

1. Planning Commission Regular Meeting Agenda

Documents:

[01-15MARCH2017 AGENDA.PDF](#)

2. Planning Commission Regular Meeting Packet

Documents:

[MARCH 15, 2017 PC MEETING PACKET.PDF](#)

3. 539 S Huron- Site Plan Review Supplemental Documents

Documents:

[539 S HURON ENVIRONMENTAL.PDF](#)
[539 S HURON PLANS.PDF](#)

**Agenda
Planning Commission
Council Chambers
Wednesday, 15 March 2017 – 7:00 P.M.**

I. Call to Order

II. Roll Call

Heidi Jugenitz, Chair	P	A
Cheryl Zuellig, Vice Chair	P	A
Anthony Bedogne	P	A
Liz Dahl MacGregor	P	A
Toi Dennis	P	A
Matt Dunwoodie	P	A
Phil Hollifield	P	A
Jared Talaga	P	A

III. Approval of Minutes

- January 18, 2017

IV. Audience Participation

Open for general public comment to Planning Commission on items for which a public hearing is not scheduled.

V. Presentations and Public Hearing Items

- Special Nonconforming Status: 1111 W Cross St.
Public Hearing

VI. New Business

- 539 S Huron St.
Site Plan Review

VII. Old Business

- None

VIII. Future Business Discussion / Updates

IX. Committee Reports

- Non-motorized Advisory Committee: March Minutes

X. Adjournment

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**PLANNING COMMISSION
MEETING MINUTES
January 18, 2017
CITY COUNCIL CHAMBER
7:00 P.M.**

I. CALL TO ORDER

The meeting was called to order at 7:00 p.m.

II. ROLL CALL

Present: H. Jugenitz, C. Zuellig, A. Bedogne, L. Dahl MacGregor, M. Dunwoodie,
P. Hollifield, J. Talaga

Absent: T. Dennis (excused)

Staff: Bonnie Wessler, City Planner
Cynthia Kochanek, Associate Planner

III. APPROVAL OF MINUTES

Commissioner Hollifield moved to approve the minutes of December 21, 2016 as amended (Support: C. Zuellig) and the motion carried unanimously.

IV. AUDIENCE PARTICIPATION

1002 Washtenaw, Joseph Golder, owner- stated that he shares the main entrance with Eastern Michigan University. Stated that his property was taken by EMU and that he no longer has the ability to enjoy his property. He is frustrated with the situation and he is upset that under the current zoning his property would require a site plan review at the very least. He feels for the residents of the Bell-Kramer area and what they are going through.

V. PRESENTATION AND PUBLIC HEARING ITEMS

1. Rezoning: 311 Ballard St.

Cynthia Kochanek, Associate Planner, presented the staff review of the rezoning request for 311 Ballard. This is a rezoning request for parcel #11-11-40-183-017. The parcel is 0.11 acres with an existing residence on site. The property is currently zoned C-Center. The property owner wishes to have the parcel rezoned to CN- Core Neighborhood in order to be able to utilize the structure as residential. The structure was built in 1900; prior to the existence of the City Zoning Ordinance. Previously the parcel was part of the 501 W. Cross parcel to the north and appears to have been split from that parcel at some point prior to mid-20th century. No variances or special uses have been approved for the property.

Ms. Kochanek reviewed the criteria for a rezoning and findings.

Staff recommended that the Planning Commission recommend approval of the rezoning to City Council.

Chairperson Jugenitz inquired as to what the property can be used for currently and why this rezoning is needed.

Ms. Wessler stated that the house can only be utilized as a single family residential and that the house cannot be subdivided into multiple residential units under the current zoning.

Commissioner Bedogne clarified that if the rezoning was approved that the owner could utilize the structure as a multi-family up to four units by right in the proposed Core Neighborhood zoning but that if the owner want to utilize the structure as more than four units, the owner would need to request a special use approval.

Ms. Wessler confirmed that is the case. That if the owner wanted to utilize the structure as more than four residential units or a roominghouse, the owner would need to obtain a special use permit.

Commissioner Hollifield moved to open the public portion of the hearing (Support: L. Dahl MacGregor) and the motion carried unanimously.

There were no comments from the audience.

Commissioner Hollifield moved to close the public portion of the hearing (Support: L. Dahl MacGregor) and the motion carried unanimously.

