Varue Hos 340 FF PLYMOUTH MI 48170 PROGRAMMED PRODUCTS SAC BONG + 11.200 ms Depth Factor + 7300 HZ +7600 195 939693 SUMMARY \*0LD S10:-5U 2-126-1 5U 2-126-1 S 1 DE 6 05 E LINE OF 09 W 732. HWY FOR PL BI Depth 9اح 2000 16 E 4 9 348.20 **ASSESSMENT** Frontoge 7-1 orTaxTrib \$200,005 130000 00892 160000 (NAT) 2800do 4/65,000 75000 46 600 64000 Sales Price 660 667 645000 8000 12000 1-10-72 \$133,000 1 1 6 K Total 0000 10000 9800 ann arbor road plymouth mi 48170 43923 SUPCETOR ARENDE LAGS/191 4490 4-32-05 1-26-66 4-12-77 Building 7-26-77 STREET ADDRESS 9800 PLIMOTH アニコ 3 87 1-4 81.10.02.400.01.18 BAINRIAD FRODELL BANKONE 604 David N. Sheeran, C.P.A. ZAFARANA G. RESZKA WD . 1 8 Pag SUPERIOR WAREHOUSE CORP MERCHAUT'S BUTOMATIC WE HENNELLS GO IN 53 peccolity stall က Reason for Assmt. Change 40 ELROS MERCHANT SP OWNERSHIP CHARLES H. STONE HERBEAT ETAL 3 1 3 . 3 1 3 . 1+ 700 Count 187 PROGRAMMED PRODUC 8



# 9800 Plymouth-Ann Arbor

9800 Plymouth-Ann Arbor Plymouth, MI 48170

Inquiry Number: 2816854.4

July 20, 2010

# The EDR Aerial Photo Decade Package



# **EDR Aerial Photo Decade Package**

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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## **Date EDR Searched Historical Sources:**

Aerial Photography July 20, 2010

# **Target Property:**

9800 Plymouth-Ann Arbor Plymouth, MI 48170

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1937	Aerial Photograph. Scale: 1"=500'	Flight Year: 1937	AAA
1940	Aerial Photograph. Scale: 1"=500'	Flight Year: 1940	AAA
1949	Aerial Photograph. Scale: 1"=500'	Flight Year: 1949	Detroit Edison
1955	Aerial Photograph. Scale: 1"=500'	Flight Year: 1955	CSS
1963	Aerial Photograph. Scale: 1"=500'	Flight Year: 1963	ASCS
1969	Aerial Photograph. Scale: 1"=500'	Flight Year: 1969	ASCS
1978	Aerial Photograph. Scale: 1"=600'	Flight Year: 1978	ASCS
1985	Aerial Photograph. Scale: 1"=500'	Flight Year: 1985	SEMCOG
1993	Aerial Photograph. Scale: 1"=600'	Flight Year: 1993	NAPP
2000	Aerial Photograph. Scale: 1"=500'	Flight Year: 2000	SEMCOG
2005	Aerial Photograph. Scale: 1"=604'	Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=604'	Flight Year: 2006	EDR



























# 9800 Plymouth-Ann Arbor

9800 Plymouth-Ann Arbor Plymouth, MI 48170

Inquiry Number: 2816854.3

July 14, 2010

# **Certified Sanborn® Map Report**



# **Certified Sanborn® Map Report**

7/14/10

Site Name: Client Name:

9800 Plymouth-Ann Arbor 9800 Plymouth-Ann Arbor Plymouth, MI 48170 Soil & Materials Engineers 43980 Plymouth Oaks Plymouth, MI 48170

EDR Inquiry # 2816854.3 Contact: Rhonda Miller



The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Soil & Materials Engineers were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

### Certified Sanborn Results:

Site Name: 9800 Plymouth-Ann Arbor Address: 9800 Plymouth-Ann Arbor City, State, Zip: Plymouth, MI 48170

**Cross Street:** 

P.O. # NA Project: NA

Certification # 2AD9-4A5C-9761



Sanborn® Library search results Certification # 2AD9-4A5C-9761

#### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

✓ University Publications of America

✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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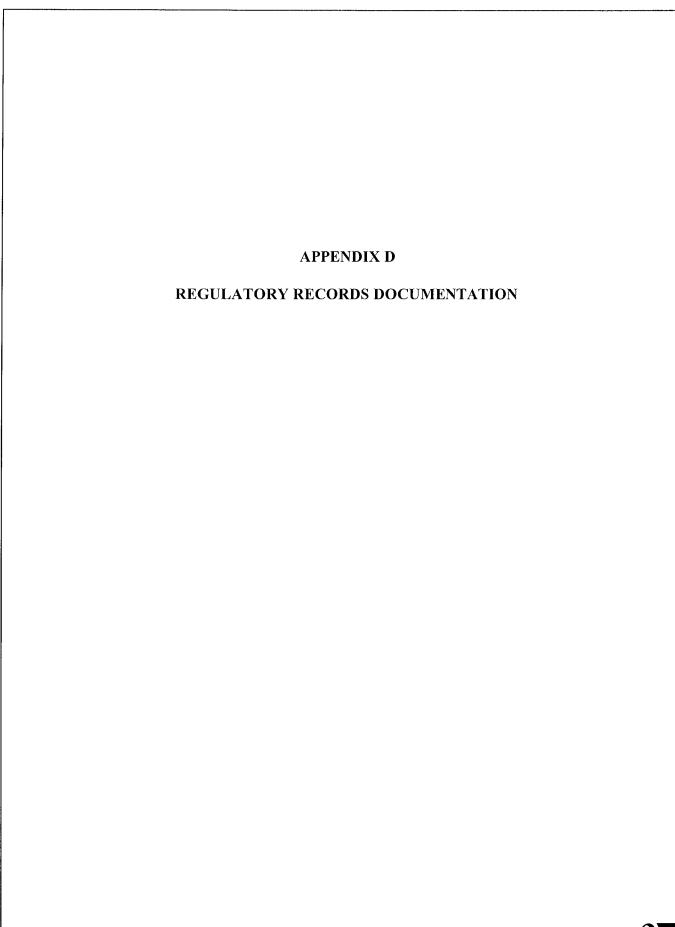
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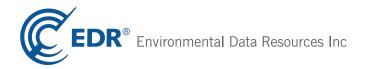


**9800 Plymouth-Ann Arbor** 9800 Plymouth-Ann Arbor Plymouth, MI 48170

Inquiry Number: 2816854.2s

July 15, 2010

# The EDR Radius Map™ Report with GeoCheck®



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**Thank you for your business.**Please contact EDR at 1-800-352-0050 with any questions or comments.

#### **Disclaimer - Copyright and Trademark Notice**

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

#### TARGET PROPERTY INFORMATION

#### **ADDRESS**

9800 PLYMOUTH-ANN ARBOR PLYMOUTH, MI 48170

#### **COORDINATES**

Latitude (North): 42.339900 - 42° 20' 23.6" Longitude (West): 83.570500 - 83° 34' 13.8"

Universal Tranverse Mercator: Zone 17 UTM X (Meters): 288241.4 UTM Y (Meters): 4690502.5

Elevation: 866 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 42083-C5 DENTON, MI

Most Recent Revision: 1980

#### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from: 2006, 2005 Source: USDA

#### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
9800 ANN ARBOR RD W 9800 ANN ARBOR RD W WASHTENAW (County), MI 48170	BEA	N/A
PROGRAMMED PRODUCTS CORP 9800 ANN ARBOR RD W PLYMOUTH, MI 48170	RCRA-NonGen FINDS	MI0000888651

## **DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list	
NPL	_ National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	- Federal Superfund Liens
Federal Delisted NPL site li	ist
Delisted NPL	National Priority List Deletions
Federal CERCLIS list	
CERCLIS.	Comprehensive Environmental Response, Compensation, and Liability Information System
	Federal Facility Site Information listing
Federal CERCLIS NFRAP s	ite List
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
Federal RCRA CORRACTS	facilities list
CORRACTS	Corrective Action Report
Federal RCRA non-CORRA	
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
Federal RCRA generators I	üst
	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators RCRA - Conditionally Exempt Small Quantity Generator
RURA-UESQG	- RCRA - Conditionally Exempt Small Quantity Generator
Federal institutional control	ols / engineering controls registries
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
Federal ERNS list	
ERNS	- Emergency Response Notification System
State- and tribal - equivaler	nt CERCLIS
SHWS	

State and tribal landfill and	or solid waste disposal site lists
SWF/LF	Solid Waste Facilities Database
State and tribal leaking stor	age tank lists
LUSTINDIAN LUST	. Leaking Underground Storage Tank Sites Leaking Underground Storage Tanks on Indian Land
State and tribal registered s	storage tank lists
INDIAN UST	<ul> <li>Underground Storage Tank Facility List</li> <li>Underground Storage Tanks on Indian Land</li> <li>Underground Storage Tank Listing</li> </ul>
State and tribal institutional	l control / engineering control registries
AUL	Engineering and Institutional Controls
State and tribal voluntary c	leanup sites
INDIAN VCP	Voluntary Cleanup Priority Listing
State and tribal Brownfields	sites
BROWNFIELDS	Brownfields and UST Site Database
ADDITIONAL ENVIRONMENTA	L RECORDS
Local Brownfield lists	
US BROWNFIELDS	A Listing of Brownfields Sites
Local Lists of Landfill / Soli	d Waste Disposal Sites
HIST LF	Open Dump Inventory Torres Martinez Reservation Illegal Dump Site Locations Inactive Solid Waste Facilities Report on the Status of Open Dumps on Indian Lands
Local Lists of Hazardous w	aste / Contaminated Sites
US CDL DEL SHWS. CDL US HIST CDL	Clandestine Drug Labs Delisted List of Contaminated Sites Clandestine Drug Lab Listing National Clandestine Laboratory Register
Local Land Records	
LIENS 2LIENS	Land Use Control Information System
Records of Emergency Rele	ease Reports
HMIRS	Hazardous Materials Information Reporting System

SPILLS..... Pollution Emergency Alerting System

#### Other Ascertainable Records

CONSENT...... Superfund (CERCLA) Consent Decrees

TRIS\_\_\_\_\_ Toxic Chemical Release Inventory System

TSCA..... Toxic Substances Control Act

Act)/TSCA (Toxic Substances Control Act)

HIST FTTS...... FIFRA/TSCA Tracking System Administrative Case Listing

SSTS..... Section 7 Tracking Systems

ICIS\_\_\_\_\_\_Integrated Compliance Information System

RAATS...... RCRA Administrative Action Tracking System

UIC......Underground Injection Wells Database

INDIAN RESERV.....Indian Reservations

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing COAL ASH EPA...... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER....... PCB Transformer Registration Database

COAL ASH...... Coal Ash Disposal Sites

#### **EDR PROPRIETARY RECORDS**

#### **EDR Proprietary Records**

Manufactured Gas Plants..... EDR Proprietary Manufactured Gas Plants

#### **SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in bold italics are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## STANDARD ENVIRONMENTAL RECORDS

#### State and tribal registered storage tank lists

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Natural Resources' Michigan AST database.

A review of the AST list, as provided by EDR, and dated 02/05/2010 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

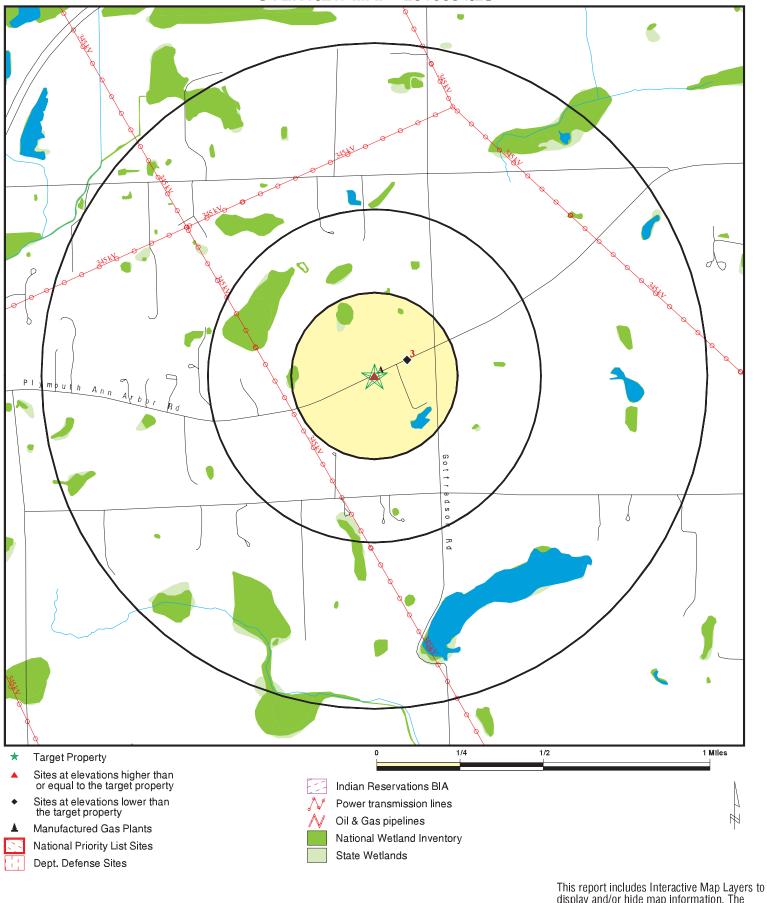
Lower Elevation	Address	Direction / Distance	Map ID	Page
PLYMOUTH NURSERY	9900 PLYMOUTH RD	ENE 0 - 1/8 (0.109 mi.)	3	9

# **EXECUTIVE SUMMARY**

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
UNISYS BURROUGHS LANDFILL	AUL
WESTERN WAYNE CORRECTIONAL FAC	SHWS
BUCKEYE PIPELINE COMPANY	SHWS
HINES & PLYMOUTH ROAD DUMP	SHWS
UNISYS BURROUGHS LANDFILL	SHWS
WILLOW RUN	SHWS, SPILLS
3.99 ACRE SITE	BEA

# **OVERVIEW MAP - 2816854.2s**



display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 9800 Plymouth-Ann Arbor ADDRESS: 9800 Plymouth-Ann Arbor

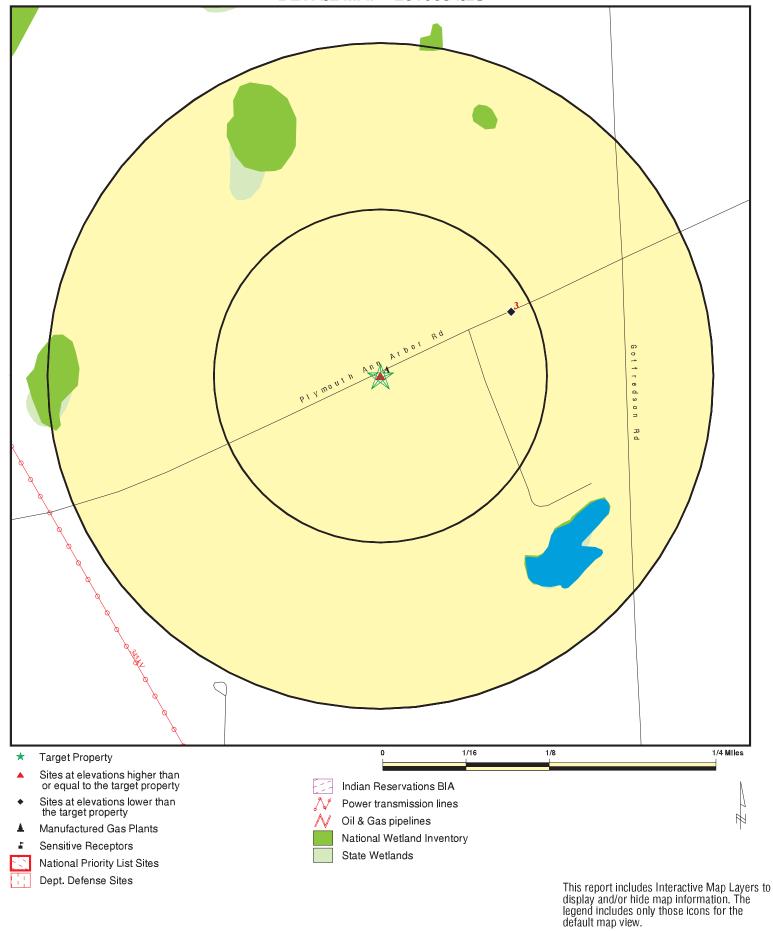
Plymouth MI 48170 LAT/LONG: 42.3399 / 83.5705

Soil & Materials Engineers

CLIENT: Soil & Material CONTACT: Rhonda Miller INQUIRY#: 2816854.2s

July 15, 2010 2:15 pm DATE:

# **DETAIL MAP - 2816854.2s**



SITE NAME: 9800 Plymouth-Ann Arbor
ADDRESS: 9800 Plymouth-Ann Arbor
Plymouth MI 48170
LAT/LONG: 42.3399 / 83.5705

CLIENT: Soil & Materials Engineers
CONTACT: Rhonda Miller
INQUIRY #: 2816854.2s
DATE: July 15, 2010 2:16 pm

# **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS		1.000 1.000 TP	0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS FEDERAL FACILITY		0.500 1.000	0 0	0 0	0 0	NR 0	NR NR	0 0
Federal CERCLIS NFRAI	P site List							
CERC-NFRAP		0.500	0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities lis	it .						
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD fa	cilities list						
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG		0.250 0.250 0.250	0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional con engineering controls reg								
US ENG CONTROLS US INST CONTROL		0.500 0.500	0 0	0 0	0 0	NR NR	NR NR	0 0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equiva	lent CERCLIS							
SHWS		1.000	0	0	0	0	NR	0
State and tribal landfill a solid waste disposal site								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST INDIAN LUST		0.500 0.500	0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal registered storage tank lists								
UST		0.250	0	0	NR	NR	NR	0

# **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST INDIAN UST FEMA UST		0.250 0.250 0.250	1 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	1 0 0
State and tribal institution control / engineering co		s						
AUL		0.500	0	0	0	NR	NR	0
State and tribal voluntar	y cleanup site	es						
INDIAN VCP		0.500	0	0	0	NR	NR	0
State and tribal Brownfie	elds sites							
BROWNFIELDS		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORDS	<u> </u>						
Local Brownfield lists		0.500	•	•	•	ND	ND	0
US BROWNFIELDS	2-11-1	0.500	0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	solia							
ODI DEBRIS REGION 9 HIST LF INDIAN ODI		0.500 0.500 0.500 0.500	0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0
Local Lists of Hazardou Contaminated Sites	s waste /							
US CDL DEL SHWS CDL US HIST CDL		TP 1.000 TP TP	NR 0 NR NR	NR 0 NR NR	NR 0 NR NR	NR 0 NR NR	NR NR NR NR	0 0 0 0
Local Land Records								
LIENS 2 LUCIS LIENS		TP 0.500 TP	NR 0 NR	NR 0 NR	NR 0 NR	NR NR NR	NR NR NR	0 0 0
Records of Emergency Release Reports								
HMIRS SPILLS		TP TP	NR NR	NR NR	NR NR	NR NR	NR NR	0 0
Other Ascertainable Records								
RCRA-NonGen DOT OPS DOD FUDS CONSENT ROD UMTRA	X	0.250 TP 1.000 1.000 1.000 1.000 0.500	0 NR 0 0 0 0	0 NR 0 0 0 0	NR NR 0 0 0 0	NR NR 0 0 0 NR	NR NR NR NR NR NR	0 0 0 0 0 0

# **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS	Χ	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
UIC		TP	NR	NR	NR	NR	NR	0
DRYCLEANERS NPDES		0.250	0	0	NR	NR	NR	0
		TP TP	NR	NR	NR	NR NR	NR NR	0
AIRS BEA	Χ	0.500	NR 0	NR 0	NR 0	NR NR	NR NR	0 0
INDIAN RESERV	^	1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
COAL ASH		0.500	0	0	0	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	Ö
EDR PROPRIETARY RECOR	<u>DS</u>							
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

A1 BEA \$107031687
Target 9800 ANN ARBOR RD W N/A

Property WASHTENAW (County), MI 48170

Site 1 of 2 in cluster A

Actual: BEA:

866 ft. Secondary Address: Not reported

BEA Number: 633
District: Jackson

Date Received: 6/16/2005 12:59:00 AM Submitter Name: GLAS Investments LLC

Petition Determination: Affirmed Petition Disclosure: 1

Category: No Hazardous Substance(s)

Determination 20107A: No Request Reviewer: katkov

Division Assigned: Environmental Response Division

.\_\_\_\_\_

A2 PROGRAMMED PRODUCTS CORP Target 9800 ANN ARBOR RD W

Property PLYMOUTH, MI 48170

Site 2 of 2 in cluster A

Actual: RCRA-NonGen:

866 ft. Date form received by agency: 02/23/1995

Facility name: PROGRAMMED PRODUCTS CORP

Facility address: 9800 ANN ARBOR RD W

PLYMOUTH, MI 48170

EPA ID: MI0000888651
Contact: KEITH EWING

Contact address: 9800 ANN ARBOR RD W

PLYMOUTH, MI 48170

Contact country: Not reported
Contact telephone: (810) 348-7755
Contact email: Not reported
EPA Region: 05

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ZAFARANA JOHN Owner/operator address: Not reported

Not reported

Owner/operator country:

Owner/operator telephone:

Legal status:

Owner/Operator Type:

Owner

Owner/Op start date:

Owner/Op end date:

Not reported

Not reported

Not reported

Owner/operator name: ZAFARANA JOHN Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator

**EDR ID Number** 

1000909378

MI0000888651

**RCRA-NonGen** 

**FINDS** 

Map ID MAP FINDINGS

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

#### PROGRAMMED PRODUCTS CORP (Continued)

1000909378

Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Off-site waste receiver: Commercial status unknown

Universal Waste Summary:

Waste type: Batteries
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Lamps
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Pesticides
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Thermostats

Accumulated waste on-site: No Generated waste on-site: No

Waste type: DEVICES CONTAINING ELEMENTAL MERCURY

Accumulated waste on-site: No Generated waste on-site: No

Waste type: MERCURY THERMOMETERS

Accumulated waste on-site: No Generated waste on-site: No

Waste type: MERCURY SWITCHES

Accumulated waste on-site: No Generated waste on-site: No

Historical Generators:

Date form received by agency: 10/12/1994

Facility name: PROGRAMMED PRODUCTS CORP

Classification: Not a generator, verified

Violation Status: No violations found

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

#### PROGRAMMED PRODUCTS CORP (Continued)

1000909378

FINDS:

110003568951 Registry ID:

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

**ACTIVE** 

**PLYMOUTH NURSERY** A100003189 AST **ENE** 9900 PLYMOUTH RD N/A

< 1/8 0.109 mi. 576 ft.

Lower

AST: Relative:

Owner Name: Plymouth Nursery Actual: 9900 PLYMOUTH RD Owner Address: 865 ft.

PLYMOUTH, MI 48170

Type:

Owner City, St, Zip: PLYMOUTH, MI 48170 Owner County: USA Owner Contact: Not reported

(734) 453-0155 Owner Telephone: 92081026 Facility ID: District: Jackson District Office

Contact: JEFF JONES Facility Phone: (734) 453-5500

Tank ID:

Currently In Use Tank Status: 12400 Capacity: Install Date: Mar 27 1980 Close Date: Not reported Liquid Propane Gas Content: Latitude: 42.3393520000 Longitude: -83.5717450000 Date of Collection: 01-11-2001

Accuracy: 100 Accuracy Value Unit: **FEET** Horizontal Datum: NAD83

STATE OF MICHIGAN Source: Point Line Area: **POINT** 

Description of Category:

Plant Entrance (Freight) Method of Collection: Address Matching-House Nu

#### ORPHAN SUMMARY

City	City EDR ID Site Name Site Address		Site Address	Zip	Database(s)
PLYMOUTH	S107031708	3.99 ACRE SITE	NW CORNER OF PLYMOUTH AND CONC	48170	BEA
PLYMOUTH	S103594602	WESTERN WAYNE CORRECTIONAL FAC	4840 FIVE MILE RD	48170	SHWS
PLYMOUTH	S103095091	BUCKEYE PIPELINE COMPANY	HAGGERTY	48170	SHWS
PLYMOUTH	S108959574	HINES & PLYMOUTH ROAD DUMP	HINES DRIVE AND PLYMOUTH RD	48170	SHWS
PLYMOUTH	S109847052	UNISYS BURROUGHS LANDFILL	PLYMOUTH & HAGGERTY RD	48170	AUL
PLYMOUTH	S103095078	UNISYS BURROUGHS LANDFILL	PLYMOUTH & HAGGERTY ROADS	48170	SHWS
YPSILANTI	S103411770		WILLOW RUN	48198	SHWS. SPILLS

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

#### STANDARD ENVIRONMENTAL RECORDS

#### Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/31/2010 Source: EPA
Date Data Arrived at EDR: 04/02/2010 Telephone: N/A

Date Made Active in Reports: 04/12/2010 Last EDR Contact: 07/14/2010

Number of Days to Update: 10 Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Quarterly

**NPL Site Boundaries** 

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/31/2010 Source: EPA
Date Data Arrived at EDR: 04/02/2010 Telephone: N/A

Number of Days to Update: 10 Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Source: EPA

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Telephone: 202-564-4267 Last EDR Contact: 05/17/2010

Next Scheduled EDR Contact: 08/30/2010 Data Release Frequency: No Update Planned

#### Federal Delisted NPL site list

**DELISTED NPL: National Priority List Deletions** 

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/31/2010 Date Data Arrived at EDR: 04/02/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 10

Source: EPA Telephone: N/A

Last EDR Contact: 07/14/2010

Next Scheduled EDR Contact: 10/25/2010 Data Release Frequency: Quarterly

#### Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/29/2010 Date Data Arrived at EDR: 02/09/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 62

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 07/12/2010

Next Scheduled EDR Contact: 10/11/2010 Data Release Frequency: Quarterly

#### FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPAa??s Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 06/23/2009 Date Data Arrived at EDR: 01/15/2010 Date Made Active in Reports: 02/10/2010

Number of Days to Update: 26

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 04/30/2010

Next Scheduled EDR Contact: 07/26/2010 Data Release Frequency: Varies

#### Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 06/23/2009 Date Data Arrived at EDR: 09/02/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 19

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 07/12/2010

Next Scheduled EDR Contact: 09/13/2010 Data Release Frequency: Quarterly

#### Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2010 Date Data Arrived at EDR: 03/31/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 57

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 05/17/2010

Next Scheduled EDR Contact: 08/30/2010 Data Release Frequency: Quarterly

#### Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/17/2010 Date Data Arrived at EDR: 02/19/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 87

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Quarterly

#### Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010 Date Data Arrived at EDR: 02/19/2010 Date Made Active in Reports: 05/17/2010 Number of Days to Update: 87

Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/17/2010 Date Data Arrived at EDR: 02/19/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 87

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010 Date Data Arrived at EDR: 02/19/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 87

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 07/09/2010

#### Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/20/2009 Date Data Arrived at EDR: 01/20/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 06/14/2010

Next Scheduled EDR Contact: 09/27/2010 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/20/2009 Date Data Arrived at EDR: 01/20/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 06/14/2010

Next Scheduled EDR Contact: 09/27/2010 Data Release Frequency: Varies

#### Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 01/22/2010 Date Made Active in Reports: 02/11/2010

Number of Days to Update: 20

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Annually

#### State- and tribal - equivalent CERCLIS

SHWS: Contaminated Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/03/2010 Date Data Arrived at EDR: 05/04/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 36

Source: Department of Natural Resources & Environment

Telephone: 517-373-9541 Last EDR Contact: 05/04/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Semi-Annually

#### State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facilities Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/05/2010 Date Data Arrived at EDR: 05/28/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 12

Source: Department of Natural Resources & Environment

Telephone: 517-335-4035 Last EDR Contact: 07/08/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Semi-Annually

#### State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 05/21/2010 Date Data Arrived at EDR: 05/25/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 15

Source: Department of Natural Resources & Environment

Telephone: 517-373-9837 Last EDR Contact: 05/25/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/01/2010 Date Data Arrived at EDR: 03/03/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 40

Source: Environmental Protection Agency Telephone: 415-972-3372

Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 03/10/2010 Date Data Arrived at EDR: 03/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 27

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/04/2010 Date Data Arrived at EDR: 05/05/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 22

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009 Date Data Arrived at EDR: 02/19/2009 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 25

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/03/2010 Date Data Arrived at EDR: 05/05/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 22

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 05/03/2010

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 11/04/2009 Date Data Arrived at EDR: 05/04/2010 Date Made Active in Reports: 07/07/2010

Number of Days to Update: 64

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 05/04/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 02/25/2010 Date Data Arrived at EDR: 02/25/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 46

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Quarterly

#### State and tribal registered storage tank lists

UST: Underground Storage Tank Facility List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/21/2010 Date Data Arrived at EDR: 05/25/2010 Date Made Active in Reports: 06/15/2010

Number of Days to Update: 21

Source: Department of Natural Resources & Environment

Telephone: 517-335-4035 Last EDR Contact: 05/25/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: Annually

AST: Aboveground Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 02/05/2010 Date Data Arrived at EDR: 03/12/2010 Date Made Active in Reports: 04/14/2010

Number of Days to Update: 33

Source: Department of Natural Resources & Environment

Telephone: 517-373-8168 Last EDR Contact: 05/24/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: No Update Planned

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 02/25/2010 Date Data Arrived at EDR: 02/25/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 46

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008 Date Data Arrived at EDR: 12/30/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 76

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 05/12/2010

#### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009 Date Data Arrived at EDR: 02/19/2009 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 25

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Varies

#### INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/01/2010 Date Data Arrived at EDR: 03/03/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 40

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Quarterly

#### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 03/10/2010 Date Data Arrived at EDR: 03/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 27

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Semi-Annually

#### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/04/2010 Date Data Arrived at EDR: 05/05/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 22

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Quarterly

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/03/2010 Date Data Arrived at EDR: 05/05/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 22

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Semi-Annually

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/11/2010 Date Data Arrived at EDR: 02/11/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 60

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 05/03/2010

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 55

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 04/19/2010

Next Scheduled EDR Contact: 08/02/2010 Data Release Frequency: Varies

#### State and tribal institutional control / engineering control registries

AUL: Engineering and Institutional Controls

A listing of sites with institutional and/or engineering controls in place.