Commissioner Hollifield moved that the Planning Commission recommend approval of the rezoning for 311 Ballard to Core Neighborhood to City Council with the following findings:

1. The rezoning is consistent with the goals in the Shape Ypsilanti master plan of "Anyone, no matter what age or income, can find a place to call home in Ypsilanti" and "Ypsilanti is an asset of Eastern Michigan University, and Eastern Michigan University is an asset of Ypsilanti."
2. The proposed rezoning would not affect the physical, geological, hydrological and other environmental features of this parcel.
3. Rezoning the parcel to Core Neighborhood will bring the property and any potential uses into alignment with the existing neighborhood to the south.
4. This rezoning is consistent with the trend of development in the neighborhood to the south.
5. The current zoning is inappropriate for the existing character and use.

The motion was supported by Commissioner Bedogne. A roll call vote was taken and carried unanimously 7:0.

VI. NEW BUSINESS

2. 2100 Washtenaw Ave

Bonnie Wessler, City Planner, presented the staff review of the site plan for 2100 Washtenaw. Parcel # 11-11-06-408-003 is 0.73 acres fronting on Washtenaw Ave. There is an existing 1,740 square foot single story building on site. There are 21 parking spaces in the lot, including one ADA space and one curb cut on Washtenaw Ave. No special uses or variances have been approved for the property.

The property is zoned **GC- General Corridor**, which permits medical and dental offices and clinics by right. The plans submitted call for a single story addition to the north side of the structure and associated site improvements, including a dumpster enclosure, additional parking including bike parking, a curb cut onto Whittier, and a sidewalk along Washtenaw. The Washtenaw frontage of the building will retain the same footprint; however two windows are being added to increase transparency and to reduce the nonconformity of the façade.

Ms. Wessler reviewed the waivers and conditions.

Staff recommended that the Planning Commission approve the site plan for 2100 Washtenaw. Ms. Wessler stated that she left out of the conditions that the applicant is looking to pay a fee-in-lieu of building the sidewalk on Whittier, since there is no other sidewalks along Whittier at this time.

Commissioner Bedogne inquired as to where the easement will be in relation to the building.

Ms. Wessler stated that proposed easement will be about a ½ foot from the front of the building.

Commissioner Zuellig stated that she is not a fan of the curb cut onto Whittier as it is a residential street and it will be a negative impact on the properties. She inquired as to whether that was something the applicant wanted. Ms. Wessler confirmed that it was something that the applicant wanted.

Commissioner Zuellig inquired as to why there is a jog in the driveway.

Andy Wakeland, engineer with Giffels Webster, for the applicant- stated that he jogged the driveway in order to attempt to alleviate the problem with headlights shining into the house just north of the property from cars pulling into the drive on Washtenaw.

Commissioner Zuellig inquired as to why the driveway is proposed for Whittier.

Beth Williams, construction manager with Innovative Construction Systems, for the applicant- stated that the owner requested the second driveway. That the drive on Whittier would help with truck access for the dumpster. That it is really for garbage truck and possibly employee access.

Commissioner Zuellig inquired as to why there are five additional parking spaces than what is required by ordinance. She stated that the planning commission has been trying to make an effort to eliminate any unnecessary parking along this corridor.

Williams- stated that since this is a family dentist that sometimes multiple vehicles are driven to the site for one family if they meet up at the dentist office and they are trying to make sure there is ample parking

Commissioner Zuellig inquired as to what is happening in the two feet between the proposed sidewalk and the street.

Wakeland- stated that it will be grass in that area.

Commissioner Zuellig requested that the sidewalk be shifted more north onto the site and that the entire area up to the street be paved since 2 or 3 feet of the grass will more than likely not survive.

Commissioner Bedogne stated that a lot of the green space could be added on site if the rear access drive was eliminated. That he would be fine with retaining the extra parking if the back drive was eliminated.

Commissioner Dahl MacGregor stated that if she was a dental patient at this site, knowing how crowded Washtenaw Ave can be, she would utilize the back drive if it existed.

Commissioner Zuellig requested that the four trees on Whittier be lined up similar to how street trees would usually be while still working around the utilities. The same with the trees on the Washtenaw Ave side. She requested that the first space in the lot be eliminated to create some more space to maneuver, increase the safety and in order to create space for a tree in that area.

Chairperson Jugenitz inquired as to what the rest of the commission thought about the second curb cut on Whittier.

Commissioner Hollifield stated that he can take it or leave it. He did look into it and there are six more similar drives already in existence on Whittier.

Commissioner Dahl MacGregor stated that she is on the fence. She stated that when she first saw it she thought that it would make for a safer flow of traffic but that Commissioner Zuellig makes a good point.