Date of Government Version: 03/26/2010 Date Data Arrived at EDR: 03/26/2010 Date Made Active in Reports: 04/13/2010

Number of Days to Update: 18

Source: Department of Natural Resources & Environment

Telephone: 517-373-4828 Last EDR Contact: 06/07/2010

Next Scheduled EDR Contact: 09/20/2010 Data Release Frequency: Varies

#### State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 07/08/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

#### State and tribal Brownfields sites

BROWNFIELDS: Brownfields and USTfield Site Database

All state funded Part 201 and 213 sites, as well as LUST sites that have been redeveloped by private entities using the BEA process. Be aware that this is not a list of all of the potential brownfield sites in Michigan.

Date of Government Version: 06/01/2010 Date Data Arrived at EDR: 06/01/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 8

Source: Department of Natural Resources & Environment

Telephone: 517-373-4805 Last EDR Contact: 05/17/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Varies

BROWNFIELDS 2: Brownfields Building and Land Site Locations

A listing of brownfield building and land site locations. The listing is a collaborative effort of Michigan Economic Development Corporation, Michigan Economic Developers Association, Detrot Edison, Detroit Area Commercial Board of Realtors

Date of Government Version: 04/09/2007 Date Data Arrived at EDR: 04/10/2007 Date Made Active in Reports: 05/01/2007

Number of Days to Update: 21

Source: Economic Development Corporation

Telephone: 888-522-0103 Last EDR Contact: 06/21/2010

#### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 03/02/2010 Date Data Arrived at EDR: 03/23/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 55

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 06/25/2010

Next Scheduled EDR Contact: 10/11/2010 Data Release Frequency: Semi-Annually

#### Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004 Number of Days to Update: 39 Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 09/20/2010 Data Release Frequency: Varies

HIST LF: Inactive Solid Waste Facilities

The database contains historical information and is no longer updated.

Date of Government Version: 03/01/1997 Date Data Arrived at EDR: 02/28/2003 Date Made Active in Reports: 03/06/2003

Number of Days to Update: 6

Source: Department of Natural Resources & Environment

Telephone: 517-335-4034 Last EDR Contact: 02/28/2003 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 06/08/2010

Next Scheduled EDR Contact: 08/23/2010

Data Release Frequency: Varies

#### Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/19/2009 Date Data Arrived at EDR: 12/29/2009 Date Made Active in Reports: 02/10/2010

Number of Days to Update: 43

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 03/08/2010

Next Scheduled EDR Contact: 09/20/2010 Data Release Frequency: Quarterly

DEL SHWS: Delisted List of Contaminated Sites

Sites that have been delisted or deleted from the List of Contaminated Sites. The available documentation for the site does not support it's listing or the site no longer meets criteria specified in rules.

Date of Government Version: 05/10/2010 Date Data Arrived at EDR: 05/11/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 29

Source: Department of Natural Resources & Environment

Telephone: 517-373-9541 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Varies

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab locations.

Date of Government Version: 10/20/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 11/21/2008

Number of Days to Update: 3

Source: Department of Community Health

Telephone: 517-373-3740 Last EDR Contact: 04/15/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007 Date Data Arrived at EDR: 11/19/2008 Date Made Active in Reports: 03/30/2009

Number of Days to Update: 131

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

#### Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/05/2010 Date Data Arrived at EDR: 02/11/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 60

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 05/03/2010

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005 Date Data Arrived at EDR: 12/11/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 31

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 05/24/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: Varies

LIENS: Lien List

An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC \* 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition

Date of Government Version: 03/30/2010 Date Data Arrived at EDR: 04/30/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 40

Source: Department of Natural Resources & Environment

Telephone: 517-373-9837 Last EDR Contact: 04/26/2010

Next Scheduled EDR Contact: 08/09/2010 Data Release Frequency: Varies

#### Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 04/06/2010 Date Data Arrived at EDR: 04/07/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 50

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Annually

PEAS: Pollution Emergency Alerting System

Environmental pollution emergencies reported to the Department of Environmental Quality such as tanker accidents, pipeline breaks, and release of reportable quantities of hazardous substances.

Date of Government Version: 12/08/2009 Date Data Arrived at EDR: 03/12/2010 Date Made Active in Reports: 03/23/2010

Number of Days to Update: 11

Source: Department of Natural Resources & Environment

Telephone: 517-373-8427 Last EDR Contact: 06/14/2010

Next Scheduled EDR Contact: 09/27/2010 Data Release Frequency: Quarterly

#### Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/17/2010 Date Data Arrived at EDR: 02/19/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 87

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 10/18/2010

Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/12/2010 Date Data Arrived at EDR: 02/09/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 62

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 05/12/2010

Next Scheduled EDR Contact: 08/23/2010 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS Telephone: 703-692-8801

Last EDR Contact: 04/21/2010

Next Scheduled EDR Contact: 08/02/2010 Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 09/30/2009 Date Made Active in Reports: 12/01/2009

Number of Days to Update: 62

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 06/16/2010

Next Scheduled EDR Contact: 09/27/2010

Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 04/11/2010 Date Data Arrived at EDR: 04/19/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 28

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 07/08/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/29/2010
Date Data Arrived at EDR: 05/07/2010
Date Made Active in Reports: 05/27/2010

Number of Days to Update: 20

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 06/16/2010

Next Scheduled EDR Contact: 09/27/2010 Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 01/05/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 05/08/2009

Number of Days to Update: 1

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 06/01/2010

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/12/2010 Date Data Arrived at EDR: 03/10/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 68

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 06/09/2010

Next Scheduled EDR Contact: 09/20/2010 Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 01/13/2010 Date Made Active in Reports: 02/18/2010

Number of Days to Update: 36

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 06/04/2010

Next Scheduled EDR Contact: 09/13/2010 Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002 Date Data Arrived at EDR: 04/14/2006 Date Made Active in Reports: 05/30/2006

Number of Days to Update: 46

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 07/07/2010

Next Scheduled EDR Contact: 10/11/2010 Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 06/01/2010

Next Scheduled EDR Contact: 09/13/2010 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 06/01/2010

Next Scheduled EDR Contact: 09/13/2010 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

#### HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

#### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 01/06/2010 Date Made Active in Reports: 02/10/2010

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 05/03/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Annually

#### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 04/24/2010 Date Data Arrived at EDR: 04/29/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 18

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 06/25/2010

Next Scheduled EDR Contact: 10/11/2010 Data Release Frequency: Quarterly

#### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/01/2009 Date Data Arrived at EDR: 10/21/2009 Date Made Active in Reports: 12/01/2009

Number of Days to Update: 41

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 04/22/2010

Next Scheduled EDR Contact: 08/02/2010 Data Release Frequency: Annually

#### MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/18/2010 Date Data Arrived at EDR: 04/06/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 51

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 06/14/2010

Next Scheduled EDR Contact: 09/27/2010 Data Release Frequency: Quarterly

#### RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/13/2010 Date Data Arrived at EDR: 04/14/2010 Date Made Active in Reports: 05/17/2010

Number of Days to Update: 33

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 07/14/2010

Next Scheduled EDR Contact: 10/25/2010 Data Release Frequency: Quarterly

#### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/14/2010 Date Data Arrived at EDR: 04/16/2010 Date Made Active in Reports: 05/27/2010

Number of Days to Update: 41

Source: EPA

Telephone: (312) 353-2000 Last EDR Contact: 07/07/2010

Next Scheduled EDR Contact: 09/27/2010 Data Release Frequency: Quarterly

#### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

#### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 02/25/2010 Date Made Active in Reports: 05/12/2010

Number of Days to Update: 76

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 05/25/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: Biennially

#### UIC: Underground Injection Wells Database

A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 02/02/2010 Date Data Arrived at EDR: 03/03/2010 Date Made Active in Reports: 03/23/2010

Number of Days to Update: 20

Source: Department of Natural Resources & Environment

Telephone: 517-241-1515 Last EDR Contact: 02/01/2010

Next Scheduled EDR Contact: 05/17/2010 Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Establishments
A listing of drycleaning facilities in Michigan.

Date of Government Version: 04/28/2010 Date Data Arrived at EDR: 05/17/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 23

Source: Department of Natural Resources & Environment

Telephone: 517-335-4586 Last EDR Contact: 04/23/2010

Next Scheduled EDR Contact: 08/09/2010 Data Release Frequency: Varies

NPDES: List of Active NPDES Permits

General information regarding NPDES (National Pollutant Discharge Elimination System) permits and NPDES Storm

Water permits.

Date of Government Version: 04/13/2010 Date Data Arrived at EDR: 04/14/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 56

Source: Department of Natural Resources & Environment

Telephone: 517-241-1300 Last EDR Contact: 07/14/2010

Next Scheduled EDR Contact: 10/25/2010

Data Release Frequency: Varies

AIRS: Permit and Emissions Inventory Data Permit and emissions inventory data.

> Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 10/09/2009 Date Made Active in Reports: 11/17/2009

Number of Days to Update: 39

Source: Department of Natural Resources & Environment

Telephone: 517-373-7074 Last EDR Contact: 07/09/2010

Next Scheduled EDR Contact: 10/11/2010 Data Release Frequency: Varies

BEA: BASELINE ENVIRONMENTAL ASSESSMENT DATABASE

A Baseline Environmental Assessment (BEA) allows people to purchase or begin operating at a facility without being held liable for existing contamination. BEAs are used to gather enough information about the property being transferred so that existing contamination can be distinguished from any new releases that might occur after the new owner or operator takes over the property.

Date of Government Version: 05/27/2010 Date Data Arrived at EDR: 05/28/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 12

Source: Department of Natural Resources & Environment

Telephone: 517-373-9541 Last EDR Contact: 05/24/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: Semi-Annually

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 34

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 04/21/2010

Next Scheduled EDR Contact: 08/02/2010 Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 02/10/2010 Date Data Arrived at EDR: 02/11/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 60

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 05/10/2010

Next Scheduled EDR Contact: 08/09/2010

Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 04/21/2010

Next Scheduled EDR Contact: 08/02/2010

Data Release Frequency: N/A

FINANCIAL ASSURANCE: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 05/04/2010 Date Data Arrived at EDR: 05/06/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 34

Source: Department of Natural Resources & Environment

Telephone: 517-335-6610 Last EDR Contact: 07/12/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Varies

FINANCIAL ASSURANCE 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 04/05/2010 Date Data Arrived at EDR: 05/28/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 12

Source: Department of Natural Resources & Environment

Telephone: 517-335-4034 Last EDR Contact: 07/08/2010

Next Scheduled EDR Contact: 10/18/2010 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 11/09/2009 Date Data Arrived at EDR: 12/18/2009 Date Made Active in Reports: 02/10/2010

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 06/14/2010

Next Scheduled EDR Contact: 09/27/2010 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008 Date Data Arrived at EDR: 02/18/2009 Date Made Active in Reports: 05/29/2009

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 05/14/2010

Next Scheduled EDR Contact: 08/16/2010 Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 04/21/2010

COAL ASH: Coal Ash Disposal Sites

Coal fired power plants in Southeast Michigan that have coal ash handling on site.

Date of Government Version: 04/19/2010 Date Data Arrived at EDR: 04/19/2010 Date Made Active in Reports: 06/09/2010

Number of Days to Update: 51

Source: Department of Natural Resources & Environment

Telephone: 586-753-3754 Last EDR Contact: 07/12/2010

Next Scheduled EDR Contact: 10/25/2010 Data Release Frequency: Varies

#### **EDR PROPRIETARY RECORDS**

#### **EDR Proprietary Records**

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR. Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

#### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 08/26/2009 Date Made Active in Reports: 09/11/2009

Number of Days to Update: 16

Source: Department of Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 06/04/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 01/20/2010 Date Made Active in Reports: 02/05/2010

Number of Days to Update: 16

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 04/23/2010

Next Scheduled EDR Contact: 08/02/2010 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 04/30/2010 Date Data Arrived at EDR: 05/13/2010 Date Made Active in Reports: 06/21/2010

Number of Days to Update: 39

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 05/13/2010

Next Scheduled EDR Contact: 08/23/2010 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 12/01/2009 Date Made Active in Reports: 12/14/2009

Number of Days to Update: 13

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 05/24/2010

Next Scheduled EDR Contact: 09/06/2010 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 11/03/2009 Date Data Arrived at EDR: 02/12/2010 Date Made Active in Reports: 02/22/2010

Number of Days to Update: 10

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 06/01/2010

Next Scheduled EDR Contact: 09/13/2010 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 07/17/2009 Date Made Active in Reports: 08/10/2009

Number of Days to Update: 24

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/21/2010

Next Scheduled EDR Contact: 10/04/2010 Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: Rextag Strategies Corp. Telephone: (281) 769-2247

U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

**Public Schools** 

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

**Private Schools** 

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Centers, Group & Family Homes

Source: Bureau of REgulatory Services

Telephone: 517-373-8300

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Source: Department of Natural Resources

Telephone: 517-241-2254

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

#### STREET AND ADDRESS INFORMATION

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# **GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM**

#### **TARGET PROPERTY ADDRESS**

9800 PLYMOUTH-ANN ARBOR 9800 PLYMOUTH-ANN ARBOR PLYMOUTH, MI 48170

#### **TARGET PROPERTY COORDINATES**

Latitude (North): 42.33990 - 42° 20' 23.6" Longitude (West): 83.5705 - 83° 34' 13.8"

Universal Tranverse Mercator: Zone 17 UTM X (Meters): 288241.4 UTM Y (Meters): 4690502.5

Elevation: 866 ft. above sea level

#### **USGS TOPOGRAPHIC MAP**

Target Property Map: 42083-C5 DENTON, MI

Most Recent Revision: 1980

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

### **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

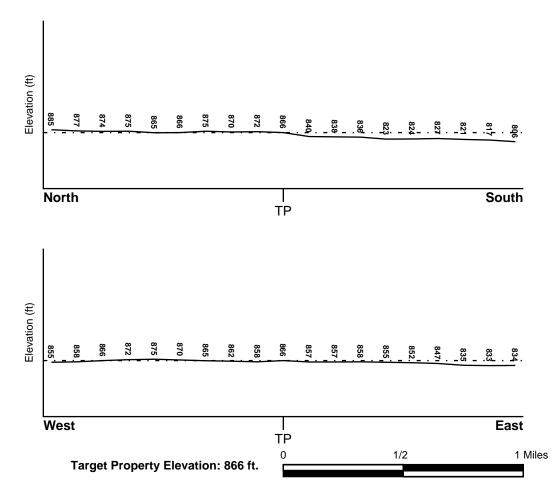
#### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

#### **SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### **HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE** 

FEMA Flood unty Electronic Data

Target Property County
WASHTENAW, MI

Electronic Dat
Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property Data Coverage

DENTON YES - refer to the Overview Map and Detail Map

#### **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### Site-Specific Hydrogeological Data\*:

Search Radius: 1.25 miles Status: Not found

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

 MAP ID
 FROM TP
 GROUNDWATER FLOW

 Not Reported
 GROUNDWATER FLOW

#### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

#### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

#### **GEOLOGIC AGE IDENTIFICATION**

Era: Paleozoic Category: Stratified Sequence

System: Mississippian

Series: Osagean and Kinderhookian Series
Code: M1 (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

#### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ST. CLAIR

Soil Surface Texture: clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

	Soil Layer Information						
	Воц	ındary		Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	25 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.20 Min: 0.06	Max: 7.30 Min: 5.60
3	25 inches	70 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.20 Min: 0.06	Max: 8.40 Min: 7.40

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silty clay loam

loam loamy sand muck

Surficial Soil Types: silty clay loam

loam

loamy sand muck

Shallow Soil Types: sandy loam

loamy sand

Deeper Soil Types: silty clay

silty clay loam stratified clay loam

muck fine sand

### **LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

#### FEDERAL USGS WELL INFORMATION

LOCATION
WELL ID FROM TP

No Wells Found

MAP ID

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

### STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	MI20315713	0 - 1/8 Mile ESE
A2	MI20315714	0 - 1/8 Mile East
3	MI20315712	0 - 1/8 Mile NW
4	MI20315715	0 - 1/8 Mile ESE
B5	MI20315710	1/8 - 1/4 Mile NE
C6	MI20315692	1/8 - 1/4 Mile ESE
C7	MI20321916	1/8 - 1/4 Mile SE
C8	MI20315693	1/4 - 1/2 Mile SE
C9	MI20315691	1/4 - 1/2 Mile ESE
B10	MI20321820	1/4 - 1/2 Mile NE
11	MI20321550	1/4 - 1/2 Mile WNW
12	MI20315709	1/4 - 1/2 Mile North
D13	MI20315695	1/4 - 1/2 Mile ENE
D14	MI20315694	1/4 - 1/2 Mile ENE
E15	MI20315707	1/4 - 1/2 Mile SW
E16	MI20315706	1/4 - 1/2 Mile SW
F17	MI20315702	1/4 - 1/2 Mile NNW
F18	MI20315700	1/4 - 1/2 Mile NNW
F19	MI20315701	1/4 - 1/2 Mile NNW
20	MI20315931	1/2 - 1 Mile SSW

# **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE SUMMARY**

## STATE DATABASE WELL INFORMATION

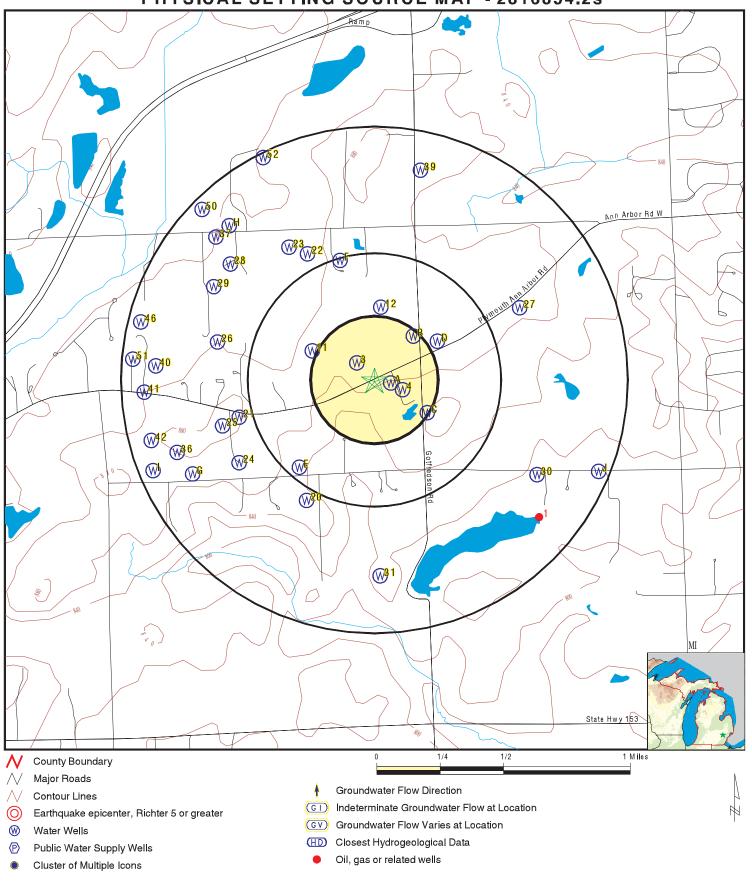
	WELLID	LOCATION
MAP ID	WELL ID	FROM TP
21	MI20321461	1/2 - 1 Mile WSW
22	MI20315699	1/2 - 1 Mile NNW
23	MI20315698	1/2 - 1 Mile NNW
24	MI20315708	1/2 - 1 Mile WSW
25	MI20315711	1/2 - 1 Mile WSW
26	MI20315696	1/2 - 1 Mile WNW
27	MI20315672	1/2 - 1 Mile ENE
28	MI20320635	1/2 - 1 Mile NW
29	MI20315697	1/2 - 1 Mile WNW
30	MI20322187	1/2 - 1 Mile ESE
31	MI20315932	1/2 - 1 Mile South
G32	MI20315705	1/2 - 1 Mile WSW
G33	MI20322337	1/2 - 1 Mile WSW
H34	MI20313472	1/2 - 1 Mile NW
G35	MI20315704	1/2 - 1 Mile WSW
36	MI20315703	1/2 - 1 Mile WSW
37	MI20321239	1/2 - 1 Mile NW
H38	MI20313471	1/2 - 1 Mile NW
39	MI20313476	1/2 - 1 Mile NNE
40	MI20315736	1/2 - 1 Mile West
41	MI20321069	1/2 - 1 Mile West
42	MI20321899	1/2 - 1 Mile WSW
143	MI20315719	1/2 - 1 Mile WSW
144	MI20315718	1/2 - 1 Mile WSW
I45	MI20315720	1/2 - 1 Mile WSW
46	MI20320315	1/2 - 1 Mile WNW
147	MI20315717	1/2 - 1 Mile WSW
J48	MI20315934	1/2 - 1 Mile ESE
J49	MI20315673	1/2 - 1 Mile ESE
50	MI20313470	1/2 - 1 Mile NW
51	MI20315735	1/2 - 1 Mile West
52	MI20323351	1/2 - 1 Mile NNW

### OTHER STATE DATABASE INFORMATION

#### STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	MIOG50000004660	1/2 - 1 Mile SF

## PHYSICAL SETTING SOURCE MAP - 2816854.2s



SITE NAME: 9800 Plymouth-Ann Arbor ADDRESS: 9800 Plymouth-Ann Arbor

Plymouth MI 48170 LAT/LONG: 42.3399 / 83.5705 CLIENT: Soil & Materials Engineers CONTACT: Rhonda Miller

INQUIRY#: 2816854.2s

DATE: July 15, 2010 2:16 pm

Мар	ID
Direc	ction
Dista	ance

Distance Elevation			Database	EDR ID Number
A1 ESE			MI WELLS	MI20315713
0 - 1/8 Mile				
Lower				
Wellid:	81000005119	Import id:	81727702018	
County:	Washtenaw	Township:	Superior	
Town range:	02S 07E	Section:	2	
Owner name:	JONES, WAYNE H.			
Well addr:	UNKNOWN			
Well depth:	194			
Well type:	Household			
Wssn:	0			
Well num:	Not Reported	Driller id:	111	
Const date:	1969-10-14 00:00:00.000	Case type:	Unknown	
Case dia:	4			
Case depth:	194			
Screen frm:	189			
Screen to:	194			
Swl:	22			
Test depth:	150			
Test hours:	3			
Test rate:	10	Test methd:	Unknown	
Grouted:	1	Pmp cpcity:	0	
Latitude:	42.3395576074			
Longitude:	-83.5696792596			
Methd coll:	Interpolation-Map			
Elevation:	855			
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported	
Elev flag:	Not Reported			
Swl flag:	Not Reported			
Elev dem:	850	Elev dif:	5	
Elev miv:	855	Aq code:	Drift Well	
Aq flag:	Not Reported	Pct aq:	7	
Pct aq d:	7	Pct aq r:	0	
Pct maq:	0	Pct maq d:	0	
Pct maq r:	0	Pct cm:	93	
Pct cm d:	93	Pct cm r:	0	
Pct pcm:	0	Pct pcm d:	0	
Pct pcm r:	0	Pct na:	0	
Pct na d:	0	Pct na r:	0	
Pct flag:	Not Reported	Rock top:	-1	
D r type:	Not Reported	Spc cpcity:	0	
A thicknes:	6	A pct aq:	100	
A pct maq:	0	A pct pcm:	0	
A pct cm:	0	A pct na:	0	
A thickns2:	172	A pct aq2:	7	
A pct maq2:	0	A pct pcm2:	0	
A pct cm2:	93	A pct na2:	0	
A hit swl:	F	A hit top:	F	
A hit rock:	F	A sc lith1:	Sand	
A sc Imod1:	Not Reported	A sc Imaq1:	AQ Nat Damanta d	
A sc lpct1:	100	A sc lith2:	Not Reported	
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported	
A sc lpct2:	0	Pct aq 1:	10	
Pct maq 1:	0	Pct cm 1:	90	
Pct pcm 1:	0	Pct na 1:	0	

Pct aq 2: 0 Pct cm 2: 100 Pct na 2: 0 Pct maq 3: 0 Pct pcm 3: 0 Pct aq 4: 0 Pct cm 4: 100 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 100 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 0 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: Athk2: 172 Horiz Conduct: 3.48907 Vert Conduct: .0003 600.1195 T2: D50plek: 184.61729 Pct maq 2: 0 Pct pcm 2: 0 0 Pct aq 3: Pct cm 3: 100 Pct na 3: 0 0 Pct maq 4: Pct pcm 4: 0 Pct aq 5: 0 Pct cm 5: 100 Pct na 5: 0 Pct maq 6: 0 Pct pcm 6: 0 Pct aq 7: 0 Pct cm 7: 100 Pct na 7: 0 Pct maq 8: 0 Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 Pct mag 10: 0 Pct pcm 10: 0 0 Pct aq 11: Pct cm 11: 0 0 Pct na 11: Pct mag 12: 0 0 Pct pcm 12: Pct aq 13: 0 Pct cm 13: 0 Pct na 13: 0 Loc match: Υ

MI WELLS MI20315714

81727702019

Superior

2

#### A2 East 0 - 1/8 Mile Lower

Wellid: 8100005120
County: Washtenaw
Town range: 02S 07E

Owner name: PLYMOUTH NURSERY Well addr: 9900 PLYMOUTH RD.

Well depth: 222
Well type: Public
Wssn: 0

Well num:Not ReportedDriller id:388Const date:Not ReportedCase type:Unknown

Import id:

Township:

Section:

Case dia: 0

Case depth: 0 Screen frm: 0 Screen to: 0 999.99 Swl: Test depth: 0 Test hours: 0 Test rate: 0 Test methd: Unknown Grouted: Pmp cpcity: 42.3398951241 Latitude: -83.56878466 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: SWL > Well Depth 859 Elev dem: Elev dif: 2 Drift Well Elev miv: 857 Aq code: Not Reported Aq flag: Pct aq: 12 Pct aq d: 12 Pct aq r: 0 Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 19 Pct cm d: 19 Pct cm r: 0 Pct pcm: 69 Pct pcm d: 69 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: 0 Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 0 0 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 0 A pct ag2: 0 0 A pct maq2: 0 A pct pcm2: 0 0 A pct cm2: A pct na2: A hit swl: F A hit top: Т A hit rock: A sc lith1: Not Reported A sc Imod1: Not Reported A sc Imaq1: Not Reported Not Reported A sc lpct1: A sc lith2: Not Reported Not Reported A sc Imod2: A sc Imaq2: A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 65 Pct pcm 1: 35 Pct na 1: 0 0 75 Pct aq 2: Pct maq 2: Pct cm 2: 25 0 Pct pcm 2: 60 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 0 Pct pcm 3: 40 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 0 Pct pcm 4: 100 Pct na 4: 0 Pct aq 5: 0 0 Pct maq 5: 0 Pct cm 5: 100 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: Pct cm 6: 0 Pct pcm 6: 100 Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 0 Pct pcm 7: 100 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 33 Pct pcm 8: 67 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

Pct aq 10: 0 Pct maq 10: 0 Pct cm 10: 0 Pct pcm 10: 0 0 Pct na 10: 0 Pct aq 11: 0 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: 0 Pct aq 12: 0 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 0 Pct na 12: 0 Pct aq 13: 0 0 Pct maq 13: 0 Pct cm 13: Pct pcm 13: 0 Pct na 13: 0 Υ Within sec: Υ Loc match:

Aq code 1: Not Reported Hit swl: Not Reported

 Athk2:
 0

 Horiz Conduct:
 0

 Vert Conduct:
 0

 T2:
 0

 D50plek:
 0

Higher

3 NW MI WELLS MI20315712 0 - 1/8 Mile

 Wellid:
 8100005118
 Import id:
 81727702017

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 2

Owner name: MATTHEWS, GEORGE

Well addr: 9775 ANN ARBOR RD. Well depth: 239

Well type: Household Wssn: 239

Well num: Not Reported Driller id:

Const date: 1982-05-21 00:00:00.000 Case type: PVC Plastic Case dia: 5

 Case depth:
 239

 Screen frm:
 0

 Screen to:
 0

 Swl:
 70

 Test depth:
 80

 Test hours:
 2

 Test rate:
 12

Test rate: 12 Test methd: Unknown Grouted: 1 Pmp opcity: 0

Latitude: 42.340873268
Longitude: -83.5718482424
Methd coll: Interpolation-Map

Elevation: 871

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 869 Elev dif: 2

Elev miv: 871 Aq code: Rock Well

Aq flag: Not Reported Pct aq: 5 Pct aq d: 0 Pct aq r: 86 Pct maq: 0 Pct maq d: 0 0 Pct maq r: Pct cm: 94

1290

Det are d	100	Det em m	0
Pct cm d:	100	Pct cm r:	0
Pct pcm:	0	Pct pcm d:	0
Pct pcm r:	0	Pct na:	1
Pct na d:	0 Not Deported	Pct na r:	14
Pct flag:	Not Reported	Rock top:	225
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	0	A pet aq:	0
A pct maq:	0	A pet pem:	0
A pct cm:	0	A pct na:	0
A thickns2:	0	A pct aq2:	0
A pct maq2:	0	A pet pem2:	0
A pct cm2:	0	A pct na2:	0 T
A hit swl:	F F	A hit top:	
A hit rock:	·	A sc lith1:	Not Reported
A sc Imod1:	Not Reported	A sc Imaq1:	Not Reported
A sc lpct1:	0 Not Deported	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	100
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	100	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	100
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	100	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	100
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	100	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	100
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	100	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0 Y
Within sec:	Y	Loc match:	T
Aq code 1:	R F		
Hit swl:			
Athk2:	0		
Horiz Conduct:	.0001		
Vert Conduct:	.0001		
T2:	.0205		
D50plek:	.01722		

Map ID Direction Distance

Elevation Database EDR ID Number ESE **MI WELLS** MI20315715 0 - 1/8 Mile Lower Wellid: 81000005121 Import id: 81727702020 County: Washtenaw Township: Superior Town range: 02S 07E Section: 2 PLYMOUTH NURSERY Owner name: Well addr: 9900 PLYMOUTH RD. Well depth: 185 Well type: Household 0 Wssn: Well num: Not Reported Driller id: 1290 1978-12-05 00:00:00.000 Const date: Case type: Unknown 0 Case dia: Case depth: 185 Screen frm: 177 Screen to: 185 Swl: 35 Test depth: 55 2 Test hours: Test rate: 40 Test methd: Unknown Grouted: Pmp cpcity: 42.3393409568 Latitude: Longitude: -83.5683226311 Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Not Reported Swl flag: Elev dem: 856 Elev dif: Elev miv: 857 Aq code: Drift Well Aq flag: Not Reported Pct aq: 5 0 Pct aq d: 5 Pct aq r: Pct maq d: 0 0 Pct maq: Pct mag r: 0 Pct cm: 95 Pct cm r: Pct cm d: 95 0 Pct pcm: 0 Pct pcm d: 0 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: 5 A thickns2: 150 A pct aq2: 0 A pct maq2: 0 A pct pcm2: 0 95 A pct cm2: A pct na2: F F A hit swl: A hit top: F A hit rock: A sc lith1: Sand A sc Imod1: Wet/Moist A sc Imaq1: AQ A sc lpct1: 88 A sc lith2: Clay A sc Imod2: Not Reported A sc Imaq2: CM A sc lpct2: 12 Pct aq 1: 10 Pct mag 1: 0 Pct cm 1: 90 Pct pcm 1: 0 Pct na 1:

Pct aq 2: 0 Pct cm 2: 100 Pct na 2: 0 Pct maq 3: 0 Pct pcm 3: 0 Pct aq 4: 0 Pct cm 4: 100 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 100 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 0 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: 150 Athk2: Horiz Conduct: 2.33343 Vert Conduct: .0001 350.0143 T2: D50plek: 96.76258 Pct maq 2: Pct pcm 2: Pct aq 3: Pct cm 3: Pct na 3: Pct maq 4: Pct pcm 4: Pct aq 5: Pct cm 5: Pct na 5: Pct maq 6: Pct pcm 6: Pct aq 7: Pct cm 7: Pct na 7: Pct maq 8: Pct pcm 8: Pct aq 9: Pct cm 9: Pct na 9: Pct maq 10: Pct pcm 10: Pct aq 11: Pct cm 11: Pct na 11: Pct mag 12: Pct pcm 12: Pct aq 13: Pct cm 13: Pct na 13: Loc match:

0

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0 0

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0

0

0

Υ

1290

**PVC Plastic** 

100

100

100

MI WELLS MI20315710

ΝĒ 1/8 - 1/4 Mile Higher

> Wellid: 81000005116 County: Washtenaw Town range: 02S 07E GARCIA, JEFF Owner name:

Well addr: 4533 GOTFREDSON RD.

190 Well depth: Well type: Household

Wssn: 0

Well num: Not Reported Const date: 1986-12-01 00:00:00.000

Case dia:

Import id: 81727702015 Township: Superior Section:

2

Driller id:

Case type:

Case depth: 182 Screen frm: 182 Screen to: 190 Swl: 35 Test depth: 38 Test hours: 2 Test rate: 20 Test methd: Unknown Grouted: Pmp cpcity: 42.3420947036 Latitude: -83.5678774032 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported Elev dem: 872 Elev dif: 5 Drift Well Elev miv: 867 Aq code: Not Reported Aq flag: Pct aq: 8 0 Pct aq d: 8 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 92 Pct cm d: 92 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 10 100 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 155 A pct ag2: 10 A pct maq2: 0 A pct pcm2: 0 90 0 A pct cm2: A pct na2: A hit swl: F A hit top: F A hit rock: F A sc lith1: Sand A sc Imod1: Wet/Moist A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 Pct aq 2: 10 Pct maq 2: 90 0 Pct cm 2: Pct pcm 2: 15 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 85 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 100 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 100 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 100 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

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0 0

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Υ

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 155 Horiz Conduct: 4.03235 Vert Conduct:

**MI WELLS** MI20315692 1/8 - 1/4 Mile Lower

Wellid: 81000005098 Import id: 81727701021 County: Washtenaw Township: Superior Town range: 02S 07E Section:

Owner name: VETTESE, JOANN 4240 GOTFREDSON RD.

.00011

625.014

172.88663

Well addr: Well depth: 185

Well type: Household 0 Wssn:

T2:

D50plek:

Well num: Not Reported Driller id: 388 Const date: 1978-02-13 00:00:00.000 Case type: Unknown

Case dia: 4 Case depth: 181 Screen frm: 181 Screen to: 185 Swl: 60 Test depth: 110 Test hours: 4

20 Test rate: Test methd: Unknown Grouted: 1 Pmp cpcity:

Latitude: 42.3381444722 Longitude: -83.5665896758 Methd coll: Interpolation-Map

Elevation: 854

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Not Reported Swl flag:

Elev dem: 853 Elev dif:

Drift Well Elev miv: 854 Aq code: Aq flag: Not Reported Pct aq: 48 Pct aq d: 48 Pct aq r: 0 Pct maq: 0 Pct maq d: 0 0 Pct maq r: Pct cm: 19

Sand & Gravel

Not Reported Not Reported

AQ

Pct cm d:	19	Pct cm r:
Pct pcm:	32	Pct pcm d:
Pct pcm r:	0	Pct na:
Pct na d:	0	Pct na r:
Pct flag:	Not Reported	Rock top:
D r type:	Not Reported	Spc cpcity:
A thicknes:	·	
	15	A pct aq:
A pct maq:	0	A pct pcm:
A pct cm:	0	A pct na:
A thickns2:	125	A pct aq2:
A pct maq2:	0	A pct pcm2:
A pct cm2:	0	A pct na2:
A hit swl:	F	A hit top:
A hit rock:	F	A sc lith1:
A sc Imod1:	Fine	A sc Imaq1:
A sc lpct1:	100	A sc lith2:
A sc Imod2:	Not Reported	A sc Imaq2:
A sc lpct2:	0	Pct aq 1:
Pct maq 1:	0	Pct cm 1:
Pct pcm 1:	0	Pct na 1:
Pct aq 2:	5	Pct mag 2:
Pct cm 2:	95	Pct pcm 2:
Pct na 2:	0	Pct aq 3:
Pct mag 3:	0	Pct cm 3:
Pct pcm 3:	0	Pct na 3:
Pct aq 4:	100	Pct maq 4:
Pct cm 4:	0	
		Pct pcm 4:
Pct na 4:	0	Pct aq 5:
Pct maq 5:	0	Pct cm 5:
Pct pcm 5:	0	Pct na 5:
Pct aq 6:	40	Pct maq 6:
Pct cm 6:	0	Pct pcm 6:
Pct na 6:	0	Pct aq 7:
Pct maq 7:	0	Pct cm 7:
Pct pcm 7:	100	Pct na 7:
Pct aq 8:	0	Pct maq 8:
Pct cm 8:	0	Pct pcm 8:
Pct na 8:	0	Pct aq 9:
Pct maq 9:	0	Pct cm 9:
Pct pcm 9:	0	Pct na 9:
Pct aq 10:	0	Pct maq 10:
Pct cm 10:	0	Pct pcm 10:
Pct na 10:	0	Pct aq 11:
Pct mag 11:	0	Pct cm 11:
Pct pcm 11:	0	Pct na 11:
Pct aq 12:	0	Pct mag 12:
Pct cm 12:	0	Pct pcm 12:
Pct na 12:	0	Pct aq 13:
Pct mag 13:	0	Pct cm 13:
Pct pcm 13:	0	Pct na 13:
Within sec:	Y	Loc match:
		LOC MAICH.
Aq code 1:	D F	
Hit swl:		
Athk2:	125	
Horiz Conduct:	26.0048	
Vert Conduct:	.02083	
T2:	3250.6	
D50plek:	665.16186	

Map ID
Direction
Distance
□1 4!

Database EDR ID Number Elevation **MI WELLS** MI20321916 1/8 - 1/4 Mile Lower Wellid: 81000012690 Import id: Not Reported Washtenaw Township: Superior County: Town range: 02S 07E Section: Owner name: Dennis Taylor Well addr: 4222 Gotfredson Well depth: 143 Well type: Household 0 Wssn: Well num: Driller id: 2014 Not Reported 2002-08-07 00:00:00.000 Const date: Case type: **PVC Plastic** 5 Case dia: Case depth: 137 Screen frm: 137 Screen to: 143 Swl: 73 Test depth: 73 2 Test hours: Test rate: 6 Test methd: Air Grouted: Pmp cpcity: 18 42.33767194 Latitude: Longitude: -83.56672823 Methd coll: Address Matching-House Number Elevation: Elev methd: DEM30M Depth flag: Not Reported Elev flag: Elevation < DEMmin or Elevation > DEMmax Not Reported Swl flag: Elev dem: 856 856 Elev dif: Elev miv: 856 Aq code: Drift Well Aq flag: Not Reported Pct aq: 5 0 Pct aq d: 5 Pct aq r: 6 Pct maq d: Pct maq: 6 Pct mag r: 0 Pct cm: 90 Pct cm d: 90 Pct cm r: 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: 0 Pct na: Pct na r: 0 Pct na d: 0 Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: A thickns2: 70 A pct aq2: 10 A pct maq2: 0 A pct pcm2: 0 90 0 A pct cm2: A pct na2: F F A hit swl: A hit top: A hit rock: F A sc lith1: Gravel A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1:

Pct aq 2: 0 Pct cm 2: 100 Pct na 2: 0 Pct maq 3: 35 Pct pcm 3: 0 Pct aq 4: 0 Pct cm 4: 95 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 100 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 0 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: Athk2: 70 Horiz Conduct: 10.00009 Vert Conduct: .00011 700.0063 T2: D50plek: 86.90756 Pct maq 2: 0 Pct pcm 2: 0 0 Pct aq 3: Pct cm 3: 65 Pct na 3: 0 5 Pct maq 4: Pct pcm 4: 0 Pct aq 5: 0 Pct cm 5: 100 Pct na 5: 0 Pct maq 6: 0 Pct pcm 6: 0 Pct aq 7: 0 0 Pct cm 7: 0 Pct na 7: Pct maq 8: 0 Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 Pct maq 10: 0 Pct pcm 10: 0 0 Pct aq 11: Pct cm 11: 0 0 Pct na 11: Pct mag 12: 0 0 Pct pcm 12: Pct aq 13: 0 Pct cm 13: 0 Pct na 13: 0 Loc match: Υ

MI WELLS MI20315693 1/4 - 1/2 Mile

Lower

C8

SE

Wellid: 81000005099 County: Washtenaw Town range: 02S 07E Owner name: **VETTESE** 

Well addr: 4234 GOTFREDSON RD.

Well depth: 174 Well type: Household Wssn: 0

Well num: Not Reported Const date: Not Reported

Case dia:

Import id: 81727701022 Township: Superior Section:

Driller id: 1199 Case type: Unknown

Case depth: 174 Screen frm: 111 Screen to: 114 Swl: 31 Test depth: 41 Test hours: 1 Test rate: 16 Test methd: Unknown Grouted: Pmp cpcity: 42.3376996818 Latitude: -83.5665951356 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 856 Elev dem: Elev dif: Drift Well Elev miv: 857 Aq code: Not Reported Aq flag: Pct aq: 8 0 Pct aq d: 8 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 92 Pct cm d: 92 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 100 10 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 83 A pct ag2: 12 A pct maq2: 0 A pct pcm2: 0 88 0 A pct cm2: A pct na2: A hit swl: F A hit top: F A hit rock: F A sc lith1: Sand A sc Imod1: Fine A sc Imaq1: AQ 100 Not Reported A sc lpct1: A sc lith2: A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 0 Pct aq 4: 0 Pct maq 4: Pct cm 4: 100 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 40 Pct aq 6: Pct maq 6: 0 Pct cm 6: 60 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 100 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

Pct ag 10:	0	Pct mag 10:
Pct cm 10:	0	Pct pcm 10:
Pct na 10:	0	Pct aq 11:
Pct maq 11:	0	Pct cm 11:
Pct pcm 11:	0	Pct na 11:
Pct aq 12:	0	Pct maq 12:
Pct cm 12:	0	Pct pcm 12:
Pct na 12:	0	Pct aq 13:
Pct maq 13:	0	Pct cm 13:
Pct pcm 13:	0	Pct na 13:
Within sec:	Υ	Loc match:
Aq code 1:	D	
Hit swl:	F	
Athk2:	83	
Horiz Conduct:	6.02418	
Vert Conduct:	.00011	

C9
ESE MI WELLS MI20315691

1/4 - 1/2 Mile Lower

T2: D50plek:

 Wellid:
 8100005097
 Import id:
 81727701020

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 1

Owner name: VETTESE, JOE

Well addr: 4270 GOTFREDSON RD.

500.0073

74.97661

Well depth: 199
Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 388
Const date: 1977-11-02 00:00:00.000 Case type: Unknown

 Case dia:
 4

 Case depth:
 195

 Screen frm:
 195

 Screen to:
 199

 Swl:
 100

 Test depth:
 168

 Test hours:
 4

Test rate: 10 Test methd: Unknown Grouted: 1 Pmp cpcity: 0

Latitude: 42.3385994059
Longitude: -83.5657546646
Methd coll: Interpolation-Map

Elevation: 857

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 856 Elev dif: 1

Drift Well Elev miv: 857 Aq code: Aq flag: Not Reported Pct aq: 15 Pct aq d: 15 Pct aq r: 0 0 0 Pct maq: Pct maq d: 0 65 Pct maq r: Pct cm:

Sand & Gravel

Not Reported Not Reported

AQ

Y

Pct cm d:	65	Pct cm r:
Pct pcm:	20	Pct pcm d:
Pct pcm r:	0	Pct na:
Pct na d:	0	Pct na r:
Pct flag:	Not Reported	Rock top:
D r type:	Not Reported	Spc cpcity:
A thicknes:	19	A pct aq:
A pct maq:	0	A pct pcm:
A pct cm:	0	A pct na:
A thickns2:	99	A pct ag2:
A pct maq2:	0	A pct pcm2:
A pct cm2:	32	A pct na2:
A hit swl:	F	A hit top:
A hit rock:	F	A sc lith1:
A sc Imod1:	Fine	A sc Imag1:
A sc lpct1:	100	A sc lith2:
A sc Imod2:		
	Not Reported 0	A sc Imaq2:
A sc lpct2:		Pct aq 1:
Pct maq 1:	0	Pct cm 1:
Pct pcm 1:	0	Pct na 1:
Pct aq 2:	0	Pct maq 2:
Pct cm 2:	100	Pct pcm 2:
Pct na 2:	0	Pct aq 3:
Pct maq 3:	0	Pct cm 3:
Pct pcm 3:	0	Pct na 3:
Pct aq 4:	0	Pct maq 4:
Pct cm 4:	100	Pct pcm 4:
Pct na 4:	0	Pct aq 5:
Pct maq 5:	0	Pct cm 5:
Pct pcm 5:	0	Pct na 5:
Pct aq 6:	0	Pct maq 6:
Pct cm 6:	80	Pct pcm 6:
Pct na 6:	0	Pct aq 7:
Pct maq 7:	0	Pct cm 7:
Pct pcm 7:	100	Pct na 7:
Pct aq 8:	0	Pct maq 8:
Pct cm 8:	0	Pct pcm 8:
Pct na 8:	0	Pct aq 9:
Pct maq 9:	0	Pct cm 9:
Pct pcm 9:	0	Pct na 9:
Pct aq 10:	0	Pct maq 10:
Pct cm 10:	0	Pct pcm 10:
Pct na 10:	0	Pct aq 11:
Pct mag 11:	0	Pct cm 11:
Pct pcm 11:	0	Pct na 11:
Pct aq 12:	0	Pct mag 12:
Pct cm 12:	0	Pct pcm 12:
Pct na 12:	0	Pct aq 13:
Pct mag 13:	0	Pct cm 13:
Pct pcm 13:	0	Pct na 13:
•	Y	Loc match:
Within sec:	T D	LOC IIIaloII.
Aq code 1:	F	
Hit swl:		
Athk2:	99	
Horiz Conduct:	12.87922	
Vert Conduct:	.00027	
T2:	1275.0432	
D50plek:	216.81649	

Map ID Direction Distance

Elevation Database EDR ID Number **B10** ΝE **MI WELLS** MI20321820 1/4 - 1/2 Mile Higher Wellid: 81000012549 Import id: Not Reported Washtenaw Township: Superior County: Town range: 02S 07E Section: **DENNIS YETTESE** Owner name: Well addr: Not Reported Well depth: 230 Well type: Irrigation 0 Wssn: Well num: Driller id: 2125 Not Reported 2002-09-05 00:00:00.000 Const date: Case type: **PVC Plastic** 5 Case dia: Case depth: 200 Screen frm: 220 Screen to: 230 Swl: 80 Test depth: 230 Test hours: 2 Test rate: 20 Test methd: Air Grouted: Pmp cpcity: 42.34271666 Latitude: -83.56711296 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: DEM30M Depth flag: Not Reported Elev flag: Elevation < DEMmin or Elevation > DEMmax Not Reported Swl flag: Elev dem: Elev dif: 872 872 Elev miv: 872 Aq code: Drift Well Aq flag: Not Reported Pct aq: 9 0 Pct aq d: Pct aq r: Pct maq: 0 Pct maq d: 0 Pct mag r: 0 Pct cm: 91 Pct cm d: 91 Pct cm r: 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: 0 Pct na: Pct na r: 0 Pct na d: 0 Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: 10 A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: 7 A thickns2: 150 A pct aq2: 0 A pct maq2: 0 A pct pcm2: 0 93 A pct cm2: A pct na2: F F A hit swl: A hit top: F A hit rock: A sc lith1: Sand A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported Pct aq 1: A sc lpct2: 0 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1:

Pct aq 2: 45 Pct cm 2: 55 Pct na 2: 0 0 Pct maq 3: 0 Pct pcm 3: Pct aq 4: 0 Pct cm 4: 100 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 100 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 100 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: 150 Athk2: Horiz Conduct: 6.66676 Vert Conduct: .00011 1000.014 T2: D50plek: 260.98658

Pct maq 2: Pct pcm 2: Pct aq 3: Pct cm 3: Pct na 3: Pct maq 4: Pct pcm 4: Pct aq 5: Pct cm 5: Pct na 5: Pct maq 6: Pct pcm 6: Pct aq 7: Pct cm 7: Pct na 7: Pct maq 8: Pct pcm 8: Pct aq 9: Pct cm 9: Pct na 9: Pct maq 10: Pct pcm 10: Pct aq 11: Pct cm 11: Pct na 11: Pct mag 12: Pct pcm 12: Pct aq 13: Pct cm 13: Pct na 13: Loc match:

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100

100

11 WNW MI WELLS 1/4 - 1/2 Mile Higher

Import id:

Township:

Section:

Driller id:

Case type:

Wellid: 81000012124 County: Washtenaw Town range: 02S 07E **Dynasty Builders** Owner name: Well addr: 4356 Hickory Ridge

81 Well depth:

Well type: Household

Wssn:

0 Well num: Not Reported

1999-07-26 00:00:00.000 Const date:

Case dia:

Not Reported Superior

2

524

**PVC Plastic** 

MI20321550

Case depth: 69 Screen frm: 69 Screen to: 79 45 Swl: 58 Test depth: Test hours: 2 Test rate: 12 Test methd: Unknown Grouted: Pmp cpcity: 12 42.34156178 Latitude: -83.57528004 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: DEM30M Depth flag: Not Reported Elev flag: Elevation < DEMmin or Elevation > DEMmax Swl flag: Not Reported 872 Elev dem: 872 Elev dif: Drift Well Elev miv: 872 Aq code: Not Reported 33 Aq flag: Pct aq: 0 Pct aq d: 33 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 67 Pct cm d: 67 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 100 17 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 34 A pct ag2: 50 0 A pct maq2: 0 A pct pcm2: 50 0 A pct cm2: A pct na2: A hit swl: F A hit top: F A hit rock: F A sc lith1: Sand A sc Imod1: Fine A sc Imaq1: AQ 100 Not Reported A sc lpct1: A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: A sc lpct2: 0 Pct aq 1: 30 Pct mag 1: 0 Pct cm 1: 70 Pct pcm 1: 0 Pct na 1: 0 0 20 Pct aq 2: Pct maq 2: Pct cm 2: 80 0 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 85 Pct maq 4: 0 Pct cm 4: 15 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 0 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 0 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 0 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

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Υ

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct na 13: Pct pcm 13: Υ Within sec: Loc match: Aq code 1: D F Hit swl: Athk2: 34 Horiz Conduct: 25.00005 Vert Conduct: .0002 850.0017 T2:

12 North MI WELLS MI20315709

North 1/4 - 1/2 Mile Higher

D50plek:

 Wellid:
 8100005115
 Import id:
 81727702014

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 2

Owner name: ENDLEIN, DENIS

Well addr: 4611 GOTFREDSON RD.