Commissioner Bedogne stated he does not believe that it would make it any less safe if the second drive was eliminated and that it would be a win for the neighborhood to have more green space.

Williams- stated that the client would probably be fine with eliminating the second drive if they could retain the parking.

Ms. Wessler requested that staff be able to confirm with emergency services to see if eliminating the drive off of Whittier would work for emergency access.

Chairperson Jugenitz inquired as to whether the applicants would be ok with the elimination of the southernmost parking space to help allow for the tree to be placed farther back.

Williams- confirmed that would be fine.

Commissioner Zuellig moved that the Planning Commission approve the office expansion at 2100 Washtenaw with the following finding, waivers and conditions:

Finding

1. The application substantially complies with §122-127.

Waivers

1. Planning Commission waiver requested from off-street parking landscaping screening along Washtenaw frontage for visibility concerns.
2. Waiver from street tree standards sought for the north (Whittier), due to utilities in the ROW.

Conditions

1. Applicant to provide a master sign plan for all existing and proposed signage with sign permit applications.
2. Barrier-free access within the parking area appears challenging; there is not a clear path from accessible spaces to the entrance. Applicant to revise and resubmit.
3. Applicant to submit photometric plan to ensure compliance with outdoor lighting standards.
4. Provide off-street parking landscaping screening from Whittier on the east side of the parking lot.
5. Applicant to provide additional detail about how the Washtenaw sidewalk will cross the curb cut.
6. Applicant to provide estimate for fee-in-lieu of construction for the Whittier sidewalk.
7. Applicant to provide details on the landscape wall as indicated in plans for staff review.
8. Engineering conditions as noted in the engineer's letter.
9. Applicant to consider granting an easement to the City for non-motorized transportation purposes over the future right-of-way area. Such an easement could allow for the existing ground sign to remain in place and be refaced as needed.
10. Remove the Whittier access driveway contingent on emergency services review and approval.
11. Reorient the trash enclosure and access from the south.
12. Eliminate the southernmost parking space in the parking lot.
13. Align the proposed street trees on Whittier and along Washtenaw Ave to emulate traditional street tree placement.
14. Shift the Washtenaw Ave sidewalk as far north as possible and pave to the existing curb.

The motion was supported by Commissioner Dahl MacGregor. A roll call vote was taken and carried unanimously 7:0.

3. Annual Report

Ms. Wessler reviewed the report with board members. Commissioner Jugenitz noted four corrections of dates on the graph on the second page. Commissioner Hollifield moved that the Planning Commission adopt the 2016 Planning Commission Annual Report with corrections as noted (Support: J. Talaga) and the motion carried unanimously.

4. Calendar of Meetings

Chairperson Jugenitz reviewed the calendar of meetings. Commissioner Hollifield moved that the calendar of meetings be adopted (Support: J. Talaga) and the motion carried unanimously.

5. Non-Motorized Advisory Committee Appointments

Chairperson Jugenitz reviewed the Non-Motorized Advisory Committee reappointments of Sarah Walsh and Bob Krzewinski for two year terms. Commissioner Dunwoodie moved that the Planning Commission reappoint Sarah Walsh and Bob Krzewinski for two year terms to the Non-Motorized Advisory Committee (Support: P. Hollifield) and the motion carried unanimously.

Commissioner Dahl MacGregor moved that the Planning Commission reappoint Bob Krzewinski as the Committee Chair for a two-year term to the Non-Motorized Advisory Committee (Support: C. Zuellig) and the motion carried unanimously.

6. Non-Motorized Advisory Committee Resolution to MDOT on Non-Motorized Improvements

Commissioner Zuellig suggested that a request or resolution be taken to City Council for more signage on MDOT roads throughout the City. Ms. Wessler suggested that staff could work on a report and bring it back to the Planning Commission to get a better idea of the issues. She also suggested drafting a resolution to City Council for their action. Chairperson Jugenitz requested that staff also look into different funding sources, if MDOT funds are unavailable.

VII. OLD BUSINESS

None

VIII. FUTURE BUSINESS DISCUSSION/UPDATES

Ms. Wessler noted that the MDOT research and report will be upcoming. A site plan application has been submitted for 539 S. Huron. There are some upcoming changes to the medical marijuana legislation with the State of Michigan. Also the PMD nonconformity update will be going to City Council on January 24th. The Zoning Ordinance update will be going to council for the second meeting in February.