50.72226

Well depth: 170
Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 1290

Const date: 1987-09-24 00:00:00.000 Case type: PVC Plastic

 Case dia:
 5

 Case depth:
 166

 Screen frm:
 166

 Screen to:
 170

 Swl:
 37

 Test depth:
 41

 Test hours:
 2

Test rate: 20 Test methd: Unknown Grouted: 1 Pmp opcity: 0

 Latitude:
 42.3440571005

 Longitude:
 -83.5699996935

 Methd coll:
 Interpolation-Map

Elevation: 875

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 872 Elev dif: 3

Drift Well Elev miv: 875 Aq code: Aq flag: Not Reported Pct aq: 15 Pct aq d: 15 Pct aq r: 0 0 Pct maq: Pct maq d: 0 0 85 Pct maq r: Pct cm:

Not Reported Not Reported

Y

Pct cm d:	85	Pct cm r:
Pct pcm:	0	Pct pcm d:
Pct pcm r:	0	Pct na:
Pct na d:	0	Pct na r:
Pct flag:	Not Reported	Rock top:
D r type:	Not Reported	Spc cpcity:
A thicknes:	6	A pct aq:
A pct maq:	0	A pct pcm:
A pct cm:	0	A pct na:
A thickns2:	133	A pct aq2:
A pct maq2:	0	A pct pcm2:
A pct cm2:	83	A pct na2:
A hit swl:	F	A hit top:
A hit rock:	F	A sc lith1:
A sc Imod1:	Wet/Moist	A sc Imaq1:
A sc lpct1:	100	A sc lith2:
A sc lmod2:	Not Reported	A sc Imag2:
A sc lpct2:	0	Pct aq 1:
Pct maq 1:	0	Pct cm 1:
Pct pcm 1:	0	Pct na 1:
Pct aq 2:	15	Pct maq 2:
Pct cm 2:	85	Pct pcm 2:
Pct na 2:	0	Pct aq 3:
Pct mag 3:	0	Pct cm 3:
Pct pcm 3:	0	Pct na 3:
Pct aq 4:	0	Pct maq 4:
Pct cm 4:	100	Pct pcm 4:
Pct na 4:	0	Pct aq 5:
Pct maq 5:	0	Pct cm 5:
Pct pcm 5:	0	Pct na 5:
Pct aq 6:	40	Pct maq 6:
Pct cm 6:	60	Pct pcm 6:
Pct na 6:	0	Pct aq 7:
Pct maq 7:	0	Pct cm 7:
Pct pcm 7:	0	Pct na 7:
Pct aq 8:	0	Pct maq 8:
Pct cm 8:	0	Pct pcm 8:
Pct na 8:	0	Pct aq 9:
Pct maq 9:	0	Pct cm 9:
Pct pcm 9:	0	Pct na 9:
Pct aq 10:	0	Pct maq 10:
Pct cm 10:	0	Pct pcm 10:
Pct na 10:	0	Pct aq 11:
Pct maq 11:	0	Pct cm 11:
Pct pcm 11:	0	Pct na 11:
Pct aq 12:	0	Pct maq 12:
Pct cm 12:	0	Pct pcm 12:
Pct na 12:	0	Pct aq 13:
Pct maq 13:	0	Pct cm 13:
Pct pcm 13:	0	Pct na 13:
Within sec:	Υ	Loc match:
Aq code 1:	D	
Hit swl:	F	
Athk2:	133	
Horiz Conduct:	5.63918	
Vert Conduct:	.00012	
T2:	750.011	
D50plek:	176.25912	

Map ID Direction Distance

Elevation Database EDR ID Number D13 **MI WELLS** MI20315695 **ENE** 1/4 - 1/2 Mile Higher Wellid: 81000005101 Import id: 81727701401 Washtenaw Township: Superior County: Town range: 02S 07E Section: TRINITY PRESBYTERIAN CHURCH Owner name: Well addr: 10101 W. ANN ARBOR RD Well depth: 192 Well type: Type II public 2017581 Wssn: Well num: 001 Driller id: 1586 1981-11-06 00:00:00.000 Const date: Case type: Steel-black 5 Case dia: Case depth: 192 Screen frm: 184 Screen to: 192 Swl: 45 Test depth: 48 8 Test hours: Test rate: 50 Test methd: Unknown Grouted: Pmp cpcity: 50 Latitude: 42.3421115886 Longitude: -83.5656402996 Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Not Reported Swl flag: Elev dem: 869 Elev dif: Elev miv: 870 Aq code: Drift Well Aq flag: Not Reported Pct aq: 14 0 Pct aq d: 14 Pct aq r: Pct maq d: Pct maq: 0 0 Pct mag r: 0 Pct cm: 86 Pct cm d: 86 Pct cm r: 0 Pct pcm: 0 Pct pcm d: 0 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: 8 A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: A thickns2: 147 A pct aq2: 18 A pct maq2: 0 A pct pcm2: 0 82 0 A pct cm2: A pct na2: F F A hit swl: A hit top: F A hit rock: A sc lith1: Gravel A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1:

Pct aq 2: 0 Pct cm 2: 100 Pct na 2: 0 Pct maq 3: 0 Pct pcm 3: 0 Pct aq 4: 25 Pct cm 4: 75 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 100 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 0 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: 147 Athk2: Horiz Conduct: 28.57151 Vert Conduct: .00012 4200.0121 T2: D50plek: 997.87411 Pct maq 2: 0 Pct pcm 2: 0 Pct aq 3: 65 Pct cm 3: 35 Pct na 3: 0 0 Pct maq 4: Pct pcm 4: 0 Pct aq 5: 0 Pct cm 5: 100 Pct na 5: 0 Pct maq 6: 0 Pct pcm 6: 0 Pct aq 7: 0 Pct cm 7: 100 Pct na 7: 0 Pct maq 8: 0 Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 Pct maq 10: 0 Pct pcm 10: 0 0 Pct aq 11: Pct cm 11: 0 0 Pct na 11: Pct mag 12: 0 0 Pct pcm 12: Pct aq 13: 0 Pct cm 13: 0 Pct na 13: 0 Loc match: Υ

D14
ENE MI WELLS MI20315694
1/4 - 1/2 Mile

TRINITY PRESBYTERIAN CHURCH

 Wellid:
 81000005100

 County:
 Washtenaw

 Town range:
 02S 07E

Import id: Township: Section: 81727701023 Superior

Well addr: 10003 PLYMOUTH-ANN ARBOR RD.
Well depth: 192
Well type: Public

Higher

Owner name:

Case dia:

Well type: Public Wssn: 0

Well num: Not Reported
Const date: 1981-11-06 00:00:00.000

Driller id: Case type: 1586 Steel-black

Case depth: 192 Screen frm: 186 Screen to: 192 Swl: 45 Test depth: 48 Test hours: 8 Test rate: 50 Test methd: Unknown Grouted: Pmp cpcity: 42.3421115886 Latitude: -83.5656402996 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 869 Elev dem: Elev dif: Drift Well Elev miv: 870 Aq code: Not Reported Aq flag: Pct aq: 14 0 Pct aq d: 14 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 86 Pct cm d: 86 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 8 100 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 147 A pct ag2: 18 A pct maq2: 0 A pct pcm2: 0 82 0 A pct cm2: A pct na2: A hit swl: F F A hit top: A hit rock: A sc lith1: Gravel A sc Imod1: Not Reported A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 65 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 35 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 25 Pct maq 4: 0 Pct cm 4: 75 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 Pct aq 6: 0 Pct maq 6: 0 Pct cm 6: 100 Pct pcm 6: Pct na 6: 0 0 Pct aq 7: Pct maq 7: 0 Pct cm 7: 100 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0

0

0

0

0

0

0

0

Υ

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: Pct na 11: 0 Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 147 Horiz Conduct: 28.57151 .00012 Vert Conduct:

E15 SW MI WELLS MI20315707

1/4 - 1/2 Mile Lower

T2:

D50plek:

 Wellid:
 81000005113
 Import id:
 81727702012

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 2

Owner name: NUSTAD, MR. HENRY; J.L HUDSON C

4200.0121

997.87411

Well addr: 9503 WARREN RD.

Well depth: 155
Well type: Household

Wssn: 0

 Well num:
 Not Reported
 Driller id:
 25

 Const date:
 1973-07-16 00:00:00.000
 Case type:
 Unknown

 Case dia:
 4

 Case depth:
 150.5

 Screen frm:
 150.5

 Screen to:
 155

 Swl:
 25

 Test depth:
 140

 Test hours:
 4

Test rate: 8 Test methd: Unknown Grouted: 0 Pmp opcity: 0

Latitude: 42.3349093818 Longitude: -83.576105738 Methd coll: Interpolation-Map

Elevation: 847

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 843 Elev dif: 4

Drift Well Elev miv: 847 Aq code: Aq flag: Not Reported Pct aq: 33 Pct aq d: 33 Pct aq r: 0 Pct maq: 0 Pct maq d: 0 0 31 Pct maq r: Pct cm:

Pct cm d:	31	Dot on "	0
	31 35	Pct cm r:	0
Pct pcm:		Pct pcm d:	35
Pct pcm r:	0	Pct na:	0
Pct na d:	0 Not Beneated	Pct na r:	0
Pct flag:	Not Reported	Rock top:	-1
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	19	A pct aq:	32
A pct maq:	0	A pct pcm:	63
A pct cm:	0	A pct na:	5
A thickns2:	130	A pct aq2:	39
A pct maq2:	0	A pct pcm2:	42
A pct cm2:	18	A pct na2:	1_
A hit swl:	F -	A hit top:	F
A hit rock:	F	A sc lith1:	Sand & Gravel
A sc Imod1:	Medium	A sc Imaq1:	AQ
A sc lpct1:	100	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	95
Pct pcm 1:	0	Pct na 1:	5
Pct aq 2:	10	Pct maq 2:	0
Pct cm 2:	50	Pct pcm 2:	40
Pct na 2:	0	Pct aq 3:	15
Pct maq 3:	0	Pct cm 3:	85
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	100	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	40
Pct maq 5:	0	Pct cm 5:	10
Pct pcm 5:	50	Pct na 5:	0
Pct aq 6:	48	Pct maq 6:	0
Pct cm 6:	0	Pct pcm 6:	52
Pct na 6:	0	Pct aq 7:	4
Pct maq 7:	0	Pct cm 7:	0
Pct pcm 7:	92	Pct na 7:	4
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Υ	Loc match:	Υ
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

Map ID Direction Distance

Elevation Database EDR ID Number E16 **MI WELLS** MI20315706 1/4 - 1/2 Mile Lower Wellid: 81000005112 Import id: 81727702011 Washtenaw Township: Superior County: Town range: 02S 07E Section: 2 NUSTAD, MR.; HUDSON REAL EST. Owner name: Well addr: 9503 WARREN RD. Well depth: 367 Well type: Household 0 Wssn: Well num: Driller id: 25 Not Reported 1973-07-05 00:00:00.000 Const date: Case type: Unknown 0 Case dia: Case depth: 0 Screen frm: 0 Screen to: 0 Swl: 999.99 Test depth: 0 0 Test hours: Test rate: 0 Test methd: Unknown Grouted: Pmp cpcity: 42.3349042275 Latitude: Longitude: -83.5764395854 Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported SWL > Well Depth Swl flag: Elev dem: 843 Elev dif: Elev miv: 847 Aq code: Rock Well Aq flag: Not Reported Pct aq: 23 23 Pct aq d: 22 Pct aq r: Pct maq d: 0 Pct maq: 0 Pct mag r: 0 Pct cm: 50 Pct cm d: 37 Pct cm r: 76 Pct pcm: 28 Pct pcm d: 40 0 Pct pcm r: Pct na: 1 0 Pct na d: 0 Pct na r: Not Reported Pct flag: Rock top: 249 D r type: Not Reported Spc cpcity: 0 A thicknes: A pct aq: 0 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: 0 A thickns2: 0 A pct aq2: 0 A pct maq2: 0 A pct pcm2: 0 0 A pct cm2: A pct na2: F F A hit swl: A hit top: A hit rock: A sc lith1: Not Reported Not Reported A sc Imod1: Not Reported A sc Imaq1: A sc lpct1: A sc lith2: Not Reported Not Reported A sc Imod2: Not Reported A sc Imaq2: A sc lpct2: 0 Pct aq 1: 5 Pct mag 1: 0 Pct cm 1: 95 Pct pcm 1: 0 Pct na 1:

Pct aq 2:	0
Pct cm 2:	25
Pct na 2:	0
Pct maq 3:	0
Pct pcm 3:	0
Pct aq 4:	100
Pct cm 4:	0
Pct na 4:	0
Pct maq 5:	0
Pct pcm 5:	0
Pct aq 6:	0
Pct cm 6:	60
Pct na 6:	0
Pct maq 7:	0
Pct pcm 7:	0
Pct aq 8:	11
Pct cm 8:	15
Pct na 8:	0
Pct maq 9:	0
Pct pcm 9:	0
Pct aq 10:	0
Pct cm 10:	0
Pct na 10:	0
Pct maq 11:	0
Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct maq 13:	0
Pct pcm 13:	0
Within sec:	Υ
Aq code 1:	R
Hit swl:	F
Athk2:	0
Horiz Conduct:	18.99956
Vert Conduct:	.00057
T2:	4350.8994
D50plek:	1607.54831

Pct maq 2:	0
Pct pcm 2:	75
Pct aq 3:	100
Pct cm 3:	0
Pct na 3:	0
Pct maq 4:	0
Pct pcm 4:	0
Pct aq 5:	30
Pct cm 5:	70
Pct na 5:	0
Pct maq 6:	0
Pct pcm 6:	40
Pct aq 7:	4
Pct cm 7:	96
Pct na 7:	0
Pct maq 8:	0
Pct pcm 8:	75
Pct aq 9:	0
Pct cm 9:	0
Pct na 9:	0
Pct maq 10:	0
Pct pcm 10:	0
Pct aq 11:	0
Pct cm 11:	0
Pct na 11:	0
Pct maq 12:	0
Pct pcm 12:	0
Pct aq 13:	0
Pct cm 13:	0
Pct na 13:	0
Loc match:	Υ

F17 NNW 1/4 - 1/2 Mile Higher

Wellid: 8100005108
County: Washtenaw
Town range: 02S 07E
Owner name: BOHLEN, TED
Well addr: 9676 JOY RD.

Well depth: 171
Well type: Household

Wssn: 0

Well num: Not Reported

Const date: 1984-11-02 00:00:00.000

Case dia: 5

81727702007 Superior

MI WELLS

MI20315702

2

Import id:

Township:

Section:

Driller id:

Case type:

388 PVC Plastic

Case depth: 163 Screen frm: 163 Screen to: 171 Swl: 36 Test depth: 80 Test hours: 2 Test rate: 20 Test methd: Unknown Grouted: Pmp cpcity: 42.3467336339 Latitude: -83.5727663127 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 866 Elev dem: Elev dif: Drift Well Elev miv: 865 Aq code: Not Reported Aq flag: Pct aq: 16 0 Pct aq d: 16 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 84 Pct cm d: 84 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 100 16 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 135 A pct ag2: 12 A pct maq2: 0 A pct pcm2: 0 88 0 A pct cm2: A pct na2: A hit swl: F A hit top: F A hit rock: F A sc lith1: Sand & Gravel A sc Imod1: Fine A sc Imaq1: AQ 100 Not Reported A sc lpct1: A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: A sc lpct2: 0 Pct aq 1: 55 Pct mag 1: 0 Pct cm 1: 45 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 0 Pct aq 4: 0 Pct maq 4: Pct cm 4: 100 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 Pct aq 6: 0 Pct maq 6: 0 Pct cm 6: 100 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 100 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

Pct aq 10:	0	Pct mag 10:
Pct cm 10:	0	Pct pcm 10:
Pct na 10:	0	Pct aq 11:
Pct maq 11:	0	Pct cm 11:
Pct pcm 11:	0	Pct na 11:
Pct aq 12:	0	Pct maq 12:
Pct cm 12:	0	Pct pcm 12:
Pct na 12:	0	Pct aq 13:
Pct maq 13:	0	Pct cm 13:
Pct pcm 13:	0	Pct na 13:
Within sec:	Υ	Loc match:
Aq code 1:	D	
Hit swl:	F	
Athk2:	135	
Horiz Conduct:	5.92601	
Vert Conduct:	.00011	
T2:	800.0119	

190.17255

1/4 - 1/2 Mile Higher

D50plek:

81727702005 Wellid: 81000005106 Import id: County: Washtenaw Township: Superior Town range: 02S 07E Section: 2 BOHLEN, TED Owner name: Well addr: 9676 JOY RD.

Well depth: 107
Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 388

 Case dia:
 5

 Case depth:
 103

 Screen frm:
 103

 Screen to:
 107

 Swl:
 90

 Test depth:
 100

 Test hours:
 2

 Test rate:
 10

Test rate: 10 Test methd: Unknown Grouted: 1 Pmp cpcity: 0

Latitude: 42.3467294845 Longitude: -83.5729661173 Methd coll: Interpolation-Map

Elevation: 865

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 866 Elev dif: 1

Drift Well Elev miv: 865 Aq code: Aq flag: Not Reported Pct aq: 15 Pct aq d: 15 Pct aq r: 0 0 0 Pct maq: Pct maq d: Pct cm: 0 85 Pct maq r:

Dat am di	0.5	Dat am ri	0
Pct cm d:	85	Pct cm r:	0
Pct pcm:	0	Pct pcm d:	
Pct pcm r:	0	Pct na:	0
Pct na d:	0 Not Departed	Pct na r:	0 -1
Pct flag:	Not Reported	Rock top:	
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	6	A pct aq:	100
A pct maq:	0	A pct pcm:	0
A pct cm:	0	A pct na:	0
A thickns2:	17	A pct aq2:	35
A pct maq2:	0	A pct pcm2:	0
A pct cm2:	65 F	A pct na2:	0 F
A hit swl:	F	A hit top:	-
A hit rock:	•	A sc lith1:	Sand & Gravel
A sc Imod1:	Fine	A sc Imaq1:	AQ
A sc lpct1:	100 Not Departed	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	50
Pct maq 1:	0	Pct cm 1:	50
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	100	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	100
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	100	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	100
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	0	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	0
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Y	Loc match:	Υ
Aq code 1:	D		
Hit swl:	F		
Athk2:	17		
Horiz Conduct:	17.64712		
Vert Conduct:	.00015		
T2:	300.0011		
D50plek:	9.482		

Map ID Direction Distance

Elevation Database EDR ID Number F19 NNW **MI WELLS** MI20315701 1/4 - 1/2 Mile Lower Wellid: 81000005107 Import id: 81727702006 Washtenaw Township: Superior County: Town range: 02S 07E Section: 2 WICK, JOHN Owner name: Well addr: 9570 JOY RD. Well depth: 153 Well type: Household Wssn: 0 Well num: Driller id: 388 Not Reported Const date: 1969-12-17 00:00:00.000 Case type: Unknown Case dia: 4 Case depth: 149 Screen frm: 149 Screen to: 153 Swl: 999.99 Test depth: 130 Test hours: 2 Test rate: 12 Test methd: Unknown Grouted: Pmp cpcity: Latitude: 42.3467317496 Longitude: -83.5736772512 Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported SWL > Well Depth Swl flag: Elev dem: 859 Elev dif: Elev miv: 855 Aq code: Drift Well Aq flag: Not Reported Pct aq: 16 0 Pct aq d: 16 Pct aq r: Pct maq d: Pct maq: 0 0 Pct mag r: 0 Pct cm: 5 Pct cm d: 5 Pct cm r: 0 Pct pcm: 78 Pct pcm d: 78 Pct pcm r: 0 Pct na: 0 0 0 Pct na d: Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: A pct aq: 0 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: 0 A thickns2: 0 A pct aq2: A pct maq2: 0 A pct pcm2: 0 0 0 A pct cm2: A pct na2: F A hit swl: A hit top: Τ Gravel & Sand A hit rock: A sc lith1: A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 60 Pct mag 1: 0 Pct cm 1: 40 Pct pcm 1: 0 Pct na 1: 0

Pct aq 2:	0
Pct cm 2:	0
Pct na 2:	0
Pct maq 3:	0
Pct pcm 3:	100
Pct aq 4:	0
Pct cm 4:	0
Pct na 4:	0
Pct maq 5:	0
Pct pcm 5:	100
Pct aq 6:	0
Pct cm 6:	0
Pct na 6:	0
Pct maq 7:	0
Pct pcm 7:	60
Pct aq 8:	0
Pct cm 8:	0
Pct na 8:	0
Pct maq 9:	0
Pct pcm 9:	0
Pct aq 10:	0
Pct cm 10:	0
Pct na 10:	0
Pct maq 11:	0
Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct maq 13:	0
Pct pcm 13:	0
Within sec:	Υ
Aq code 1:	Not Reported
Hit swl:	Not Reported
441.1.0	

Pct maq 2:
Pct pcm 2:
Pct aq 3:
Pct cm 3:
Pct na 3:
Pct maq 4:
Pct pcm 4:
Pct aq 5:
Pct cm 5:
Pct na 5:
Pct maq 6:
Pct pcm 6:
Pct aq 7:
Pct cm 7:
Pct na 7:
Pct maq 8:
Pct pcm 8:
Pct aq 9:
Pct cm 9:
Pct na 9:
Pct maq 10:
Pct pcm 10:
Pct aq 11:
Pct cm 11:
Pct na 11:
Pct maq 12:
Pct pcm 12:
Pct aq 13:
Pct cm 13:
Pct na 13:
Loc match:

Driller id:

Case type:

0
0
0
100
0
0
0
0
100
40
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
Υ

0 100 0

20 SSW 1/2 - 1 Mile Lower

Athk2:

T2:

D50plek:

Horiz Conduct:

Vert Conduct:

Wellid: 81000005337 Import id: County: Washtenaw Township: 02S 07E Town range: Section: Owner name: WILLETT, C. 9568 WARREN RD.

Well addr: Well depth: 73 Well type: Household

Wssn: 0

Well num: Not Reported 1984-08-01 00:00:00.000 Const date:

0

0

0

0

0

Case dia:

MI20315931 MI WELLS

81727711001 Superior 11

64 Steel-black

Case depth: 73 Screen frm: 70 Screen to: 73 23 Swl: 60 Test depth: Test hours: 2 Test rate: 10 Test methd: Unknown Grouted: 0 Pmp cpcity: 42.3330118062 Latitude: -83.5757200736 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 846 Elev dem: Elev dif: Drift Well Elev miv: 845 Aq code: Not Reported Aq flag: Pct aq: 0 Pct aq d: Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 96 Pct cm d: 96 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 3 100 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 50 A pct ag2: 6 0 A pct maq2: 0 A pct pcm2: 94 0 A pct cm2: A pct na2: A hit swl: F A hit top: F A hit rock: F A sc lith1: Sand A sc Imod1: Coarse A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 0 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 0 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 0 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 0 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0

0

0

0

0

0

0

Υ

**MI WELLS** 

MI20321461

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct na 13: Pct pcm 13: Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 50 Horiz Conduct: 6.00009 Vert Conduct: .00011

21 WSW 1/2 - 1 Mile Higher

Wellid:81000011998Import id:Not ReportedCounty:WashtenawTownship:SuperiorTown range:02S 07ESection:2

Owner name: ROSE LANGE

Well addr: 8950 ANN ARBOR PLYMOUTH

300.0047

27.88854

Well depth: 160
Well type: Household

Wssn: 0

T2:

D50plek:

 Well num:
 Not Reported
 Driller id:
 2014

 Const date:
 2001-12-05 00:00:00.000
 Case type:
 PVC Plastic

 Case dia:
 5

 Case depth:
 150

 Screen frm:
 150

 Screen to:
 160

 Swl:
 42

 Test depth:
 42

 Test hours:
 2

Test rate: 7 Test methd: Air Grouted: 1 Pmp cpcity: 20

Latitude: 42.33776897
Longitude: -83.58090904
Methd coll: Interpolation-Map

Elevation: 0

Elev methd: DEM30M Depth flag: Not Reported

Elev flag: Elevation < DEMmin or Elevation > DEMmax

Swl flag: Not Reported

Elev dem: 879 879 Elev dif: Drift Well Elev miv: 879 Aq code: Aq flag: Not Reported Pct aq: 8 Pct aq d: 8 Pct aq r: 0 Pct maq: 0 Pct maq d: 0 0 93 Pct maq r: Pct cm:

Pct cm d:	93	Pct
Pct pcm:	0	Pct
Pct pcm r:	0	Pct
Pct na d:	0	Pct
Pct flag:	Not Reported	Roc
_	·	
D r type:	Not Reported	Spc
A thicknes:	12	A po
A pct maq:	0	A po
A pct cm:	0	A po
A thickns2:	118	A po
A pct maq2:	0	A po
A pct cm2:	90	A po
A hit swl:	F	A hi
A hit rock:	F	A so
A sc Imod1:	Not Reported	A so
A sc lpct1:	100	A so
A sc Imod2:	Not Reported	A so
A sc lpct2:	0	Pct
Pct maq 1:	0	Pct
Pct pcm 1:	0	Pct
Pct aq 2:	0	Pct
Pct cm 2:	100	Pct
Pct na 2:	0	Pct
Pct maq 3:	0	Pct
Pct pcm 3:	0	Pct
Pct aq 4:	0	Pct
Pct cm 4:	100	Pct
Pct na 4:	0	Pct
Pct maq 5:	0	Pct
Pct pcm 5:	0	Pct
Pct aq 6:	0	Pct
Pct cm 6:	100	Pct
Pct na 6:	0	Pct
Pct mag 7:	0	Pct
Pct pcm 7:	0	Pct
Pct aq 8:	0	Pct
Pct cm 8:	0	Pct
Pct na 8:	0	Pct
	0	Pct
Pct maq 9:	0	
Pct pcm 9:	0	Pct Pct
Pct aq 10:		
Pct cm 10:	0	Pct
Pct na 10:	0	Pct
Pct maq 11:	0	Pct
Pct pcm 11:	0	Pct
Pct aq 12:	0	Pct
Pct cm 12:	0	Pct
Pct na 12:	0	Pct
Pct maq 13:	0	Pct
Pct pcm 13:	0	Pct
Within sec:	Y	Loc
Aq code 1:	D	
Hit swl:	F	
Athk2:	118	
Horiz Conduct:	5.08484	
Vert Conduct:	.00011	
T2:	600.0106	
D50plek:	126.63432	

0 cm r: pcm d: 0 0 na: 0 na r: ck top: -1 0 c cpcity: oct aq: 100 ct pcm: 0 0 ct na: 10 ct aq2: 0 ct pcm2: ct na2: 0 F nit top: Sand c lith1: sc Imaq1: AQ sc lith2: Not Reported sc Imaq2: Not Reported 0 aq 1: 100 cm 1: na 1: 0 maq 2: 0 0 pcm 2: 0 aq 3: 100 cm 3: 0 na 3: 0 maq 4: 0 pcm 4: 0 aq 5: cm 5: 100 na 5: 0 maq 6: 0 0 pcm 6: 8 aq 7: 92 cm 7: na 7: 0 0 maq 8: 0 pcm 8: 0 aq 9: 0 cm 9: na 9: 0 maq 10: 0 0 pcm 10: 0 aq 11: cm 11: 0 na 11: 0 maq 12: 0 0 pcm 12: 0 aq 13: cm 13: 0 na 13: Υ c match:

Мар	ID.
Dire	ction
Dista	ance

Distance Elevation			Database	EDR ID Numbe
22 NNW 1/2 - 1 Mile Lower			MI WELLS	MI20315699
Wellid:	81000005105	Import id:	81727702004	
County:	Washtenaw	Township:	Superior	
Town range:	02S 07E	Section:	2	
Owner name:	FRAZER, JAMES	Occitori.	2	
Well addr:	9504 JOY RD.			
Well depth:	142			
Well type:	Household			
Wssn:	0			
Well num:	Not Reported	Driller id:	388	
Const date:	1969-12-10 00:00:00.000	Case type:	Unknown	
Case dia:	4	Case type.	OHKHOWH	
	138			
Case depth: Screen frm:	138			
Screen to:	142			
Swl:				
Test depth:	20 60			
Test hours:	1	Table to a section of	Halmanna	
Test rate:	20	Test methd:	Unknown	
Grouted:	1	Pmp cpcity:	0	
Latitude:	42.3471065361			
Longitude:	-83.5756462003			
Methd coll:	Interpolation-Map			
Elevation:	857			
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported	
Elev flag:	Not Reported			
Swl flag:	Not Reported			
Elev dem:	853	Elev dif:	4	
Elev miv:	857	Aq code:	Drift Well	
Aq flag:	Not Reported	Pct aq:	14	
Pct aq d:	14	Pct aq r:	0	
Pct maq:	0	Pct maq d:	0	
Pct maq r:	0	Pct cm:	28	
Pct cm d:	28	Pct cm r:	0	
Pct pcm:	58	Pct pcm d:	58	
Pct pcm r:	0	Pct na:	0	
Pct na d:	0	Pct na r:	0	
Pct flag:	Not Reported	Rock top:	-1	
D r type:	Not Reported	Spc cpcity:	0	
A thicknes:	15	A pct aq:	100	
A pct maq:	0	A pct pcm:	0	
A pct cm:	0	A pct na:	0	
A thickns2:	122	A pct aq2:	16	
A pct maq2:	0	A pct pcm2:	59	
A pct cm2:	25	A pct na2:	0	
A hit swl:	F	A hit top:	F	
A hit rock:	F	A sc lith1:	Sand & Gravel	
A sc Imod1:	Not Reported	A sc Imaq1:	AQ	
A sc iniou1. A sc lpct1:	100	A sc lith2:	Not Reported	
A sc lpct1: A sc lmod2:	Not Reported	A sc Imaq2:	Not Reported	
			·	
A sc lpct2:	0	Pct aq 1:	0	
Pct maq 1:	0	Pct cm 1:	50	
Pct pcm 1:	50	Pct na 1:	0	

Pct maq 2:	0
Pct pcm 2:	0
Pct aq 3:	25
Pct cm 3:	50
Pct na 3:	0
Pct maq 4:	0
Pct pcm 4:	100
Pct aq 5:	0
Pct cm 5:	0
Pct na 5:	0
Pct maq 6:	0
Pct pcm 6:	100
Pct aq 7:	0
Pct cm 7:	0
Pct na 7:	0
Pct maq 8:	0
Pct pcm 8:	0
Pct aq 9:	0
Pct cm 9:	0
Pct na 9:	0
Pct maq 10:	0
Pct pcm 10:	0
Pct aq 11:	0
Pct cm 11:	0
Pct na 11:	0
Pct maq 12:	0
Pct pcm 12:	0
Pct aq 13:	0
Pct cm 13:	0
Pct na 13:	0
Loc match:	Υ

MI WELLS MI20315698

# 23 NNW 1/2 - 1 Mile Lower

Wellid: 81000005104 County: Washtenaw 02S 07E Town range: Owner name: WILSON, DONN 9444 JOY RD. Well addr: Well depth: 150

Well type: Household 0

Wssn:

Not Reported Well num: Const date: 1981-11-25 00:00:00.000

5 Case dia:

Import id: 81727702003 Township: Superior Section: 2

1586 **PVC Plastic** Case type:

Driller id:

Case depth: 150 Screen frm: 146 Screen to: 150 Swl: 20 Test depth: 20 Test hours: 2 Test rate: 12 Test methd: Unknown Grouted: Pmp cpcity: 42.3474849014 Latitude: -83.5770741224 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 850 Elev dem: Elev dif: Drift Well Elev miv: 854 Aq code: Not Reported Aq flag: Pct aq: 5 0 Pct aq d: 5 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 94 Pct cm d: 94 Pct cm r: 0 Pct pcm: 1 Pct pcm d: 1 0 0 Pct pcm r: Pct na: Pct na d: 0 Pct na r: 0 Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 58 12 A pct aq: A pct maq: 0 A pct pcm: 17 25 0 A pct cm: A pct na: A thickns2: 130 A pct ag2: 5 2 A pct maq2: 0 A pct pcm2: 93 0 A pct cm2: A pct na2: A hit swl: F F A hit top: A hit rock: A sc lith1: Gravel A sc Imod1: Not Reported A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 0 Pct aq 4: 0 Pct maq 4: Pct cm 4: 100 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 100 Pct pcm 6: Pct na 6: 0 Pct aq 7: 28 Pct maq 7: 0 Pct cm 7: 64 Pct pcm 7: 8 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0

0

0

0

0

0

0

Υ

**MI WELLS** 

MI20315708

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct na 13: Pct pcm 13: Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 130 Horiz Conduct: 16.15395 Vert Conduct: .00011 T2: 2100.0141

24 WSW 1/2 - 1 Mile Higher

 Wellid:
 8100005114
 Import id:
 81727702013

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 2

Owner name: MCCAULEY, MIKE

Well addr: 8989 WARREN RD. (PARCEL A)

456.92134

Well depth: 192
Well type: Household

D50plek:

Wssn: 0

Well num: Not Reported Driller id: 388
Const date: 1987-08-25 00:00:00.000 Case type: Steel-black

 Case dia:
 4

 Case depth:
 184

 Screen frm:
 184

 Screen to:
 192

 Swl:
 75

 Test depth:
 90

 Test hours:
 2

Test rate: 25 Test methd: Unknown Grouted: 1 Pmp opcity: 0

 Latitude:
 42.3351667377

 Longitude:
 -83.5809170918

 Methd coll:
 Interpolation-Map

Elevation: 875

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 872 Elev dif: 3

Drift Well Elev miv: 875 Aq code: Aq flag: Not Reported Pct aq: 11 Pct aq d: 11 Pct aq r: 0 Pct maq: 0 Pct maq d: 0 0 89 Pct maq r: Pct cm:

Pct cm d:	89
Pct pcm:	0
Pct pcm r:	0
Pct na d:	0
Pct flag:	Not Reported
D r type:	Not Reported
A thicknes:	14
A pct maq:	0
A pct cm:	0
A thickns2:	117
A pct maq2:	0
A pct cm2:	88
A hit swl:	F
A hit rock:	F
A sc Imod1:	Fine
A sc lpct1:	100
A sc Imod2:	Not Reported
A sc lpct2:	0
Pct maq 1:	0
Pct pcm 1:	0
Pct aq 2:	0
Pct cm 2:	100
Pct na 2:	0
Pct maq 3:	0
Pct pcm 3:	0
Pct aq 4:	0
Pct cm 4:	100
Pct na 4:	0
Pct maq 5:	0
Pct pcm 5:	0
Pct aq 6:	0
Pct cm 6:	100
Pct na 6:	0
Pct maq 7:	0
Pct pcm 7:	0
Pct aq 8:	0
Pct cm 8:	0
Pct na 8:	0
Pct maq 9:	0
Pct pcm 9:	0
Pct aq 10:	0
Pct cm 10:	0
Pct na 10:	0
Pct maq 11:	0
Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct maq 13:	0
Pct pcm 13: Within sec:	Y
	D D
Aq code 1: Hit swl:	F
Athk2:	г 117
Horiz Conduct:	5.98299
Vert Conduct:	.00011
T2:	700.0103
D50plek:	145.26057
	0.20001

Pct cm r: 0 Pct pcm d: 0 Pct na: 0 0 Pct na r: Rock top: -1 0 Spc cpcity: A pct aq: 100 A pct pcm: 0 0 A pct na: A pct aq2: 12 0 A pct pcm2: A pct na2: 0 F A hit top: Sand A sc lith1: A sc Imaq1: AQ A sc lith2: Not Reported A sc Imaq2: Not Reported Pct aq 1: 0 Pct cm 1: 100 Pct na 1: 0 Pct maq 2: 0 Pct pcm 2: 0 Pct aq 3: 40 Pct cm 3: 60 Pct na 3: 0 Pct maq 4: 0 0 Pct pcm 4: 0 Pct aq 5: Pct cm 5: 100 Pct na 5: 0 Pct maq 6: 0 0 Pct pcm 6: 0 Pct aq 7: Pct cm 7: 100 Pct na 7: 0 0 Pct maq 8: Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 0 Pct maq 10: 0 Pct pcm 10: Pct aq 11: 0 Pct cm 11: 0 Pct na 11: 0 Pct maq 12: 0 0 Pct pcm 12: 0 Pct aq 13: Pct cm 13: 0 Pct na 13: Υ Loc match:

Map ID	
Direction	1
Distance	

Elevation			Database	EDR ID Numbe
25 WSW 1/2 - 1 Mile Higher			MI WELLS	MI20315711
Wellid:	81000005117	Import id:	81727702016	
County:	Washtenaw	Township:	Superior	
Town range:	02S 07E	Section:	2	
Owner name:	GUREGIAN, L.	Coolon.	_	
Well addr:	9200 PLYMOUTH RD.			
Well depth:	235			
Well type:	Household			
Wssn:	0			
Well num:	Not Reported	Driller id:	64	
Const date:	1986-08-20 00:00:00.000	Case type:	Unknown	
Case dia:	0	0400 1,701	<b>5</b>	
Case depth:	0			
Screen frm:	0			
Screen to:	0			
Swl:	999.99			
Test depth:	0			
Test hours:	0			
Test rate:	0	Test methd:	Unknown	
Grouted:	1	Pmp cpcity:	0	
Latitude:	42.3372758415	i inp cpoity.	0	
Longitude:	-83.5821935891			
Methd coll:				
Elevation:	Interpolation-Map 887			
Elevation. Elev methd:		Depth flag:	Not Paparted	
	Topographoc Map Interpolation	Depth hag:	Not Reported	
Elev flag:	Not Reported			
Swl flag:	SWL > Well Depth	Flavorite	4	
Elev dem:	886 887	Elev dif:	1 Drift Well	
Elev miv:		Aq code:		
Aq flag:	Not Reported	Pct aq:	0	
Pct aq d:	0	Pct aq r:	0	
Pct maq:	0	Pct maq d:	0	
Pct maq r:	0	Pct cm:	100	
Pct cm d:	100	Pct cm r:	0	
Pct pcm:	0	Pct pcm d:	0	
Pct pcm r:	0	Pct na:	0	
Pct na d:	0	Pct na r:	0	
Pct flag:	Not Reported	Rock top:	-1	
D r type:	Not Reported	Spc cpcity:	0	
A thicknes:	0	A pct aq:	0	
A pct maq:	0	A pct pcm:	0	
A pct cm:	0	A pct na:	0	
A thickns2:	0	A pct aq2:	0	
A pct maq2:	0	A pct pcm2:	0	
A pct cm2:	0	A pct na2:	0	
A hit swl:	F	A hit top:	Т	
A hit rock:	F	A sc lith1:	Not Reported	
A sc Imod1:	Not Reported	A sc Imaq1:	Not Reported	
A sc lpct1:	0	A sc lith2:	Not Reported	
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported	
A sc lpct2:	0	Pct aq 1:	0	
Pct maq 1:	0	Pct cm 1:	95	
Pct pcm 1:	0	Pct na 1:	5	

0
100
0
0
0
0
100
0
0
0
0
100
0
0
0
0
100
0
0
0
0
0
0
0
0
0
0
0
0
0
Υ
Not Reported
Not Reported

Pct maq 2: Pct pcm 2: Pct aq 3: Pct cm 3: Pct na 3: Pct maq 4: Pct pcm 4: Pct aq 5: Pct cm 5: Pct na 5: Pct maq 6: Pct pcm 6: Pct aq 7: Pct cm 7: Pct na 7: Pct maq 8: Pct pcm 8: Pct aq 9: Pct cm 9: Pct na 9: Pct maq 10: Pct pcm 10: Pct aq 11: Pct cm 11: Pct na 11: Pct maq 12: Pct pcm 12: Pct aq 13: Pct cm 13: Pct na 13: Loc match:

Import id:

Township:

Section:

Driller id:

Case type:

0

0

0

0

0

100

### 26 WNW 1/2 - 1 Mile Lower

Athk2: Horiz Conduct:

T2:

D50plek:

Vert Conduct:

Wellid: 81000005102 County: Washtenaw Town range: 02S 07E Owner name: SOTH, R. Well addr: 9160 JOY RD. Well depth: 157

Well type: Household Wssn: 0

Well num: Not Reported 1972-06-05 00:00:00.000 Const date:

0

0

0

0

0

Case dia:

MI WELLS MI20315696

81727702001 Superior 2

64 Unknown

Case depth: 157 Screen frm: 153 Screen to: 157 Swl: 26 Test depth: 30 Test hours: 2 Test rate: 15 Test methd: Unknown Grouted: Pmp cpcity: 42.3420686606 Latitude: -83.5825788908 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 859 Elev dem: Elev dif: 2 Drift Well Elev miv: 861 Aq code: Not Reported Aq flag: Pct aq: 16 0 Pct aq d: 16 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 84 Pct cm d: 84 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 17 A pct aq: 100 A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 131 A pct ag2: 13 A pct maq2: 0 A pct pcm2: 0 87 0 A pct cm2: A pct na2: A hit swl: F F A hit top: A hit rock: A sc lith1: Sand A sc Imod1: Not Reported A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported Not Reported A sc Imod2: A sc Imaq2: A sc lpct2: 0 Pct aq 1: 40 Pct mag 1: 0 Pct cm 1: 60 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 0 Pct aq 4: 0 Pct maq 4: Pct cm 4: 100 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 Pct aq 6: 0 Pct maq 6: 0 Pct cm 6: 100 Pct pcm 6: Pct na 6: 0 40 Pct aq 7: Pct maq 7: 0 Pct cm 7: 60 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0

0

0

0

0

0

0

Υ

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 131 Horiz Conduct: 8.39703 Vert Conduct: .00011

1100.0114

249.45288

27
ENE MI WELLS MI20315672
1/2 - 1 Mile
Higher

 Wellid:
 8100005078
 Import id:
 81727701001

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 1

Owner name: WALCATT, LARRY
Well addr: 10390 NAPIER RD

Well addr: 10390 NAPIER RD. Well depth: 61

Well type: Household

T2:

D50plek:

Wssn: 0
Well num: Not Reported

 Well num:
 Not Reported
 Driller id:
 1290

 Const date:
 1983-08-01 00:00:00.000
 Case type:
 PVC Plastic

 Case dia:
 5

 Case depth:
 61

 Screen frm:
 56

 Screen to:
 61

 Swl:
 999.99

 Test depth:
 0

 Test hours:
 2

Test rate: 12 Test methd: Unknown Grouted: 1 Pmp opcity: 0

Latitude: 42.3440262881
Longitude: -83.5593007341
Methd coll: Interpolation-Map

Elevation: 870

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: SWL > Well Depth

Elev dem: 866 Elev dif: 4

Drift Well Elev miv: 870 Aq code: Aq flag: Not Reported Pct aq: 43 Pct aq d: 43 Pct aq r: 0 Pct maq: 0 Pct maq d: 0 0 57 Pct maq r: Pct cm:

<b>-</b>		<b>.</b>	_
Pct cm d:	57	Pct cm r:	0
Pct pcm:	0	Pct pcm d:	0
Pct pcm r:	0	Pct na:	0
Pct na d:	0	Pct na r:	0
Pct flag:	Not Reported	Rock top:	-1
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	0	A pct aq:	0
A pct maq:	0	A pct pcm:	0
A pct cm:	0	A pct na:	0
A thickns2:	0	A pct aq2:	0
A pct maq2:	0	A pct pcm2:	0
A pct cm2:	0	A pct na2:	0
A hit swl:	F	A hit top:	T
A hit rock:	F	A sc lith1:	Sand
A sc Imod1:	Wet/Moist	A sc Imaq1:	AQ
A sc lpct1:	100	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	25
Pct maq 1:	0	Pct cm 1:	75
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	100	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	100
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct mag 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct mag 6:	0
Pct cm 6:	0	Pct pcm 6:	0
	0	_ '	0
Pct na 6:		Pct aq 7:	
Pct maq 7:	0	Pct cm 7:	0
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Υ	Loc match:	Υ
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		
•			

Мар	ID
Dire	ction
Dista	ance

Database EDR ID Number Elevation 28 NW **MI WELLS** MI20320635 1/2 - 1 Mile Lower Wellid: 81000010774 Import id: Not Reported Washtenaw Township: Superior County: Town range: 02S 07E Section: 2 JEFF STEWARD Owner name: Well addr: 9052 JOY ROAD Well depth: 180 Well type: Household Wssn: 0 Well num: Not Reported Driller id: 2125 2000-02-03 00:00:00.000 Const date: Case type: **PVC Plastic** 5 Case dia: Case depth: 175 Screen frm: 175 Screen to: 180 Swl: 18 Test depth: 31 Test hours: 2 Test rate: 50 Test methd: Air Grouted: Pmp cpcity: 20 42.34652364 Latitude: Longitude: -83.58159144 Methd coll: Interpolation-Map Elevation: Elev methd: DEM30M Depth flag: Not Reported Elev flag: Elevation < DEMmin or Elevation > DEMmax Not Reported Swl flag: Elev dem: 850 850 Elev dif: Elev miv: 850 Aq code: Drift Well Aq flag: Not Reported Pct aq: 22 0 Pct aq d: 22 Pct aq r: Pct maq d: 0 Pct maq: 0 Pct mag r: 0 Pct cm: 78 Pct cm r: Pct cm d: 78 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: 0 Pct na: 0 0 Pct na d: Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: 5 A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: A thickns2: 162 A pct aq2: 13 A pct maq2: 0 A pct pcm2: 0 87 0 A pct cm2: A pct na2: F F A hit swl: A hit top: F Sand & Gravel A hit rock: A sc lith1: A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: A sc lith2: Not Reported Not Reported A sc Imod2: Not Reported A sc Imaq2: 100 A sc lpct2: 0 Pct aq 1: Pct mag 1: 0 Pct cm 1: 0 Pct pcm 1: 0 Pct na 1: 0

Pct aq 2: 70 Pct cm 2: 30 Pct na 2: 0 0 Pct maq 3: 0 Pct pcm 3: Pct aq 4: 0 Pct cm 4: 100 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 100 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 0 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: 162 Athk2: Horiz Conduct: 12.96305 Vert Conduct: .00011 2100.0141 T2: D50plek: 569.39429

Pct maq 2: 0 Pct pcm 2: 0 0 Pct aq 3: Pct cm 3: 100 Pct na 3: 0 0 Pct maq 4: Pct pcm 4: 0 Pct aq 5: 0 Pct cm 5: 100 Pct na 5: 0 Pct maq 6: 0 Pct pcm 6: 0 Pct aq 7: 0 Pct cm 7: 100 Pct na 7: 0 Pct maq 8: 0 Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 Pct maq 10: 0 Pct pcm 10: 0 0 Pct aq 11: Pct cm 11: 0 0 Pct na 11: Pct mag 12: 0 0 Pct pcm 12: Pct aq 13: 0 Pct cm 13: 0 Pct na 13: 0 Loc match: Υ

29 WNW 1/2 - 1 Mile Lower

Wellid: 8100005103
County: Washtenaw
Town range: 02S 07E
Owner name: PERRY, ROBERT
Well addr: 9170 JOY RD.

Well depth: 162 Well type: Household

Wssn: 0

Well num: Not Reported Driller id:
Const date: 1987-08-15 00:00:00.000 Case type:

Case dia: 4

Import id: 81727702002
Township: Superior
Section: 2

1244 Unknown

MI WELLS

MI20315697

Case depth: 157 Screen frm: 157 Screen to: 162 Swl: 17 Test depth: 55 Test hours: 3 Test rate: 38 Test methd: Unknown Grouted: 0 Pmp cpcity: 42.3452321055 Latitude: -83.5828719307 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 850 Elev dem: Elev dif: Drift Well Elev miv: 847 Aq code: Not Reported Aq flag: Pct aq: 19 0 Pct aq d: 19 Pct aq r: Pct mag: 20 Pct mag d: 20 Pct mag r: 0 Pct cm: 32 Pct cm d: 32 Pct cm r: 0 Pct pcm: 28 Pct pcm d: 28 0 Pct pcm r: Pct na: 1 Pct na d: Pct na r: 0 1 Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 63 A pct aq: 49 A pct maq: 51 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 145 A pct ag2: 21 A pct maq2: 22 A pct pcm2: 21 36 0 A pct cm2: A pct na2: A hit swl: F A hit top: F A hit rock: F A sc lith1: Sand A sc Imod1: Fine A sc Imaq1: AQ 100 Not Reported A sc lpct1: A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 0 Pct pcm 1: 95 Pct na 1: 5 0 Pct aq 2: 0 Pct maq 2: 30 70 Pct cm 2: Pct pcm 2: Pct na 2: 0 Pct aq 3: 0 Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 35 Pct pcm 4: 65 Pct na 4: 0 Pct aq 5: 0 Pct maq 5: 5 Pct cm 5: 95 0 0 Pct pcm 5: Pct na 5: 0 Pct aq 6: Pct maq 6: 100 Pct cm 6: 0 Pct pcm 6: 0 Pct na 6: 0 Pct aq 7: 92 Pct maq 7: 8 Pct cm 7: 0 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

Pct aq 10: 0 Pct maq 10: 0 Pct cm 10: 0 Pct pcm 10: 0 0 Pct na 10: 0 Pct aq 11: 0 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: 0 Pct aq 12: 0 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 0 Pct na 12: 0 Pct aq 13: 0 0 Pct maq 13: 0 Pct cm 13: 0 Pct na 13: Pct pcm 13: 0 Υ Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 145 Horiz Conduct: 11.96638

30 ESE MI WELLS MI20322187 1/2 - 1 Mile Lower

Wellid:81000013157Import id:Not ReportedCounty:WashtenawTownship:SuperiorTown range:02S 07ESection:12

Owner name: CHRISTIAN TENNANT CUSTOM

.00027

1735.1252

425.25175

Well addr: 10440 WARREN

Well depth: 120 Well type: Household

Wssn: 0

Vert Conduct:

T2:

D50plek:

 Well num:
 Not Reported
 Driller id:
 2014

 Const date:
 2002-11-22 00:00:00.000
 Case type:
 PVC Plastic

 Case dia:
 5

 Case depth:
 105

 Screen frm:
 105

 Screen to:
 120

 Swl:
 40

 Test depth:
 45

 Test hours:
 2

Test rate: 12 Test methd: Unknown Grouted: 1 Pmp opcity: 50

Latitude: 42.33448345 Longitude: -83.55796233 Methd coll: Interpolation-Map

Elevation: 0

Elev methd: DEM30M Depth flag: Not Reported

Elev flag: Elevation < DEMmin or Elevation > DEMmax

Swl flag: Not Reported

Elev dem: 813 Elev dif: 813 Drift Well Elev miv: 813 Aq code: Aq flag: Not Reported Pct aq: 8 Pct aq d: 8 Pct aq r: 0 5 Pct maq: 5 Pct maq d: 0 88 Pct maq r: Pct cm:

Pct cm d:	88
Pct pcm:	0
Pct pcm r:	0
Pct na d:	0 Nat Danastasi
Pct flag:	Not Reported
D r type:	Not Reported
A thicknes:	15
A pct maq:	40
A pct cm:	20
A thickns2:	80
A pct maq2:	8 85
A pct cm2:	60 F
A hit swl: A hit rock:	F
A sc Imod1:	W/Clay 40
A sc lpct1: A sc lmod2:	Not Reported
A sc Initiaz.  A sc Ipct2:	40
	0
Pct maq 1:	0
Pct pcm 1: Pct aq 2:	0
Pct cm 2:	100
Pct na 2:	0
Pct mag 3:	0
Pct pcm 3:	0
Pct aq 4:	0
Pct cm 4:	100
Pct na 4:	0
Pct mag 5:	0
Pct pcm 5:	0
Pct aq 6:	0
Pct cm 6:	0
Pct na 6:	0
Pct maq 7:	0
Pct pcm 7:	0
Pct ag 8:	0
Pct cm 8:	0
Pct na 8:	0
Pct mag 9:	0
Pct pcm 9:	0
Pct aq 10:	0
Pct cm 10:	0
Pct na 10:	0
Pct mag 11:	0
Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct mag 13:	0
Pct pcm 13:	0
Within sec:	Υ
Aq code 1:	D
Hit swl:	F
Athk2:	80
Horiz Conduct:	4.12509
Vert Conduct:	.00012
T2:	330.0068
D50plek:	48.81902

Pct cm r: 0 Pct pcm d: 0 Pct na: 0 0 Pct na r: Rock top: -1 0 Spc cpcity: A pct aq: 40 A pct pcm: 0 0 A pct na: 8 A pct aq2: 0 A pct pcm2: A pct na2: 0 F A hit top: Sand A sc lith1: MAQ A sc Imaq1: A sc lith2: Sand A sc Imaq2: AQ Pct aq 1: 15 Pct cm 1: 85 Pct na 1: 0 Pct maq 2: 0 0 Pct pcm 2: 0 Pct aq 3: Pct cm 3: 100 Pct na 3: 0 0 Pct maq 4: 0 Pct pcm 4: 0 Pct aq 5: Pct cm 5: 100 Pct na 5: 0 Pct maq 6: 0 0 Pct pcm 6: 0 Pct aq 7: Pct cm 7: 0 Pct na 7: 0 0 Pct maq 8: Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 0 Pct maq 10: 0 Pct pcm 10: Pct aq 11: 0 Pct cm 11: 0 Pct na 11: 0 Pct maq 12: 0 0 Pct pcm 12: 0 Pct aq 13: Pct cm 13: 0 Pct na 13: Υ Loc match:

Map ID	
Direction	1
Distance	

Direction				
Distance Elevation			Database	EDR ID Number
			Database	EDK ID Nullibel
31 South			MI WELLS	MI20315932
1/2 - 1 Mile				20010002
Lower				
Wellid:	81000005338	Import id:	81727711002	
County:	Washtenaw	Township:	Superior	
Town range:	02S 07E	Section:	11	
Owner name:	GEBSKI, A.	Occitori.		
Well addr:	3779 GOTFREDSON RD.			
Well depth:	98			
Well type:	Household			
Wssn:	0			
Well num:	Not Reported	Driller id:	64	
Const date:	1976-10-02 00:00:00.000	Case type:	Unknown	
Case dia:	4	oudd typo.	Cina io Wil	
Case depth:	98			
Screen frm:	94			
Screen to:	98			
Swl:	44			
Test depth:	60			
Test hours:	3			
Test rate:	15	Test methd:	Unknown	
Grouted:	0	Pmp cpcity:	0	
Latitude:	42.3287032898		-	
Longitude:	-83.5700486163			
Methd coll:	Interpolation-Map			
Elevation:	833			
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported	
Elev flag:	Not Reported	-13		
Swl flag:	Not Reported			
Elev dem:	830	Elev dif:	3	
Elev miv:	833	Aq code:	Drift Well	
Aq flag:	Not Reported	Pct aq:	5	
Pct aq d:	5	Pct aq r:	0	
Pct maq:	0	Pct maq d:	0	
Pct maq r:	0	Pct cm:	95	
Pct cm d:	95	Pct cm r:	0	
Pct pcm:	0	Pct pcm d:	0	
Pct pcm r:	0	Pct na:	0	
Pct na d:	0	Pct na r:	0	
Pct flag:	Not Reported	Rock top:	-1	
D r type:	Not Reported	Spc cpcity:	0	
A thicknes:	5	A pct aq:	100	
A pct maq:	0	A pct pcm:	0	
A pct cm:	0	A pct na:	0	
A thickns2:	54	A pct aq2:	9	
A pct maq2:	0	A pct pcm2:	0	
A pct cm2:	91	A pct na2:	0	
A hit swl:	F	A hit top:	F	
A hit rock:	F	A sc lith1:	Sand	
A sc Imod1:	Fine	A sc Imaq1:	AQ	
A sc lpct1:	100	A sc lith2:	Not Reported	
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported	
A sc lpct2:	0	Pct aq 1:	0	
Pct maq 1:	0	Pct cm 1:	100	
Pct pcm 1:	0	Pct na 1:	0	

Pct aq 2: Pct cm 2: Pct na 2: Pct maq 3: Pct pcm 3: Pct aq 4: Pct cm 4: Pct na 4: Pct maq 5: Pct pcm 5: Pct aq 6: Pct cm 6: Pct na 6: Pct maq 7: Pct pcm 7:	0 100 0 0 0 0 100 0 0 0 0 0
Pct maq 11: Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct maq 13: Pct pcm 13:	0
Within sec:	Y
Aq code 1:	D
Hit swl:	F
Athk2:	54
Horiz Conduct:	2.31491
Vert Conduct:	.00011
T2:	125.0049
	13.20881
D50plek:	13.20001

Pct maq 2: Pct pcm 2:	0
Pct aq 3:	0
Pct cm 3:	100
Pct na 3:	0
Pct maq 4:	0
Pct pcm 4:	0
Pct aq 5:	0
Pct cm 5:	0
Pct na 5:	0
Pct maq 6:	0
Pct pcm 6:	0
Pct aq 7:	0
Pct cm 7:	0
Pct na 7:	0
Pct maq 8:	0
Pct pcm 8:	0
Pct aq 9:	0
Pct cm 9:	0
Pct na 9:	0
Pct maq 10:	0
Pct pcm 10:	0
Pct aq 11:	0
Pct cm 11:	0
Pct na 11:	0
Pct maq 12:	0
Pct pcm 12:	0
Pct aq 13:	0
Pct cm 13:	0
Pct na 13:	0
Loc match:	Y

G32 WSW 1/2 - 1 Mile Higher

 Wellid:
 81000005111
 Import id:
 81727702010

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 2

Town range: 02S 07E
Owner name: ADAMS, DAVID
Well addr: 8867 WARREN RD.