IX. COMMITTEE REPORTS

Non-motorized Advisory Committee –2016 Annual Report
Non-motorized Advisory Committee –2017 Project Priorities
Non-motorized Advisory Committee –January minutes

X. ADJOURNMENT

Since there was no further business, Commissioner Hollifield moved to adjourn the meeting (Support: A. Bedogne) and the motion carried unanimously. The meeting adjourned at 8:45 p.m.



February 13, 2017

Staff Review of Special Nonconforming Use Application
1111 W Cross St Duplex-Nonconforming A
1111 W Cross St.

GENERAL INFORMATION

Applicant: Phanendra Yalamanchili
2829 Seminole Rd
Ann Arbor, MI 48108

Project: 1111 W Cross St Duplex-Nonconforming A

Application Date: February 3, 2017

Location: South side of W. Cross St between N Wallace Blvd and Hiawatha St.

Zoning: R-1, Single-Family Residential

Action Requested: Approval of Special Nonconforming Status

Staff Recommendation: Approval

PROJECT AND SITE DESCRIPTION

Parcel 11-11-40-205-004 is 0.16 acres on W. Cross St. between N. Wallace Blvd and Hiawatha St. in the Normal Park area of the city. The structure has frontage on the south side of W. Cross St. The structure contains two units in 1,904 square feet with a stoop on the front of the house and a 120 square foot enclosed porch at the southwest corner of the house. There is a 308 square foot, one and half car garage at the southeast corner of the parcel.

Currently zoned R-1, Single-Family Residential, the two units are nonconforming under the current zoning ordinance. The house was built in 1951. When the first zoning ordinance went into effect for the City in 1925, the property was zoned Class B, which allows for family residences of one or more units. By October 1951, the zoning for the property was R-1, single family residential. A building permit was requested to construct a two unit structure on September 7, 1951. In 1990, the planning department sent a letter to the owner of the property that recognized it as a non-conforming use and a duplex. No special use permits have previously been approved for this property. In 1955, the Board of Appeals determined that the average rear setback for accessory structures at the surrounding properties was 22.83 feet and permitted the garage at 1111 W. Cross to be built up to that setback.

The property has a Certificate of Compliance & Occupancy from the building department that is valid through June 1, 2017. There are no proposed changes to the site, the applicant is only pursuing the special nonconforming status in order to rebuild as two units in the event of a casualty.