Well depth: 67
Well type: Public
Wssn: 0

Well num: Not Reported Driller id: 524

Case dia: 5

MI WELLS

MI20315705

Case depth: 67 Screen frm: 59 Screen to: 67 Swl: 42 Test depth: 46 Test hours: 2 Test rate: 10 Test methd: Unknown Grouted: Pmp cpcity: 42.3347620459 Latitude: -83.5840378994 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported Elev dem: 872 Elev dif: 2 Drift Well Elev miv: 870 Aq code: Not Reported 28 Aq flag: Pct aq: 0 Pct aq d: 28 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 66 Pct cm d: 66 Pct cm r: 0 6 Pct pcm: 6 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 19 A pct aq: 100 A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 25 A pct ag2: 76 A pct maq2: 0 A pct pcm2: 0 0 24 A pct cm2: A pct na2: A hit swl: F F A hit top: A hit rock: A sc lith1: Gravel A sc Imod1: Not Reported A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 80 20 Pct cm 2: Pct pcm 2: Pct na 2: 0 Pct aq 3: 60 Pct maq 3: 0 Pct cm 3: 40 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 0 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 0 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 0 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 0 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0 0

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0

Υ

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 25 228.00002 Horiz Conduct:

**MI WELLS** MI20322337 1/2 - 1 Mile Lower

Wellid: 81000013375 Import id: Not Reported County: Washtenaw Township: Superior Town range: 02S 07E Section: 11

Owner name: ADAM ALLEN 8900 WARREN ROAD Well addr:

.00042

5700.0006

226.88444

Well depth: Well type: Irrigation 0 Wssn:

Vert Conduct:

T2:

D50plek:

Well num: Driller id: 1924 Not Reported

Const date: 2003-06-04 00:00:00.000 Case type: **PVC Plastic** 

Case dia: Case depth: 33 Screen frm: 33 Screen to: 53 Swl: 20 Test depth: 53 2 Test hours:

Test rate: 18 Test methd: Air 18 Grouted: 1 Pmp cpcity:

Latitude: 42.33411724 Longitude: -83.5844141

Methd coll: Address Matching-House Number

Elevation:

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported

Not Reported Swl flag:

Elev dem: 863 Elev dif: 17 Drift Well Elev miv: 846 Aq code: Aq flag: Not Reported Pct aq: 42 Pct aq d: 42 Pct aq r: 0 Pct maq: 0 Pct maq d: 0 0 58 Pct maq r: Pct cm:

Sand & Gravel

Pct cm d:	58	Pct cm r:	0
Pct pcm:	0	Pct pcm d:	0
Pct pcm r:	0	Pct na:	0
Pct na d:	0	Pct na r:	0
Pct flag:	Not Reported	Rock top:	-1
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	22	A pct aq:	10
A pct maq:	0	A pct pcm:	0
A pct cm:	0	A pct na:	0
A thickns2:	33		67
A pct mag2:	0	A pct aq2:	
	33	A pct pcm2:	0
A pct cm2:		A pct na2:	0 F
A hit swl:	F F	A hit top:	
A hit rock:	•	A sc lith1:	Sa
A sc Imod1:	Fine	A sc Imaq1:	AC
A sc lpct1:	90	A sc lith2:	Sa
A sc Imod2:	Not Reported	A sc Imaq2:	AC
A sc lpct2:	10	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	10
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	45	Pct maq 2:	0
Pct cm 2:	55	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct mag 6:	0
Pct cm 6:	0	Pct pcm 6:	Ō
Pct na 6:	0	Pct aq 7:	0
Pct mag 7:	0	Pct cm 7:	0
Pct pcm 7:	0	Pct na 7:	Ö
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct mag 11:	0	Pct cm 11:	0
•			
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Y	Loc match:	Υ
Aq code 1:	D		
Hit swl:	F		
Athk2:	33		
Horiz Conduct:	39.39397		
Vert Conduct:	.0003		
T2:	1300.0011		
D50plek:	73.61174		

Map ID Direction Distance Elevation Database EDR ID Number H34 NW **MI WELLS** MI20313472 1/2 - 1 Mile Lower Wellid: 81000002775 Import id: 81717735004 County: Washtenaw Township: Salem Town range: 01S 07E Section: 35 LA BEAU, TOM Owner name: Well addr: 9275 JOY RD. Well depth: 55 Well type: Household 0 Wssn: Well num: Driller id: 1199 Not Reported Const date: Not Reported Case type: Unknown Case dia: 4 Case depth: 48 Screen frm: 48 Screen to: 58 Swl: 14 Test depth: 20 2 Test hours: Test rate: 30 Test methd: Unknown Grouted: Pmp cpcity: Latitude: 42.3488106177 Longitude: -83.5812724626 Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported

Not Reported Swl flag: Elev dem: 846 Elev dif: Elev miv: 845 Aq code: Drift Well Aq flag: Not Reported Pct aq: 78 0 Pct aq d: 78 Pct aq r: Pct maq d: 0 0 Pct maq: Pct mag r: 0 Pct cm: 0 Pct cm r: Pct cm d: 0 0 Pct pcm: 22 Pct pcm d: 22 Pct pcm r: 0 Pct na: 0 0 Pct na d: 0 Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: 24 A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: 71 A thickns2: 41 A pct aq2: A pct maq2: 0 A pct pcm2: 29 0 0 A pct cm2: A pct na2: F F A hit swl: A hit top: F A hit rock: A sc lith1: Gravel A sc Imod1: Wet/Moist A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 95 Pct mag 1: 0 Pct cm 1: 0 Pct pcm 1: 5 Pct na 1: 0

D-1 0	45
Pct aq 2: Pct cm 2:	45 0
	-
Pct na 2:	0
Pct maq 3:	0
Pct pcm 3:	0
Pct aq 4:	0
Pct cm 4:	0
Pct na 4:	0
Pct maq 5:	0
Pct pcm 5:	0
Pct aq 6:	0
Pct cm 6:	0
Pct na 6:	0
Pct maq 7:	0
Pct pcm 7:	0
Pct aq 8:	0
Pct cm 8:	0
Pct na 8:	0
Pct maq 9:	0
Pct pcm 9:	0
Pct aq 10:	0
Pct cm 10:	0
Pct na 10:	0
Pct maq 11:	0
Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct mag 13:	0
Pct pcm 13:	0
Within sec:	Υ
Aq code 1:	Not Reported
Hit swl:	Not Reported
A.I.I.O.	

Pct maq 2:
Pct pcm 2:
Pct aq 3:
Pct cm 3:
Pct na 3:
Pct maq 4:
Pct pcm 4:
Pct aq 5:
Pct cm 5:
Pct na 5:
Pct maq 6:
Pct pcm 6:
Pct aq 7:
Pct cm 7:
Pct na 7:
Pct maq 8:
Pct pcm 8:
Pct aq 9:
Pct cm 9:
Pct na 9:
Pct maq 10:
Pct pcm 10:
Pct aq 11:
Pct cm 11:
Pct na 11:
Pct maq 12:
Pct pcm 12:
Pct aq 13:
Pct cm 13:
Pct na 13:
Loc match:

Import id:

Township:

Section:

Driller id:

Case type:

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G35 WSW 1/2 - 1 Mile Higher

Athk2:

T2:

D50plek:

Horiz Conduct:

Vert Conduct:

Wellid: 8100005110
County: Washtenaw
Town range: 02S 07E
Owner name: ADAMS, DAVID
Well addr: 8783 WARREN RD.

0

0

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0

0

Well depth: 67

Well type: Household

Wssn: 0

Well num: Not Reported
Const date: 1983-05-11 00:00:00.000

Case dia: 5

MI WELLS MI20315704

81727702009 Superior

2

1586 PVC Plastic

Case depth: 67 Screen frm: 59 Screen to: 67 Swl: 42 45 Test depth: Test hours: 2 Test rate: 9 Test methd: Unknown Grouted: Pmp cpcity: 42.3347027228 Latitude: -83.5850408862 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 866 Elev dem: Elev dif: Drift Well Elev miv: 867 Aq code: Not Reported 28 Aq flag: Pct aq: 0 Pct aq d: 28 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 66 Pct cm d: 66 Pct cm r: 0 6 Pct pcm: 6 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 19 A pct aq: 100 A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 25 A pct ag2: 76 A pct maq2: 0 A pct pcm2: 0 0 24 A pct cm2: A pct na2: A hit swl: F F A hit top: A hit rock: A sc lith1: Gravel A sc Imod1: Not Reported A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 80 20 Pct cm 2: Pct pcm 2: Pct na 2: 0 Pct aq 3: 60 Pct maq 3: 0 Pct cm 3: 40 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 0 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 0 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 0 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 0 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

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**MI WELLS** 

MI20315703

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: Υ Within sec: Loc match: Aq code 1: D Hit swl: F Athk2: 25 228.00002 Horiz Conduct:

36 WSW 1/2 - 1 Mile Higher

 Wellid:
 8100005109
 Import id:
 81727702008

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 2

Owner name: MERRY, DONALD Well addr: 8785 WARREN RD.

.00042

5700.0006

226.88444

Well addr: 8785 WARREN RI Well depth: 57

Well type: Household Wssn: 0

Vert Conduct:

T2:

D50plek:

Well num: Not Reported Driller id: 388
Const date: 1978-07-13 00:00:00.000 Case type: Unknown

 Case dia:
 4

 Case depth:
 53

 Screen frm:
 53

 Screen to:
 57

 Swl:
 42

 Test depth:
 47

 Test hours:
 2

Test rate: 10 Test methd: Unknown Grouted: 1 Pmp opcity: 0

Latitude: 42.3357578721
Longitude: -83.5856939756
Methd coll: Interpolation-Map

Elevation: 875

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 879 Elev dif: 4

Drift Well Elev miv: 875 Aq code: Aq flag: Not Reported Pct aq: 23 Pct aq d: 23 Pct aq r: 0 0 Pct maq: 0 Pct maq d: 0 70 Pct maq r: Pct cm:

Pct cm d:	70	Pct cm r:	0
Pct pcm:	7	Pct pcm d:	7
Pct pcm r:	0	Pct na:	0
Pct na d:	0	Pct na r:	0
Pct flag:	Not Reported	Rock top:	-1
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	15	A pct aq:	87
A pct maq:	0	A pct pcm:	13
A pct cm:	0	A pct na:	0
A thickns2:	15	A pct aq2:	87
A pct maq2:	0	A pct pcm2:	13
A pct cm2:	0	A pct na2:	0
A hit swl:	Ť	A hit top:	F
A hit rock:	F	A sc lith1:	Sand & Gravel
A sc Imod1:	Fine	A sc Imaq1:	AQ
A sc lpct1:	100	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imag2:	Not Reported
	·	·	
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	100
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	100	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	0	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	0
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct mag 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
	0		0
Pct aq 12: Pct cm 12:	0	Pct maq 12:	0
		Pct pcm 12:	
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Y	Loc match:	Υ
Aq code 1:	D		
Hit swl:	T		
Athk2:	15		
Horiz Conduct:	43.33467		
Vert Conduct:	.0749		
T2:	650.02		
D50plek:	17.36311		

Map	ID
Direc	tion
Dista	nce

Database EDR ID Number Elevation 37 NW **MI WELLS** MI20321239 1/2 - 1 Mile Lower Wellid: 81000011624 Import id: Not Reported Washtenaw Township: Superior County: Town range: 02S 07E Section: 2 KEN HUBBARD Owner name: Well addr: 8910 JOY RD. Well depth: 62 Well type: Household 0 Wssn: Well num: Driller id: 1861 Not Reported 2001-07-31 00:00:00.000 Const date: Case type: **PVC Plastic** Case dia: 5 Case depth: 58 Screen frm: 58 Screen to: 62 Swl: 12 Test depth: 62 Test hours: 1 Test rate: 50 Test methd: Air Grouted: Pmp cpcity: 42.34806767 Latitude: Longitude: -83.58270935 Methd coll: Interpolation-Map Elevation: Elev methd: DEM30M Depth flag: Not Reported Elev flag: Elevation < DEMmin or Elevation > DEMmax Not Reported Swl flag: Elev dem: 840 840 Elev dif: Elev miv: 840 Aq code: Drift Well Aq flag: Not Reported Pct aq: 98 0 Pct aq d: 98 Pct aq r: 0 Pct maq d: 0 Pct maq: Pct mag r: 0 Pct cm: 0 Pct cm r: Pct cm d: 0 0 Pct pcm: 0 Pct pcm d: 0 2 0 Pct pcm r: Pct na: 0 2 Pct na d: Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: 50 A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: 50 A thickns2: A pct aq2: 100 A pct maq2: 0 A pct pcm2: 0 0 0 A pct cm2: A pct na2: Т F A hit swl: A hit top: Gravel & Sand A hit rock: F A sc lith1: A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 95 Pct mag 1: 0 Pct cm 1: 0 Pct pcm 1: 0 Pct na 1: 5

Pct maq 2: 0 Pct pcm 2: 0 Pct aq 3: 100 Pct cm 3: 0 Pct na 3: 0 Pct maq 4: 0 Pct pcm 4: 0 Pct aq 5: 0 Pct cm 5: 0 Pct na 5: 0 Pct maq 6: 0 Pct pcm 6: 0 Pct aq 7: 0 0 Pct cm 7: Pct na 7: 0 Pct maq 8: 0 0 Pct pcm 8: Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 Pct maq 10: 0 0 Pct pcm 10: Pct aq 11: 0 0 Pct cm 11: Pct na 11: 0 Pct maq 12: 0 Pct pcm 12: 0 0 Pct aq 13: 0 Pct cm 13: Pct na 13: 0 Loc match: Υ

H38 NW MI WELLS MI20313471 1/2 - 1 Mile

Import id:

Township:

Section:

Wellid: 8100002774
County: Washtenaw
Town range: 01S 07E

Owner name: COWMEADOW, ARNOLD

Well addr: 9225 JOY RD.

Well depth: 64

Lower

Well type: Household

Wssn: 0

Well num: Not Reported Driller id:

Case dia: 4

81717735003 Salem

35

64

Case depth: 64 Screen frm: 61 Screen to: 64 Swl: 11 Test depth: 15 Test hours: 2 Test rate: 20 Test methd: Unknown Grouted: Pmp cpcity: 42.3486125813 Latitude: -83.5820859095 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 843 Elev dem: Elev dif: Drift Well Elev miv: 842 Aq code: Not Reported Aq flag: Pct aq: 34 0 Pct aq d: 34 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 66 Pct cm d: 66 Pct cm r: 0 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 100 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 53 A pct ag2: 21 0 A pct maq2: 0 A pct pcm2: 79 0 A pct cm2: A pct na2: A hit swl: F A hit top: F A hit rock: F A sc lith1: Sand A sc Imod1: Coarse A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported Not Reported A sc Imod2: A sc Imaq2: A sc lpct2: 0 Pct aq 1: 90 Pct mag 1: 0 Pct cm 1: 10 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: Pct cm 2: 0 100 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 0 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 0 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 0 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 0 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

Pct aq 10: 0 Pct maq 10: 0 Pct cm 10: 0 Pct pcm 10: 0 0 Pct na 10: 0 Pct aq 11: 0 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: 0 Pct aq 12: 0 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 0 Pct na 12: 0 Pct aq 13: 0 0 Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: 0 Υ Υ Within sec: Loc match: Aq code 1: D F Hit swl: Athk2: 53 Horiz Conduct: 28.30197

39
NNE MI WELLS MI20313476
1/2 - 1 Mile
Higher

 Wellid:
 8100002779
 Import id:
 81717736004

 County:
 Washtenaw
 Township:
 Salem

 Town range:
 01S 07E
 Section:
 36

Owner name: GROFF, GERALD
Well addr: 5168 GOTFREDSON RD.

.00013

1500.0042

135.39505

Well depth: 160
Well type: Household

Well type: Household Wssn: 0

Vert Conduct:

T2:

D50plek:

Well num: Not Reported Driller id: 1133 Const date: Not Reported Case type: Steel-black

 Case dia:
 4

 Case depth:
 160

 Screen frm:
 156

 Screen to:
 160

 Swl:
 36

 Test depth:
 105

 Test hours:
 2

Test rate: 20 Test methd: Unknown Grouted: 1 Pmp opcity: 0

 Latitude:
 42.3518865965

 Longitude:
 -83.5669481272

 Methd coll:
 Interpolation-Map

Elevation: 871

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 866 Elev dif: 5

Drift Well Elev miv: 871 Aq code: Aq flag: Not Reported Pct aq: 68 Pct aq d: 68 Pct aq r: 0 0 Pct maq: 0 Pct maq d: 0 33 Pct maq r: Pct cm:

Not Reported Not Reported

Y

Pct cm d:	33	Pct cm r:
Pct pcm:	0	Pct pcm d:
Pct pcm r:	0	Pct na:
Pct na d:	0	Pct na r:
Pct flag:	Not Reported	Rock top:
D r type:	Not Reported	Spc cpcity:
A thicknes:	104	A pct aq:
A pct maq:	0	A pct pcm:
A pct cm:	0	A pct na:
A thickns2:	124	A pct aq2:
A pct mag2:	0	A pct pcm2:
A pct cm2:	13	A pct na2:
A hit swl:	F	A hit top:
A hit rock:	F	A sc lith1:
A sc Imod1:	Wet/Moist	A sc Imag1:
A sc lpct1:	100	A sc lith2:
A sc Imod2:	Not Reported	A sc Imag2:
A sc Induz. A sc Ipct2:	0	Pct aq 1:
Pct mag 1:	0	Pct cm 1:
Pct pcm 1:	0	Pct na 1:
_ '	0	
Pct aq 2:		Pct maq 2:
Pct cm 2:	100	Pct pcm 2:
Pct na 2:	0	Pct aq 3:
Pct maq 3:	0	Pct cm 3:
Pct pcm 3:	0	Pct na 3:
Pct aq 4:	100	Pct maq 4:
Pct cm 4:	0	Pct pcm 4:
Pct na 4:	0	Pct aq 5:
Pct maq 5:	0	Pct cm 5:
Pct pcm 5:	0	Pct na 5:
Pct aq 6:	100	Pct maq 6:
Pct cm 6:	0	Pct pcm 6:
Pct na 6:	0	Pct aq 7:
Pct maq 7:	0	Pct cm 7:
Pct pcm 7:	0	Pct na 7:
Pct aq 8:	0	Pct maq 8:
Pct cm 8:	0	Pct pcm 8:
Pct na 8:	0	Pct aq 9:
Pct maq 9:	0	Pct cm 9:
Pct pcm 9:	0	Pct na 9:
Pct aq 10:	0	Pct maq 10:
Pct cm 10:	0	Pct pcm 10:
Pct na 10:	0	Pct aq 11:
Pct maq 11:	0	Pct cm 11:
Pct pcm 11:	0	Pct na 11:
Pct aq 12:	0	Pct maq 12:
Pct cm 12:	0	Pct pcm 12:
Pct na 12:	0	Pct aq 13:
Pct mag 13:	0	Pct cm 13:
Pct pcm 13:	0	Pct na 13:
Within sec:	Y	Loc match:
Aq code 1:	D	
Hit swl:	F	
Athk2:	124	
Horiz Conduct:	87.09679	
Vert Conduct:	.00077	
T2:	10800.0016	
D50plek:	2067.7748	
Doopiek.	2007.7740	

Map ID	
Direction	1
Distance	

Distance				
Elevation			Database	EDR ID Number
40 West 1/2 - 1 Mile Lower			MI WELLS	MI20315736
Wellid: County: Town range: Owner name: Well addr: Well depth: Well type: Wssn:	81000005142 Washtenaw 02S 07E BONNVILLE, RICHARD 8845 PLYMOUTH RD. 73 Public 0	Import id: Township: Section:	81727703021 Superior 3	
Well num: Const date: Case dia: Case depth: Screen frm: Screen to: Swl: Test depth: Test hours:	Not Reported 1984-09-05 00:00:00.000 5 73 65 73 25 25	Driller id: Case type:	524 PVC Plastic	
Test rate: Grouted: Latitude: Longitude: Methd coll: Elevation:	18 1 42.340703174 -83.5873352997 Interpolation-Map 852	Test methd: Pmp cpcity:	Unknown 0	
Elev methd: Elev flag: Swl flag:	Topographoc Map Interpolation Not Reported Not Reported	Depth flag:	Not Reported	
Elev dem:	850	Elev dif:	2	
Elev miv:	852	Aq code:	Drift Well	
Aq flag:	Not Reported	Pct aq:	32	
Pct aq d:	32	Pct aq r:	0	
Pct maq:	0	Pct maq d:	0	
Pct maq r:	0	Pct cm:	51	
Pct cm d:	51	Pct cm r:	0	
Pct pcm:	18	Pct pcm d:	18	
Pct pcm r:	0	Pct na:	0	
Pct na d:	0	Pct na r:	0	
Pct flag:	Not Reported	Rock top:	-1	
D r type:	Not Reported	Spc cpcity:	0	
A thicknes:	23	A pct aq:	100	
A pct maq:	0	A pct pcm:	0	
A pct cm:	0	A pct na:	0	
A thickns2:	48	A pct aq2:	48	
A pct maq2:	0	A pct pcm2:	27	
A pct cm2:	25	A pct na2:	0	
A hit swl:	F	A hit top:	F	
A hit rock:	F	A sc lith1:	Gravel	
A sc Imod1:	Fine	A sc Imaq1:	AQ Not Deported	
A sc lpct1:	100 Not Reported	A so Imaga:	Not Reported	
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported	
A sc lpct2:	0	Pct aq 1:	0	
Pct maq 1:	0	Pct cm 1:	100	
Pct pcm 1:	0	Pct na 1:	0	

Pct aq 2:	0
Pct cm 2:	85
Pct na 2:	0
Pct maq 3:	0
Pct pcm 3:	50
Pct aq 4:	0
Pct cm 4:	0
Pct na 4:	0
Pct maq 5:	0
Pct pcm 5:	0
Pct aq 6:	0
Pct cm 6:	0
Pct na 6:	0
Pct maq 7:	0
Pct pcm 7:	0
Pct aq 8:	0
Pct cm 8:	0
Pct na 8:	0
Pct maq 9:	0
Pct pcm 9:	0
Pct aq 10:	0
Pct cm 10:	0
Pct na 10:	0
Pct maq 11:	0
Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct maq 13:	0
Pct pcm 13:	0
Within sec:	Υ
Aq code 1:	D
Hit swl:	F
Athk2:	48
Horiz Conduct:	143.75273
Vert Conduct:	.0004
T2:	6900.1312
D50plek:	522.46747

Pct maq 2:	0
Pct pcm 2:	15
Pct aq 3:	50
Pct cm 3:	0
Pct na 3:	0
Pct maq 4:	0
Pct pcm 4:	0
Pct aq 5:	0
Pct cm 5:	0
Pct na 5:	0
Pct maq 6:	0
Pct pcm 6:	0
Pct aq 7:	0
Pct cm 7:	0
Pct na 7:	0
Pct maq 8:	0
Pct pcm 8:	0
Pct aq 9:	0
Pct cm 9:	0
Pct na 9:	0
Pct maq 10:	0
Pct pcm 10:	0
Pct aq 11:	0
Pct cm 11:	0
Pct na 11:	0
Pct maq 12:	0
Pct pcm 12:	0
Pct aq 13:	0
Pct cm 13:	0
Pct na 13:	0
Loc match:	Υ

MI WELLS MI20321069

41 West 1/2 - 1 Mile Lower

> Wellid: 81000011356 County: Washtenaw 02S 07E Town range: Owner name: MARK PERRY 9240 PLYMOUTH Well addr:

Well depth: 290 Well type: Household

Wssn: 0

Well num: Not Reported 2001-02-13 00:00:00.000 Const date:

-1 Case dia:

Import id: Not Reported Superior Township: Section: 2

2215

**PVC Plastic** 

Driller id:

Case type:

TC2816854.2s Page A-75

Coop donth	0		
Case depth:	0		
Screen frm:	0		
Screen to:	0		
Swl:	0		
Test depth:	0		
Test hours:	0		
Test rate:	0	Test methd:	Unknown
Grouted:	0	Pmp cpcity:	0
Latitude:	42.33920104		
Longitude:	-83.58822409		
Methd coll:	Address Matching-House Number	er	
Elevation:	0		
Elev methd:	DEM30M	Depth flag:	Not Reported
Elev flag:	Elevation < DEMmin or Elevation		Not Reported
Swl flag:	SWL = 0	1 > BEIVIII I AX	
Elev dem:	859	Elev dif:	859
Elev miv:	859	Aq code:	Rock Well
Aq flag:	Not Reported	Pct aq:	7
Pct aq d:	8	Pct aq r:	0
Pct maq:	0	Pct maq d:	0
Pct maq r:	0	Pct cm:	54
Pct cm d:	51	Pct cm r:	100
Pct pcm:	39	Pct pcm d:	41
Pct pcm r:	0	Pct na:	0
Pct na d:	0	Pct na r:	0
Pct flag:	Not Reported	Rock top:	273
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	0	A pct aq:	0
A pct maq:	0	A pct pcm:	0
	0	A pct na:	0
A pct cm:		•	-
A thickns2:	0	A pct aq2:	0
A pct maq2:	0	A pct pcm2:	0
A pct cm2:	0	A pct na2:	0
A hit swl:	F	A hit top:	F
A hit rock:	F	A sc lith1:	Not Reported
A sc Imod1:	Not Reported	A sc Imaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct mag 1:	0	Pct cm 1:	55
Pct pcm 1:	45	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	100	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	15
Pct maq 3:	0	Pct cm 3:	85
Pct pcm 3:	0	Pct na 3:	0
•	50		0
Pct aq 4:		Pct maq 4:	
Pct cm 4:	50	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	30
Pct maq 5:	0	Pct cm 5:	70
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	100	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	52
Pct pcm 7:	48	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	50	Pct pcm 8:	50
Pct na 8:	0	Pct aq 9:	3
Pct maq 9:	0	Pct cm 9:	14
Pct pcm 9:	84	Pct na 9:	0
i ot point o.	• .	. ot na o.	5

Pct aq 10: 0 Pct maq 10: 0 Pct cm 10: 0 Pct pcm 10: 0 0 Pct na 10: 0 Pct aq 11: 0 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: 0 Pct aq 12: 0 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 0 Pct na 12: 0 Pct aq 13: 0 0 Pct maq 13: 0 Pct cm 13: 0 Pct na 13: Pct pcm 13: 0 Υ Υ Within sec: Loc match: Aq code 1: R F Hit swl: Athk2: 0 Horiz Conduct: 8.30085 Vert Conduct: .00018

42 WSW MI WELLS 1/2 - 1 Mile Higher

Wellid:81000012667Import id:Not ReportedCounty:WashtenawTownship:SuperiorTown range:02S 07ESection:3

Owner name: Mario & Lina Tartaglia

2100.1159

889.28013

Well addr: 4461 Old Oak Dr.

Well depth: 105
Well type: Household
Wssn: 0

T2: D50plek:

Well num: Not Reported Driller id: 2125

 Case dia:
 5

 Case depth:
 95

 Screen frm:
 0

 Screen to:
 0

 Swl:
 31

 Test depth:
 105

 Test hours:
 1

Test rate: 40 Test methd: Air Grouted: 1 Pmp cpcity: 20

Latitude: 42.33643919
Longitude: -83.5876872
Methd coll: Interpolation-Map

Elevation: 0

Elev methd: DEM30M Depth flag: Not Reported

Elev flag: Elevation < DEMmin or Elevation > DEMmax

Swl flag: Not Reported

Elev dem: 876 876 Elev dif: Drift Well Elev miv: 876 Aq code: Aq flag: Not Reported Pct aq: 52 Pct aq d: 52 Pct aq r: 0 0 Pct maq: 0 Pct maq d: 0 35 Pct maq r: Pct cm:

MI20321899

Pct cm d:	35	Pct cm r:	0
Pct pcm:	12	Pct pcm d:	12
Pct pcm r:	0	Pct na:	0
Pct na d:	0	Pct na r:	0
Pct flag:	Not Reported	Rock top:	-1
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	0	A pct aq:	0
A pct maq:	0	A pct pcm:	0
A pct cm:	0	A pct na:	0
A thickns2:	0	A pct aq2:	0
A pct maq2:	0	A pct pcm2:	0
A pct cm2:	0	A pct na2:	0
A hit swl:	F	A hit top:	T
A hit rock:	F	A sc lith1:	Not Reported
A sc Imod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	100
Pct maq 1:	0	Pct cm 1:	0
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	100	Pct maq 2:	0
Pct cm 2:	0	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	10
Pct maq 3:	0	Pct cm 3:	90
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	95	Pct pcm 4:	5
Pct na 4:	0	Pct aq 5:	40
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	60	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	0	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	0
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Υ	Loc match:	Υ
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
DC0=l=l-	0		

D50plek:

0

Map ID
Direction
Distance
Flovation

Database EDR ID Number <u> ∟levation</u> I43 WSW **MI WELLS** MI20315719 1/2 - 1 Mile Higher Wellid: 81000005125 Import id: 81727703004 Washtenaw Township: Superior County: Town range: 02S 07E Section: 3 GATES, TOM Owner name: Well addr: 8727 WARREN RD. Well depth: 77 Well type: Household 0 Wssn: Well num: Driller id: 1290 Not Reported Const date: 1982-10-26 00:00:00.000 Case type: **PVC Plastic** 5 Case dia: Case depth: 77 Screen frm: 73 Screen to: 77 Swl: 57 Test depth: 58 2 Test hours: Test rate: 12 Test methd: Unknown Grouted: Pmp cpcity: 42.3347270697 Latitude: Longitude: -83.5873715322 Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Not Reported Swl flag: Elev dem: 876 Elev dif: Elev miv: 880 Aq code: Drift Well Aq flag: Not Reported Pct aq: 5 0 Pct aq d: 5 Pct aq r: 0 Pct maq d: 0 Pct maq: Pct mag r: 0 Pct cm: 95 Pct cm d: 95 Pct cm r: 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: 0 Pct na: Pct na r: 0 Pct na d: 0 Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: 20 A thickns2: A pct aq2: 20 A pct maq2: 0 A pct pcm2: 0 80 0 A pct cm2: A pct na2: F F A hit swl: A hit top: F A hit rock: A sc lith1: Sand A sc Imod1: Wet/Moist A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1:

Pct aq 2: 0 Pct cm 2: 100 Pct na 2: 0 Pct maq 3: 0 Pct pcm 3: 0 Pct aq 4: 0 Pct cm 4: 0 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 0 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 0 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: 20 Athk2: Horiz Conduct: 20.00008 Vert Conduct: .00012 400.0016 T2: D50plek: 14.63392 Pct maq 2: 0 Pct pcm 2: 0 0 Pct aq 3: Pct cm 3: 100 Pct na 3: 0 0 Pct maq 4: Pct pcm 4: 0 Pct aq 5: 0 Pct cm 5: 0 0 Pct na 5: Pct maq 6: 0 Pct pcm 6: 0 Pct aq 7: 0 0 Pct cm 7: 0 Pct na 7: Pct maq 8: 0 Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 Pct maq 10: 0 Pct pcm 10: 0 0 Pct aq 11: Pct cm 11: 0 0 Pct na 11: Pct mag 12: 0 0 Pct pcm 12: Pct aq 13: 0 Pct cm 13: 0 Pct na 13: 0 Loc match: Υ

I44
WSW
MI WELLS MI20315718
1/2 - 1 Mile

Driller id:

Case type:

Wellid: 8100005124
County: Washtenaw
Town range: 02S 07E

Owner name: GATES, THOMAS A. Well addr: 8727 WARREN RD.

Well depth: 235 Well type: Household

Wssn: 0

Higher

Well num: Not Reported
Const date: 1982-09-29 00:00:00.000

Case dia: 0

Import id: 81727703003
Township: Superior
Section: 3

524

Unknown

Case depth: 0 Screen frm: 0 Screen to: 0 999.99 Swl: Test depth: 0 Test hours: 0 Test rate: 0 Test methd: Unknown Grouted: Pmp cpcity: 42.3347717643 Latitude: -83.5875540711 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: SWL > Well Depth 879 Elev dem: Elev dif: Rock Well Elev miv: 880 Aq code: Not Reported Aq flag: Pct aq: 0 Pct aq d: Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 97 Pct cm d: 97 Pct cm r: 100 Pct pcm: 2 Pct pcm d: 2 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: 228 D r type: Not Reported Spc cpcity: 0 A thicknes: 0 0 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 0 A pct ag2: 0 0 A pct maq2: 0 A pct pcm2: 0 0 A pct cm2: A pct na2: A hit swl: F A hit top: Т A hit rock: A sc lith1: Not Reported A sc Imod1: Not Reported A sc Imaq1: Not Reported Not Reported A sc lpct1: A sc lith2: A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 0 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 100 Pct pcm 3: 0 Pct na 3: 0 0 Pct aq 4: 10 Pct maq 4: Pct cm 4: 65 Pct pcm 4: 25 Pct na 4: 0 Pct aq 5: 0 Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 100 Pct pcm 6: Pct na 6: 0 0 Pct aq 7: Pct maq 7: 0 Pct cm 7: 100 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: Pct maq 8: 0 0 Pct cm 8: 100 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0

0

0

0

0

0

0

Υ

MI20315720

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: Υ Within sec: Loc match: Aq code 1: R F Hit swl: Athk2: 0 Horiz Conduct: 2.88495 Vert Conduct: .0001

I45
WSW
MI WELLS
1/2 - 1 Mile
Higher

 Wellid:
 8100005126
 Import id:
 81727703005

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 3

Owner name: GATES, TOM
Well addr: 8727 WARREN RD.

600.0701

223.24074

Well depth: 225
Well type: Public
Wssn: 0

T2:

D50plek:

Well num: Not Reported Driller id: 64
Const date: 1983-11-01 00:00:00.000 Case type: Unknown

 Case dia:
 0

 Case depth:
 0

 Screen frm:
 0

 Screen to:
 0

 Swl:
 999.99

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown Grouted: 1 Pmp opcity: 0

Latitude: 42.3346504006 Longitude: -83.5875388771 Methd coll: Interpolation-Map

Elevation: 880

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: SWL > Well Depth

Elev dem: 879 Elev dif: 1

Drift Well Elev miv: 880 Aq code: Aq flag: Not Reported Pct aq: 4 Pct aq d: Pct aq r: 0 0 Pct maq: 0 Pct maq d: 0 96 Pct maq r: Pct cm:

Pct cm d:	96	Pct cm r:	0
Pct pcm:	0	Pct pcm d:	0
Pct pcm r:	0	Pct na:	0
Pct na d:	0	Pct na r:	0
Pct flag:	Not Reported	Rock top:	-1
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	0	A pct aq:	0
A pct maq:	0	A pct pcm:	0
A pct cm:	0	A pct na:	0
A thickns2:	0	A pct aq2:	0
A pct maq2:	0	A pct pcm2:	0
A pct cm2:	0	A pct na2:	0
A hit swl:	F	A hit top:	T
A hit rock:	F	A sc lith1:	Not Reported
A sc Imod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	100
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	100	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	40
Pct maq 3:	0	Pct cm 3:	60
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	100	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	100
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	100	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	100
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	100	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Υ	Loc match:	Υ
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
DEO-I-I-	•		

D50plek:

0

Map ID Direction Distance

Elevation Database EDR ID Number 46 WNW **MI WELLS** MI20320315 1/2 - 1 Mile Lower Wellid: 81000010303 Import id: Not Reported Washtenaw Township: Superior County: Town range: 02S 07E Section: 3 Deer Creek Building Co. Inc. Owner name: Well addr: 4581 Old Oak Well depth: 92 Well type: Household 0 Wssn: Well num: Driller id: 8130 Not Reported 2000-03-23 00:00:00.000 Const date: Case type: **PVC Plastic** Case dia: 5 Case depth: 82 Screen frm: 82 Screen to: 92 Swl: 13 Test depth: 18 2 Test hours: Test rate: 15 Test methd: Unknown Grouted: Pmp cpcity: 18 42.34321267 Latitude: Longitude: -83.588491 Methd coll: Interpolation-Map Elevation: Elev methd: DEM30M Depth flag: Not Reported Elev flag: Elevation < DEMmin or Elevation > DEMmax Not Reported Swl flag: Elev dem: 843 843 Elev dif: Elev miv: 843 Aq code: Drift Well Aq flag: Not Reported Pct aq: 79 Pct aq d: 79 Pct aq r: 0 Pct maq: 0 Pct maq d: 0 Pct mag r: 0 Pct cm: 21 Pct cm d: 21 Pct cm r: 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: 0 Pct na: 0 Pct na d: 0 Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: 41 A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: A thickns2: 79 A pct aq2: 76 A pct maq2: 0 A pct pcm2: 0 24 0 A pct cm2: A pct na2: F F A hit swl: A hit top: A hit rock: F A sc lith1: Sand A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported 100 A sc lpct2: 0 Pct aq 1: Pct mag 1: 0 Pct cm 1: 0 Pct pcm 1: 0 Pct na 1: 0

Pct maq 2:	0
Pct pcm 2:	0
Pct aq 3:	45
Pct cm 3:	55
Pct na 3:	0
Pct maq 4:	0
Pct pcm 4:	0
Pct aq 5:	0
Pct cm 5:	0
Pct na 5:	0
Pct maq 6:	0
Pct pcm 6:	0
Pct aq 7:	0
Pct cm 7:	0
Pct na 7:	0
Pct maq 8:	0
Pct pcm 8:	0
Pct aq 9:	0
Pct cm 9:	0
Pct na 9:	0
Pct maq 10:	0
Pct pcm 10:	0
Pct aq 11:	0
Pct cm 11:	0
Pct na 11:	0
Pct maq 12:	0
Pct pcm 12:	0
Pct aq 13:	0
Pct cm 13:	0
Pct na 13:	0
Loc match:	Υ

I47 WSW 1/2 - 1 Mile Higher MI WELLS MI20315717

Driller id:

Case type:

Wellid: 81000005123 County: Washtenaw 02S 07E Town range:

Owner name: GATES, THOMAS A. 8727 WARREN RD. Well addr:

Well depth: 253 Well type: Household

Wssn: 0

Not Reported Well num: 1982-09-23 00:00:00.000 Const date:

7.88 Case dia:

Import id: 81727703002 Township: Superior Section: 3

524 Unknown

Case depth: 253 Screen frm: 0 Screen to: 0 999.99 Swl: Test depth: 0 Test hours: 0 Test rate: 0 Test methd: Unknown Grouted: Pmp cpcity: 42.3347167173 Latitude: -83.5877128362 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: SWL > Well Depth 879 Elev dem: Elev dif: Rock Well Elev miv: 880 Aq code: Not Reported Aq flag: Pct aq: 0 Pct aq d: Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 96 Pct cm d: 96 Pct cm r: 100 Pct pcm: 0 Pct pcm d: 0 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: 245 D r type: Not Reported Spc cpcity: 0 A thicknes: 0 0 A pct aq: A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 0 A pct ag2: 0 0 A pct maq2: 0 A pct pcm2: 0 0 A pct cm2: A pct na2: A hit swl: F A hit top: Т A hit rock: A sc lith1: Not Reported A sc Imod1: Not Reported A sc Imaq1: Not Reported Not Reported A sc lpct1: A sc lith2: A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 100 Pct pcm 1: 0 Pct na 1: 0 0 0 Pct aq 2: Pct maq 2: 0 Pct cm 2: 100 Pct pcm 2: 30 Pct na 2: 0 Pct aq 3: Pct maq 3: 0 Pct cm 3: 70 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 100 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 100 0 0 Pct pcm 5: Pct na 5: 0 Pct aq 6: 0 Pct maq 6: 0 Pct cm 6: 100 Pct pcm 6: Pct na 6: 0 0 Pct aq 7: Pct maq 7: 0 Pct cm 7: 100 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 3 Pct maq 8: 0 Pct cm 8: 97 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0

0

0

0

0

0

0

Υ

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct na 13: Pct pcm 13: Υ Within sec: Loc match: Aq code 1: R F Hit swl: Athk2: 0 Horiz Conduct: 4.0001 Vert Conduct: .0001

J48 ESE MI WELLS MI20315934

1/2 - 1 Mile Lower

T2:

D50plek:

 Wellid:
 8100005340
 Import id:
 81727712001

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 12

Owner name: HESSE, RON Well addr: 10670 WARREN RD.

900.0216

354.32521

Well depth: 75

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 1705
Const date: 1978-12-28 00:00:00.000 Case type: Unknown

 Case dia:
 4

 Case depth:
 75

 Screen frm:
 72

 Screen to:
 75

 Swl:
 40

 Test depth:
 6

 Test hours:
 3

Test rate: 10 Test methd: Unknown Grouted: 0 Pmp opcity: 0

Latitude: 42.334379445 Longitude: -83.5533844383 Methd coll: Interpolation-Map

Elevation: 816

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 813 Elev dif: 3

Drift Well Elev miv: 816 Aq code: Aq flag: Not Reported Pct aq: 15 Pct aq d: 15 Pct aq r: 0 0 Pct maq: Pct maq d: 0 0 83 Pct maq r: Pct cm:

5.	00	B /	•
Pct cm d:	83	Pct cm r:	0
Pct pcm:	0	Pct pcm d:	0
Pct pcm r:	0	Pct na:	3
Pct na d:	3 Not Deposited	Pct na r:	0
Pct flag:	Not Reported	Rock top:	-1
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	9	A pct aq:	78
A pct maq:	0	A pct pcm:	0
A pct cm:	22	A pct na:	0
A thickns2:	35	A pct aq2:	20
A pct maq2:	0	A pct pcm2:	0
A pct cm2:	80	A pct na2:	0
A hit swl:	F	A hit top:	F
A hit rock:	F	A sc lith1:	Sand
A sc Imod1:	Wet/Moist	A sc Imaq1:	AQ
A sc lpct1:	100	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	90
Pct pcm 1:	0	Pct na 1:	10
Pct aq 2:	20	Pct maq 2:	0
Pct cm 2:	80	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	100
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	0	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	0
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Υ	Loc match:	Υ
Aq code 1:	D		
Hit swl:	F		
Athk2:	35		
Horiz Conduct:	7.85722		
Vert Conduct:	.00012		
T2:	275.0028		
D50plek:	17.98419		
•			

Мар	ID
Direc	ction
Dista	nce

Database EDR ID Number Elevation J49 ESE **MI WELLS** MI20315673 1/2 - 1 Mile Lower Wellid: 81000005079 Import id: 81727701002 Washtenaw Township: Superior County: Town range: 02S 07E Section: EMMETT, MR. & MRS. DAVE Owner name: Well addr: 10685 WARREN RD. Well depth: 196 Well type: Household 0 Wssn: Well num: Driller id: 1705 Not Reported 1981-06-01 00:00:00.000 Const date: Case type: Steel-black Case dia: 4 Case depth: 196 Screen frm: 192 Screen to: 196 Swl: 32 Test depth: 37 2 Test hours: Test rate: 37 Test methd: Unknown Grouted: Pmp cpcity: Latitude: 42.3349613951 Longitude: -83.5530526323 Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Not Reported Swl flag: Elev dem: 813 Elev dif: Elev miv: 816 Aq code: Drift Well Aq flag: Not Reported Pct aq: 4 0 Pct aq d: 4 Pct aq r: Pct maq: 1 Pct maq d: 1 Pct mag r: 0 Pct cm: 95 Pct cm r: Pct cm d: 95 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: Pct na: 1 0 Pct na d: Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: A thickns2: 164 A pct aq2: 4 A pct maq2: 1 A pct pcm2: 0 95 0 A pct cm2: A pct na2: F F A hit swl: A hit top: F Sand & Gravel A hit rock: A sc lith1: A sc Imod1: A sc Imaq1: Coarse AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 0 Pct mag 1: 0 Pct cm 1: 95 Pct pcm 1: 0 Pct na 1:

Pct aq 2: 0 Pct cm 2: 100 Pct na 2: 0 Pct maq 3: 0 Pct pcm 3: 0 Pct aq 4: 0 Pct cm 4: 100 Pct na 4: 0 Pct maq 5: 0 Pct pcm 5: 0 0 Pct aq 6: Pct cm 6: 100 Pct na 6: 0 Pct maq 7: 0 Pct pcm 7: 0 Pct aq 8: 0 Pct cm 8: 0 Pct na 8: 0 Pct maq 9: 0 Pct pcm 9: 0 Pct aq 10: 0 Pct cm 10: 0 Pct na 10: 0 Pct maq 11: 0 Pct pcm 11: 0 Pct aq 12: 0 Pct cm 12: 0 Pct na 12: 0 Pct maq 13: 0 0 Pct pcm 13: Within sec: Υ Aq code 1: D F Hit swl: Athk2: 164 Horiz Conduct: 4.27449 Vert Conduct: .00011 701.0156 T2: D50plek: 203.88962 Pct maq 2: 0 Pct pcm 2: 0 0 Pct aq 3: Pct cm 3: 100 Pct na 3: 0 0 Pct maq 4: Pct pcm 4: 0 Pct aq 5: 0 Pct cm 5: 100 Pct na 5: 0 Pct maq 6: 0 Pct pcm 6: 0 Pct aq 7: 12 Pct cm 7: 88 Pct na 7: 0 Pct maq 8: 0 Pct pcm 8: 0 Pct aq 9: 0 Pct cm 9: 0 Pct na 9: 0 Pct maq 10: 0 Pct pcm 10: 0 0 Pct aq 11: Pct cm 11: 0 0 Pct na 11: Pct mag 12: 0 0 Pct pcm 12: Pct aq 13: 0 Pct cm 13: 0 Pct na 13: 0 Loc match: Υ

Import id:

Township:

Section:

MI WELLS MI20313470

81717735002

Salem

35

388

Unknown

# 50 NW 1/2 - 1 Mile Lower

Wellid: 81000002773 County: Washtenaw Town range: 01S 07E FILL, RAY Owner name: Well addr: 9101 JOY RD.

Well depth: 40

Household Well type:

Wssn: 0

Well num: Not Reported

Driller id: Const date: 1972-10-12 00:00:00.000 Case type:

Case dia:

TC2816854.2s Page A-90

Case depth: 36 Screen frm: 36 Screen to: 40 4 Swl: 21 Test depth: Test hours: 4 Test rate: 15 Test methd: Unknown Grouted: Pmp cpcity: 42.3496425676 Latitude: -83.5837705818 Longitude: Methd coll: Interpolation-Map Elevation: Elev methd: Topographoc Map Interpolation Depth flag: Not Reported Elev flag: Not Reported Swl flag: Not Reported 830 Elev dem: Elev dif: Drift Well Elev miv: 833 Aq code: Not Reported Aq flag: Pct aq: 70 0 Pct aq d: 70 Pct aq r: Pct mag: 0 Pct mag d: 0 Pct mag r: 0 Pct cm: 0 Pct cm d: 0 Pct cm r: 0 Pct pcm: 30 Pct pcm d: 30 0 0 Pct pcm r: Pct na: 0 Pct na d: 0 Pct na r: Pct flag: Not Reported Rock top: -1 0 D r type: Not Reported Spc cpcity: A thicknes: 8 A pct aq: 100 A pct maq: 0 A pct pcm: 0 0 0 A pct cm: A pct na: A thickns2: 36 A pct ag2: 67 A pct maq2: 0 A pct pcm2: 33 0 0 A pct cm2: A pct na2: A hit swl: F F A hit top: A hit rock: A sc lith1: Sand & Gravel A sc Imod1: Not Reported A sc Imaq1: AQ Not Reported A sc lpct1: 100 A sc lith2: Not Reported Not Reported A sc Imod2: A sc Imaq2: A sc lpct2: 0 Pct aq 1: 100 Pct mag 1: 0 Pct cm 1: 0 Pct pcm 1: 0 Pct na 1: 0 40 0 Pct aq 2: Pct maq 2: 0 60 Pct cm 2: Pct pcm 2: 0 Pct na 2: Pct aq 3: 0 Pct maq 3: 0 Pct cm 3: 0 Pct pcm 3: 0 Pct na 3: 0 Pct aq 4: 0 Pct maq 4: 0 Pct cm 4: 0 Pct pcm 4: 0 0 Pct na 4: 0 Pct aq 5: Pct maq 5: 0 Pct cm 5: 0 0 0 Pct pcm 5: Pct na 5: 0 0 Pct aq 6: Pct maq 6: 0 Pct cm 6: 0 Pct pcm 6: Pct na 6: 0 Pct aq 7: 0 Pct maq 7: 0 Pct cm 7: 0 Pct pcm 7: 0 Pct na 7: 0 Pct aq 8: 0 Pct maq 8: 0 Pct cm 8: 0 Pct pcm 8: 0 Pct na 8: 0 Pct aq 9: 0 0 Pct maq 9: 0 Pct cm 9: 0 0 Pct na 9: Pct pcm 9:

0

0

0

0

0

0

0

0

Υ

Pct aq 10: 0 Pct maq 10: Pct cm 10: 0 Pct pcm 10: Pct na 10: 0 Pct aq 11: 0 Pct maq 11: Pct cm 11: Pct pcm 11: 0 Pct na 11: Pct aq 12: 0 Pct maq 12: Pct pcm 12: Pct cm 12: 0 Pct na 12: 0 Pct aq 13: Pct maq 13: 0 Pct cm 13: 0 Pct pcm 13: Pct na 13: Υ Within sec: Loc match: Aq code 1: D F Hit swl: Athk2: 36 Horiz Conduct: 66.67 Vert Conduct: .02999 T2: 2400.12

51
West MI WELLS MI20315735
1/2 - 1 Mile
Lower

 Wellid:
 8100005141
 Import id:
 81727703020

 County:
 Washtenaw
 Township:
 Superior

 Town range:
 02S 07E
 Section:
 3

Owner name: COLLMAN, JILL & RICK

143.63055

Well addr: 8813 PLYMOUTH RD.