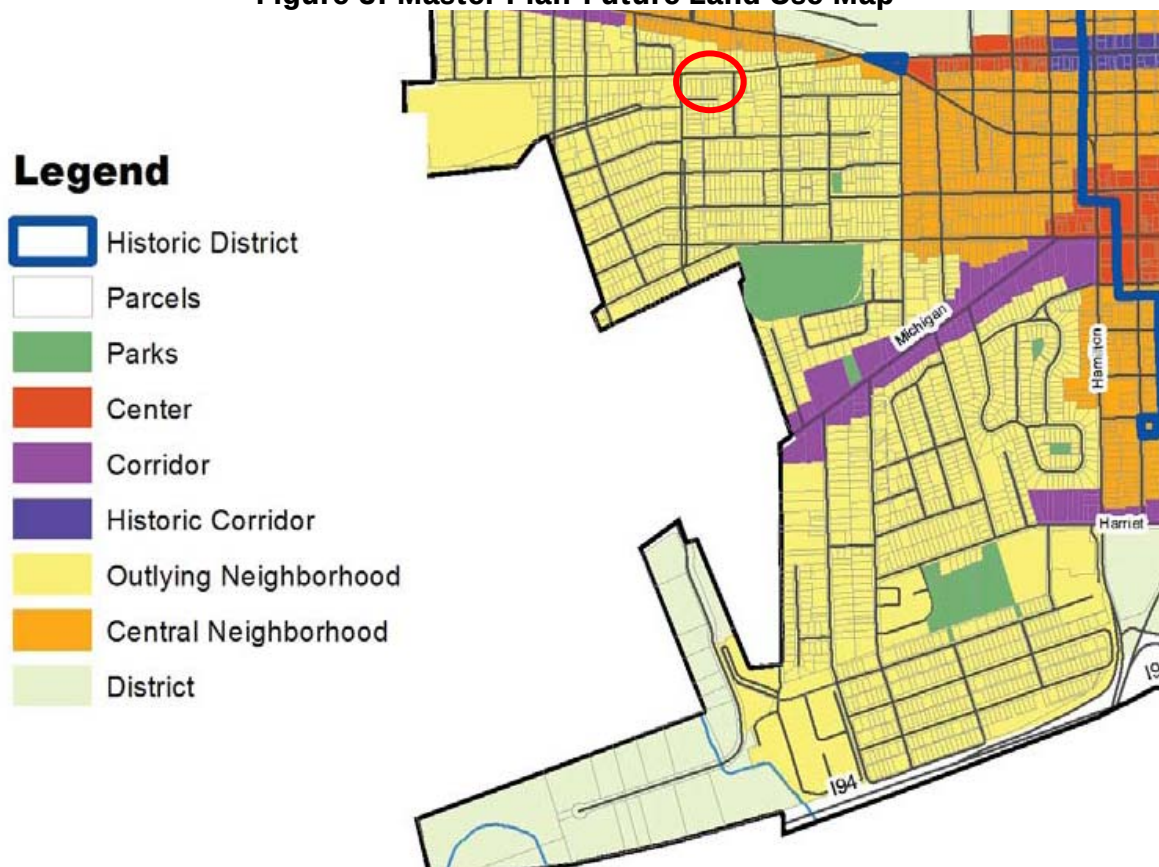
Figure 1: Subject Site Location



Figure 2: Site Aerial (2015)



Figure 3: Master Plan-Future Land Use Map



The master plan calls for the following goal:

Anyone, no matter what age or income, can find a place to call home in Ypsilanti

Housing options should match the needs of the people. Those needs will change as residents age and move. The need for safe, quality, affordable homes for all should be factored into decisions.

This property is in Outlying Neighborhood and as such the master plan calls for the following:

Limit uses to predominantly single-family residential uses in areas with small houses, suited for only single-family.

These neighborhoods will have uses limited to the type of residential for which they were built. In some areas, like the Heritage Park neighborhood in the southwest part of the City, zoning would be changed so that duplexes and group homes would no longer be allowed by right. As many of these areas have aging populations, the City needs to be concerned about the stability of these neighborhoods as demographics shift.

Figure 4: photograph of front/north side



Figure 5: photograph of south and west sides



Figure 6: Land Use and Zoning of Surrounding Area

	LAND USE	ZONING
NORTH	Church and single-family homes	R-1, Single-Family Residential
EAST	Single-family & multi-family homes	R-1, Single-Family Residential
SOUTH	Single-family & multi-family homes	R-1, Single-Family Residential
WEST	Single-family homes	R-1, Single-Family Residential

Figure 7: Current Building /Unit Layout

Unit	Level	Description
1	First	Full bathroom, 3 bedrooms; living room, kitchen/dining
2	Second	Full bathroom, 2 bedrooms, living/dining room, kitchen

CRITERIA AND REVIEW APPLYING TO CLASS A NONCONFORMING USES

§122-206

"Nonconforming uses of buildings shall be designated class A provided that the Planning Commission finds all of the following exists with respect to the use or structure:

(1) The use of structure was lawful at its inception.

COMMENTS: The structure was built as a duplex residence according to the construction permit pulled in 1951. It is unclear as to whether the use of the structure was lawful at its inception however the planning department recognized the structure as a legal non-conforming use of two units in 1990, thus implying legality.

(2) The decision to continue the nonconforming use, if granted, will not alter the essential character of the area or neighborhood.

COMMENTS: There are several other multi-family uses within blocks of the property, including a 7 unit to the east on Sheridan and several duplexes in the area. 953 Sheridan was approved as a special nonconforming use for a duplex this past December. Much of the area surrounding this property has been multi-family uses for years due to its proximity to EMU thus the essential character of the area will not be altered if approved.

(3) Continuance of the use or structure would not be contrary to the public health, safety, or welfare or the spirit of the chapter.

COMMENTS: The rental Certificate of Compliance & Occupancy for this property is valid until June 1, 2017. The rental Certificate of Compliance & Occupancy verifies that the units comply with the International Property Maintenance Code (IPMC). The IPMC is a maintenance document intended to establish minimum maintenance standards for basic equipment, light, ventilation, heating, sanitation and fire safety. As long as the property gets re-certified for rental it is expected that there will not be any affect to public health, safety or welfare.

(4) No useful purpose would be served by strict application of the provisions of this chapter with which the use or structure does not conform.

COMMENTS: Strict application of this provision may result in underutilization of a structure that was purpose built to be two units. There has been one enforcement issue on record in recent past which has since been resolved, thus the records do not indicate any essential defects that would be remedied by reducing occupancy to single-family residential.