Well depth: 65

D50plek:

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 1290

 Case dia:
 5

 Case depth:
 61

 Screen frm:
 61

 Screen to:
 65

 Swl:
 25

 Test depth:
 28

 Test hours:
 2

Test rate: 12 Test methd: Unknown Grouted: 1 Pmp opcity: 0

Latitude: 42.341087472
Longitude: -83.5891042889
Methd coll: Interpolation-Map

Elevation: 850

Elev methd: Topographoc Map Interpolation Depth flag: Not Reported

Elev flag: Not Reported Swl flag: Not Reported

Elev dem: 846 Elev dif: 4

Drift Well Elev miv: 850 Aq code: Aq flag: Not Reported Pct aq: 75 Pct aq d: 75 Pct aq r: 0 0 Pct maq: 0 Pct maq d: 0 25 Pct maq r: Pct cm:

Datasad	05	Determin	•
Pct cm d:	25	Pct cm r:	0
Pct pcm:	0	Pct pcm d:	0
Pct pcm r:	0	Pct na:	0
Pct na d:	0 Not Deported	Pct na r:	0 -1
Pct flag:	Not Reported	Rock top:	
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	40	A pet aq:	93
A pct maq:	0	A pet pem:	0
A pct cm:	8	A pct na:	0
A thickns2:	40	A pct aq2:	93
A pct maq2:	0	A pet pem2:	0
A pct cm2:	8	A pct na2:	0
A hit swl:	T F	A hit top:	F
A hit rock:	•	A sc lith1:	Sand
A sc Imod1:	Wet/Moist	A sc Imaq1:	AQ
A sc lpct1:	100	A sc lith2:	Not Reported
A sc Imod2:	Not Reported	A sc Imaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	60
Pct maq 1:	0	Pct cm 1:	40
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	60	Pct maq 2:	0
Pct cm 2:	40	Pct pcm 2:	0
Pct na 2:	0	Pct aq 3:	100
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	0
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	0
Pct aq 6:	0	Pct maq 6:	0
Pct cm 6:	0	Pct pcm 6:	0
Pct na 6:	0	Pct aq 7:	0
Pct maq 7:	0	Pct cm 7:	0
Pct pcm 7:	0	Pct na 7:	0
Pct aq 8:	0	Pct maq 8:	0
Pct cm 8:	0	Pct pcm 8:	0
Pct na 8:	0	Pct aq 9:	0
Pct maq 9:	0	Pct cm 9:	0
Pct pcm 9:	0	Pct na 9:	0
Pct aq 10:	0	Pct maq 10:	0
Pct cm 10:	0	Pct pcm 10:	0
Pct na 10:	0	Pct aq 11:	0
Pct maq 11:	0	Pct cm 11:	0
Pct pcm 11:	0	Pct na 11:	0
Pct aq 12:	0	Pct maq 12:	0
Pct cm 12:	0	Pct pcm 12:	0
Pct na 12:	0	Pct aq 13:	0
Pct maq 13:	0	Pct cm 13:	0
Pct pcm 13:	0	Pct na 13:	0
Within sec:	Υ	Loc match:	Υ
Aq code 1:	D		
Hit swl:	Т		
Athk2:	40		
Horiz Conduct:	232.50001		
Vert Conduct:	.00133		
T2:	9300.0003		
D50plek:	578.47374		

Map ID Direction Distance

Elevation Database EDR ID Number 52 NNW **MI WELLS** MI20323351 1/2 - 1 Mile Lower Wellid: 81000015684 Import id: Not Reported Washtenaw Township: Salem County: Town range: 01S 07E Section: 35 **RONALD & DEBRA NOVAK** Owner name: Well addr: 5134 SADDLECREEK Well depth: 56 Well type: Household 0 Wssn: Well num: Driller id: 2014 Not Reported 2004-12-27 00:00:00.000 Const date: Case type: **PVC Plastic** Case dia: 5 Case depth: 46 Screen frm: 46 Screen to: 56 Swl: 4 Test depth: 15 2 Test hours: Test rate: 15 Test methd: Air Grouted: Pmp cpcity: Latitude: 42.35261 Longitude: -83.57906 Methd coll: GPS Code Meas. Std. Positioning Svc. SA Off Elevation: Elev methd: DEM30M Depth flag: Not Reported Elev flag: Elevation < DEMmin or Elevation > DEMmax Not Reported Swl flag: Elev dem: 840 840 Elev dif: Elev miv: 840 Aq code: Drift Well Aq flag: Not Reported Pct aq: 36 0 Pct aq d: 36 Pct aq r: Pct maq: 0 Pct maq d: 0 Pct mag r: 0 Pct cm: 64 Pct cm d: 64 Pct cm r: 0 Pct pcm: 0 Pct pcm d: 0 0 Pct pcm r: 0 Pct na: 0 0 Pct na d: Pct na r: Not Reported Pct flag: Rock top: -1 D r type: Not Reported Spc cpcity: 0 A thicknes: A pct aq: 100 A pct maq: 0 0 A pct pcm: 0 0 A pct cm: A pct na: A thickns2: 52 A pct aq2: 38 A pct maq2: 0 A pct pcm2: 0 62 0 A pct cm2: A pct na2: F F A hit swl: A hit top: F A hit rock: A sc lith1: Sand A sc Imod1: Not Reported A sc Imaq1: AQ A sc lpct1: 100 A sc lith2: Not Reported A sc Imod2: Not Reported A sc Imaq2: Not Reported A sc lpct2: 0 Pct aq 1: 30 Pct mag 1: 0 Pct cm 1: 70 Pct pcm 1: 0 Pct na 1:

Pct aq 2:	0
Pct cm 2:	100
Pct na 2:	0
Pct maq 3:	0
Pct pcm 3:	0
Pct aq 4:	0
Pct cm 4:	0
Pct na 4:	0
Pct maq 5:	0
Pct pcm 5:	0
Pct aq 6:	0
Pct cm 6:	0
Pct na 6:	0
Pct maq 7:	0
Pct pcm 7:	0
Pct aq 8:	0
Pct cm 8:	0
Pct na 8:	0
Pct maq 9:	0
Pct pcm 9:	0
Pct aq 10:	0
Pct cm 10:	0
Pct na 10:	0
Pct maq 11:	0
Pct pcm 11:	0
Pct aq 12:	0
Pct cm 12:	0
Pct na 12:	0
Pct maq 13:	0
Pct pcm 13:	0
Within sec:	Y
Aq code 1:	D
Hit swl:	F
Athk2:	52
Horiz Conduct:	61.53852
Vert Conduct:	.00016
T2:	3200.0032
D50plek:	272.61478

Pct maq 2:	0
Pct pcm 2:	0
Pct aq 3:	0
Pct cm 3:	0
Pct na 3:	0
Pct maq 4:	0
Pct pcm 4:	0
Pct aq 5:	0
Pct cm 5:	0
Pct na 5:	0
Pct maq 6:	0
Pct pcm 6:	0
Pct aq 7:	0
Pct cm 7:	0
Pct na 7:	0
Pct maq 8:	0
Pct pcm 8:	0
Pct aq 9:	0
Pct cm 9:	0
Pct na 9:	0
Pct maq 10:	0
Pct pcm 10:	0
Pct aq 11:	0
Pct cm 11:	0
Pct na 11:	0
Pct maq 12:	0
Pct pcm 12:	0
Pct aq 13:	0
Pct cm 13:	0
Pct na 13:	0
Loc match:	Υ

Map ID Direction Distance

istance Database EDR ID Number

1 SE OIL\_GAS MIOG50000004660 1/2 - 1 Mile

Api wellno: 21161113410000

Operator no: 555

Operator Name: COLVIN AND ASSOCIATES ELECTRIC STEEL CO

Operator Status: Inactive-no active wells at present

Operator City: Not Reported Operator State: Not Reported

Permit no: 11341

Lease name: MEINZINGER, VIOLA

Well no:

Deepest fmt: GRWS Obj fmtn: Not Reported

Drillerstd: 5692 Truetd: 0
County: WASHTENAW Slant: V

Well type: Dry Hole Well status: Plugging Approved

Source loc: С Wh sec: 12 Wh twpn: 2 Wh twpd: S Wh rngn: 7 Wh rngd: Ε SE Wh qqq: Wh qq: NE

Wh q: NW
Wh lat: 42.33206
Wh long: -83.55781
Wh georef: 701075.49
Wh georef1: 200924.44
Bh georef: 701075.49
Bh georef1: 200924.44

Bh sourcel: C

Bh lat: 42.33206 Bh long: -83.55781

Site id: MIOG50000004660

# AREA RADON INFORMATION

State Database: MI Radon

Radon Test Results

Test Type	Zip	Floor	Stop Date	Can 1 Res pCi/L	Can 1 Error	Can 2 Res pCi/L	Can 2 Error
	_						
Random	48170	1	12/19/87	LT 0.5			
Random	48170	0	12/5/87	1.0	25.4%		
Random	48170	0	1/22/88	1.0	24.3%		
Random	48170	0	11/18/87	1.2	14.7%		
Random	48170	0	2/18/88	1.6	14.3%		
Random	48170	1	12/5/87	1.6	17.5%		
Random	48170	0	5/10/87	2.4	10.2%		
Geographic	48170	0	3/25/88	1.6	12.5%		

State Database: MI Radon

Radon Test Results

Zip	Less than sign	Pci/L
_	<del></del>	
48170		0.50
48170		8.50
48170		2.30
48170		1.30
48170		4.30
48170		1.70
48170		1.90
48170		5.40
48170	<	0.30
48170		7.00
48170		7.20
48170		7.60
48170		2.60
48170		2.70
48170		3.50
48170		0.60
48170		1.00
48170		3.50
48170		17.70
48170		3.70
48170	<	0.30
48170		7.10
48170		4.70
48170		1.60
48170		1.50
48170		1.70
48170		

# AREA RADON INFORMATION

	4.80
48170	16.30
48170	2.50
48170	0.70
48170	23.60
48170	3.20
48170	0.60
48170	5.60
48170	3.60
48170	10.20
48170	0.90
48170	4.20
48170	1.50
48170	1.70
48170	1.60
48170	19.30

Federal EPA Radon Zone for WASHTENAW County: 1

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 48170

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	0.400 pCi/L Not Reported	100% Not Reported	0% Not Reported	0% Not Reported
Basement	1.440 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### **TOPOGRAPHIC INFORMATION**

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Source: Department of Natural Resources

Telephone: 517-241-2254

#### HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

#### **GEOLOGIC INFORMATION**

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### LOCAL / REGIONAL WATER AGENCY RECORDS

#### FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

#### STATE RECORDS

Water Well Data

Source: Department of Environmental Quality

Telephone: 517-335-9218

#### OTHER STATE DATABASE INFORMATION

Michigan Oil and Gas Wells

Source: Department of Natural Resources and Environment

Locations of oil and gas wells are compiled from permit records on file at the Geological Survey Division (GSD), Michigan Department of Natural Resources.

#### **RADON**

State Database: MI Radon

Source: Department of Environmental Quality

Telephone: 517-335-9551 Radon Test Results

Michigan Radon Test Results

Source: Department of Environmental Quality

Telephone: 517-335-8037

These results are from test kits distributed by the local health departments and used by

Michigan residents. There is no way of knowing whether the devices were used properly, whether there are duplicates (or repeat verification) test (i.e., more than one sample per home), etc.

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

**EPA Radon Zones** 

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

# OTHER

Airport Landing Facilities: Private and public use landing facilities

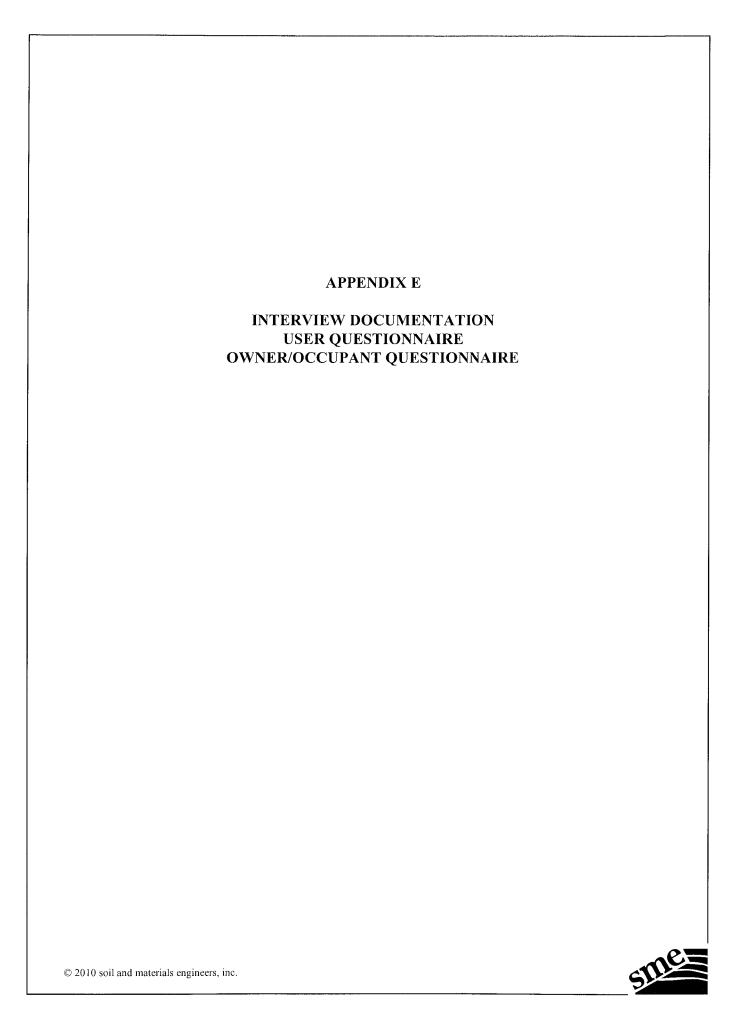
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

#### STREET AND ADDRESS INFORMATION

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SME Project No.	
DITTE I TO OVE TO	

P. 2

# PHASE I ENVIRONMENTAL ASSESSMENT – ALL APPROPRIATE INQUIRY USER QUESTIONNAIRE

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the Brownfields Amendments to CERCLA), the User of a Phase I Environmental Site Assessment (ESA) must consider the issues discussed below as part of the User's All Appropriate Inquiry (AAI) to identify Recognized Environmental Conditions (RECs) associated with the Property. This information should be provided to the Environmental Professional conducting the Phase I ESA so that a complete report can be issued.

The User may decide not to provide this information to the Environmental Professional; however, the absence of the information will be noted in the Phase I ESA report and may affect assessment conclusions. Under these circumstances, it will be the User's responsibility to determine if the Phase I ESA results, combined with results from the tasks described below, is sufficient to satisfy the requirements of All Appropriate Inquiry as defined by federal statute and regulation.

# Instructions:

- I. Fill in all blanks.
- 2. Indicate "NA" (not applicable), if appropriate.
- 3. Attach additional pages with your signature if additional space is required.

Property Name: 9800 Plymouth - Ann Arbor Rd
Property Location: 9800 Plymouth - Ann Achor Rd.
County: Washtenaw State: Michigan
Questionnaire Completed By/Title: Ben Kraft - Tax Specialist
Company/ Phone Number: Washternaw County Treasurer, 734-222-6743
On Behalf Of (if applicable). NA
Planned Date of Purchase/Lease (circle one): Expected to be sold at auction 9/16/10
Time Period of Site Knowledge: NA

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1. Reason for	r Phase I ESA
Environmental Pro	quested Phase I ESA must make the reason for the Phase I ESA known to the ofessional. Otherwise, it must be assumed that the reason is to qualify for an LLP to . Please indicate the reason for this Phase I ESA of the Property.
×	Due diligence/liability protection for purchase of the Property  Due diligence/liability protection for lease of the Property
	Mortgage loan or refinance
	Foreclosure
	Other; explain
2. Recorded	Environmental Cleanup Liens and Activity/Use Limitations
ascertainable reco Property and if an environmental im review of reasona Have you conduc	nsible to ascertain, through personal knowledge and/or a review of reasonably orded land and judicial records, if any environmental liens have been filed on the representations (AULs) have been placed on the Property because of pact. You may engage a title company or other capable professional to undertake the bly ascertainable records on your behalf.  Ited, or arranged to have conducted, a review of land title records in which recorded fuse restrictions would be revealed?
×	Yes
If yes, ple	ase specify who conducted the review:
If yes, ple	ase specify the types and locations of records reviewed:
Based on your pe	rsonal knowledge and reviews of title records, are you aware of any environmental inst the property that are filed or recorded under federal, tribal, state, or local law?
	Yes No
If yes, ex	plain briefly:

Based on your personal knowledge and reviews of title records, are you aware of any activity and/or use limitations, such as engineering controls, land use restrictions, or institutional controls, that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?

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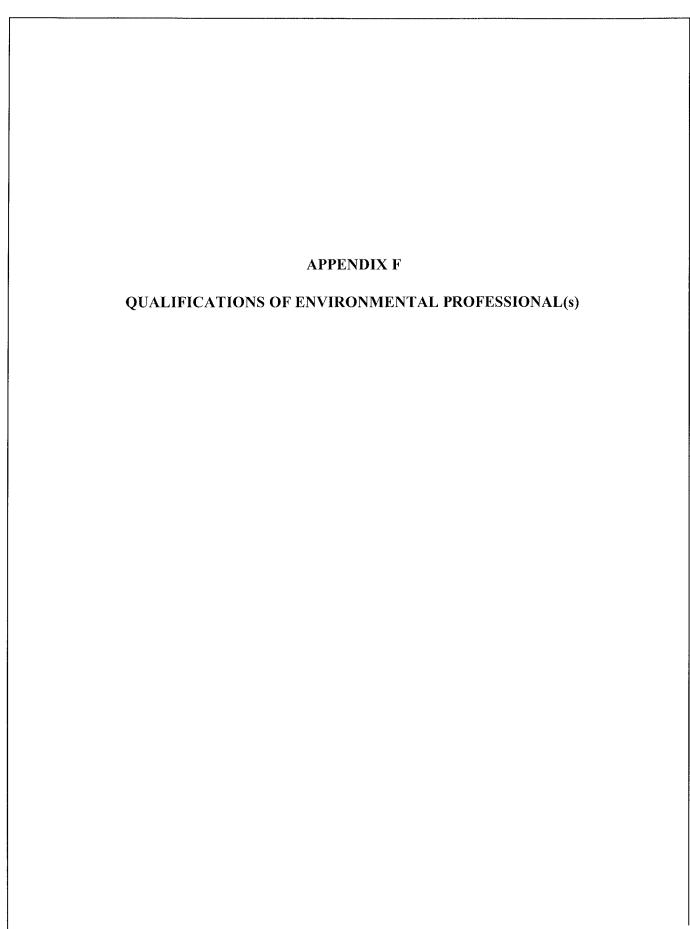
						SME Project No.
		Yes		<b>)</b> *	Ño	
	If v	zes. iden	tify the la	and us	se limi	itations/restrictions:
3.	Sp	ecialized	l Knowle	edge a	nd Ex	xperience
preser Special could environthe Pr	ice e alize resu onme oper	nvironm d knowle lt in envi ntal imp ty, and a	ental con edge or e ironment act assoc	tamin xperio al imp iated infort	nation once in pact, powerly with propagation	on the Property must be considered as part of the AAI process. Includes familiarity with historic activities on the Property that personal knowledge or experience that would indicate a risk of past Property uses, knowledge of the environmental history of in that could indicate environmental impact or threat of
As the	: Use lence	er of this related	environr to the Pr	nenta operty	l site a z or ad	assessment, do you have any specialized knowledge or ljoining properties?
		Yes		×	No	
	Ϊfν	ves. exnl		-		
		. ,,				
4,	ρΔ	lationeh	in of Pu	rchae	e Pric	ee to Value
			•			
value prope	to ei rty's e red	ntice buy sale pric luced pri	ers to acce is sign	quire ifican	the pro	nated properties often have been sold at prices below market roperty, contamination, and resultant liabilities; therefore, if a slow market value without any obvious impairments or reasons environmental impact as a cause of the reduced price must be
Does prope		ourchase	price bei	ng pa	id for	this Property reasonably reflect the fair market value of the
		Yes		×	No	
						ence, can you identify the reason for the reduced price versus ssumed to be contaminated.
	×	Yes			No	
	If	yes, exp	lain brief	ly:	The	property was foreclosed on for non-payment property taxes and will be sold at auction recoup the outstanding taxes.
© 200 Revise	6, soi ed Sej	l and mate otember 15	rials engin 5, 2006	eers, in	ic. to	recoup the outstanding taxes.

SME Project No.

a n	you become aware, through conversations, rumor, etc., of any commonly known or reasonably inable information within the local community that would indicate the Property could be ninated (e.g. types of past uses, presence of storage tanks, use of chemicals, environmental ps, etc.) or that any past event (e.g. fire, chemical spill, accident, etc.) could have resulted in
ı.	nmental impact of the Property or adjoining properties.
	If yes, explain briefly: There is a large V-vessel in back of the building and a company could "Merchants Automate Products" owned it at one point leading me to believe son of manufacturing went on there.  Proceedings Involving the Property
	u, the User of this environmental site assessment, based on your knowledge and experien
te	to the property, have any knowledge of any of the following:
	ending, threatened, or past litigation related to hazardous substances or petroleum products in,
	arising from the Property?
	arising from the Property?    Yes  No
	arising from the Property?
	arising from the Property?    Yes  No
	arising from the Property?  Yes No  If yes, explain briefly:
	ending, threatened, or past administrative proceedings related to hazardous substances etroleum products in, on or arising from the Property?
	arising from the Property?  Yes No  If yes, explain briefly:  ending, threatened, or past administrative proceedings related to hazardous substances etroleum products in, on or arising from the Property?  Yes No
	ending, threatened, or past administrative proceedings related to hazardous substances etroleum products in, on or arising from the Property?
	Arising from the Property?  Yes No  If yes, explain briefly:  ending, threatened, or past administrative proceedings related to hazardous substances etroleum products in, on or arising from the Property?  Yes No  If yes, explain briefly:  Otices from any governmental entity regarding any possible violation of environmental laws.
-	Arising from the Property?  Yes No  If yes, explain briefly:  ending, threatened, or past administrative proceedings related to hazardous substances etroleum products in, on or arising from the Property?  Yes No  If yes, explain briefly  No  If yes, explain briefly  Solution of environmental laws egulations or possible liability relating to hazardous substances or petroleum products in, or

CVVD	Project No	
CIVIL	TIDIOCCINC	',

Ben Kraft	Ben &	
Printed Name	Sign	atu:
7/19/10 Date		





# **Project Consultant**

Identifies possible environmental concerns for Phase I Environmental Site Assessments (ESAs), assists with compliance projects, and performs a broad range of tasks related to Toxic Release Inventory (TRI) reporting.

# **Professional Qualifications:**

- > Over 13 years of experience in conducting ESAs including report research, site walkover, and report preparation.
- > Over 17 years of experience in Toxic Release Inventory (TRI) reporting, including database management, training, conducting site visits, calculating releases, preparing documentation reports, submitting Form Rs, and analyzing data.

# **Representative Project Experience:**

- > Managed/conducted over 200 Phase I ESAs throughout the country for individuals, corporations and lending institutions to identify potential environmental liabilities. Assignments have included vacant land, vacant/active manufacturing sites, medical facilities, restaurants, and other commercial facilities.
- > Managed a series of Phase I ESAs for the redevelopment of urban residential properties throughout Michigan by non-profit organizations. The ESA scope included requirements to qualify the projects for Michigan State Housing Development Authority (MSHDA) competitive funding to develop new residential units.
- > Managed water quality projects for development and commercial clients. Collected water samples and compared analytical results, as well as selected chemical constituents to National Drinking Water Standards.
- > Managed and maintained database for TRI release reporting for a major automobile manufacturer for the past 16 reporting years. Modified database to account for correct usage, exemptions, unit of measure conversions, and process descriptions. Included generation of over 250 Form Rs annually for over 40 facilities. Since 1993, the project also included Environment Canada National Pollutant Release Inventory (NPRI) reporting.
- Assisted in management of database for five-year capital spending plan for environmental staff of a major automobile manufacturer. Coordinated with air, water, hazardous waste, pollution prevention, and toxic substance staff specialists to revise projects and track planned expenditures versus actual costs.
- **Career History:** SME since 1997 Other firms from 1981

**Education:** B.S., Urban and Regional Planning, Eastern Michigan University

ISO 14001 Environmental Management Systems Implementation Training

ISO 14001 Environmental Management Systems Internal Auditing

Training

**Certifications:** Certified Hazardous Materials Manager (CHMM)

8-Hour HAZWOPER Refresher Training - Health & Safety

❖ Affiliations: American Association of University Women (AAUW) - Plymouth/Canton

Chapter – Director of Communications

Inforum (Women's Economic Club of Detroit)

# **Senior Consultant**

Mr. Egan provides senior technical consulting and project management expertise in the areas of brownfield redevelopment and financing, site investigation and remediation, environmental due diligence, RCRA Corrective Action, environmental regulatory compliance, and environmental chemistry.

# **Professional Qualifications:**

- ➤ 33 years experience in environmental evaluations and consulting, including 13 years experience with the Ohio Voluntary Action Program (VAP).
- > Served as Certified Professional (CP) or principal author for 15 No Further Action (NFA) letters for redevelopment projects that received Covenant Not to Sue Status.
- ➤ Obtained approximately \$10 million in Clean Ohio Revitalization Fund (CORF) and Clean Ohio Assistance Fund (COAF) grants for redevelopment projects.
- > Successfully prepared a U.S. EPA Brownfield Pilot Project grant application.
- Expert in liability management and due care planning for property transactions, brownfield redevelopment planning and environmental response actions, and identification and acquisition of financial incentives for brownfield redevelopments
- > Expert at environmental site investigations and development of remediation alternatives for industrial and commercial facilities, UST sites, and RCRA Corrective Action facilities.

# **Representative Project Experience:**

- Successfully prepared the \$2.9 million CORF grant application for Clean Ohio funds to remediate and redevelop a former shingle manufacturing facility in Lockland, Ohio. Funds were used to demolish buildings, remediate impacted soil and install underground utilities. Managed the site investigation, remediation, and redevelopment of the property as well as CORF budgeting and invoicing. Prepared the Phase I and II Property Assessments, Remedial Action Plan, and Remedial Implementation Report.
- > Served as the CP for a former asbestos-containing building material manufacturing facility. Prepared a work plan in response to deficiencies contained in a No Further Action Letter prepared by others. The plan addressed trace levels of asbestos in the soil. Recommended and monitored an air sampling plan approved by the State of Ohio. Prepared a revised Phase II Property Assessment, a Property-Specific Risk Assessment, new Executive Summary and Filing Document, and NFA letter for this COAF supported project.
- Served as the CP for a former china manufacturing facility that was redeveloped for commercial and recreational use. The site was heavily impacted with lead requiring remediation of the soil and sediments. Remediation required interagency cooperation between VAP, the Division of Surface Water, Division of Hazardous Waste Management, and the Division of Solid and Infectious Waste. Prepared the Phase I and II Property Assessments, Property-Specific Risk Assessment, Remedial Implementation Report, and the Executive Summary and Filing Document. The project received Covenant Not to Sue status.
- > Project manager for the remedial investigation of five Superfund sites in Ohio, Kentucky and California.
- > Project manager for underground storage tank sites obtaining No Further Action status for over 50 Ohio sites using a risk-based approach.
- > Project manager for over 100 Phase I/II site assessments for due diligence related to property transfers and corporate acquisitions and divestitures in several states.

**Career History:** SME since May, 2010 - Other firms from 1977

**Education:** B.S., Environmental Science, University of Arkansas

Graduate Studies in Geology, University of Oklahoma

❖ Registrations: Certified Professional – State of Ohio VAP Program

40-Hour HAZWOPER Course

# **Senior Consultant**

- Served as the CP for a former scrap metal recycling facility now developed for commercial use. This site was heavily impacted with metals and petroleum hydrocarbons requiring remediation of the soil. Prepared a Property-Specific Risk Assessment, Remedial Implementation Report, and the Executive Summary and Filing Document. The project received Covenant Not to Sue status.
- > Project manager for all phases of the VAP project at a lead impacted property in Ohio. Developed a sampling strategy, provided oversight of field activities, and prepared Phase I and II Property Assessments and Remedial Implementation Reports. The project received Covenant Not to Sue status and is being transformed into a residential development.
- Managed all phases of the VAP projects at two aircraft parts machining facilities in Cincinnati, Ohio. Project included development of the sampling strategy, oversight of field activities, and preparation of the Phase II Property Assessment and Project-Specific Risk Assessment reports. A Covenant Not to Sue was issued for both properties.
- Managed the VAP assessment of a former linoleum manufacturing facility now developed for residential use. Project included development of the sampling strategy, oversight of field activities, and preparation of the Project-Specific Risk Assessment report. Remediation of this property was driven by residential direct contact and site-specific leaching standards. During the remediation, continually performed cumulative risk analysis and leaching modeling to assess if the current concentrations remaining at the property posed a risk to human receptors and groundwater. This approach prevented unnecessary soil remediation. A Covenant Not to Sue was issued for this property.
- Managed the VAP activities related to redevelopment of a former paper mill. Developed the sampling strategy, provided oversight of field activities, and prepared the Phase II Property Assessment and Project-Specific Risk Assessment reports. The key to the success of this project was development of a site-specific lead leaching standard based on bench scale leachability tests, the first to be approved by OEPA. A Covenant Not to Sue was issued for this site.