CONDITIONS OF APPROVAL

§122-207(2)

The Planning Commission may condition its approval on the following:

(a) Screening and landscaping in keeping with community standards to ensure compatibility with adjacent uses.

COMMENTS: There is existing landscaping to the north and west of the house and a tree in the front yard. All of the site landscaping appears to be well-maintained and compatible with the adjacent uses.

(b) Restrictions on lighting, noise, odor, or visual impact.

COMMENTS: There is an existing pole light in the front yard and a light on the enclosed porch at the rear. Neither light is fully shielded. If/when the exterior lights at the rear are replaced or upgraded, they need to be dark sky compliant and conform with §122-641. The garbage receptacles are stored at the rear of the property on patio pavers and has a partial lattice fence enclosure.

(c) Signage must comply with current zoning district requirements. Existing nonconforming signs may be required to be eliminated or reduced in size and number.

COMMENTS: No signage exists on site.

(d) Replacement of a building must not create a more nonconforming yard setback condition which would impact on conforming properties in the immediate vicinity.

COMMENTS: In the event of casualty, the structure needs to be rebuilt so that the yard setbacks are not anymore non-conforming than they are presently.

(e) Other reasonable safeguards and improvements may be imposed by the Planning Commission to protect conforming uses in the surrounding area.

COMMENTS: Photos submitted by the applicant indicate that the property appears to be in good repair. The rental Certificate of Compliance & Occupancy must be successfully renewed as prescribed by law and maintained as long as the structure is utilized as a rental property.

Items to be addressed:

1. When the exterior lights at the rear are replaced or upgraded, they need to be replaced with fixtures that are dark sky compliant and conform with §122-641.
2. If the structure needs to be rebuilt, it cannot be more non-conforming in regards to the yard setbacks.
3. The rental Certificate of Compliance & Occupancy must be successfully renewed as prescribed by law and maintained as long as the structure is utilized as a rental property.

STAFF RECOMMENDATION

Staff recommends the Planning Commission **approve** the Special Nonconforming Use permit for the duplex at 1111 W Cross St. with the following finding and conditions:

Finding

1. The application substantially complies with §122-206.

Conditions

1. When the exterior lights at the rear are replaced or upgraded, they need to be replaced with fixtures that are dark sky compliant and conform with §122-641.
2. If the structure needs to be rebuilt, it cannot be more non-conforming in regards to the yard setbacks.
3. The rental Certificate of Compliance & Occupancy must be successfully renewed as prescribed by law and maintained as long as the structure is utilized as a rental property.

Cynthia Kochanek
Associate Planner, Community & Economic Development Division

CC File
 Applicant

City of Ypsilanti

Building Department

One South Huron St.
Ypsilanti, MI 48197

Ph: (734) 482-1025

Fax: (734) 483-7444

Certificate of Compliance & Occupancy

Property Address

1111 W CROSS

Owner

AVERNENI LAXMI RUTH
2829 SEMINOLE ROAD
ANN ARBOR MI 48108

Agent

AVERNENI LAXMI RUTH
2829 SEMINOLE ROAD
ANN ARBOR MI 48108

The above listed structure substantially complies with the minimum requirements of the City of Ypsilanti Existing Structures Code and may be used for the number of apartments and rooms as indicated.

This certificate only applies to the structure's use under the Building Codes and in no way does it approve the use under the city's Zoning Ordinance. Zoning approval can only be issued by the City Planner. All zoning questions should be referred to the Planning & Development Department at (734) 483-9646.

Reminder: All battery powered smoke detectors shall be equipped with a minimum 5 year battery

Certificate #: C862-15-0076

Apartments/Rooms: 2

Issued: 06/19/15

Certification Period 06/01/15 - 06/01/17

Certificate expires at the end of certification period.

NOTE: No part of basement approved as sleeping/habitable space.

5/19/15 - Received copy of 5/18/15 approved furnace service check performed by Al Walter's Heating & Cooling per PM-603.7 HVAC Certification Requirement - which certification of inspection shall be provided minimally every 4 years.

Unit #1

Make: Trane Model: TUD060R937K5 Ser. #6353WJAIG

Unit #2

Make: Trane Model: TUD060R937K5 Ser. #6353WJHIG

Mechanical Lic. #7109454 Lic. Expiration: 8/31/16

Next HVAC service check required: May 2019 ?

This Certificate Does Not Represent Compliance With The Americans With Disabilities Act Of 1991

Frank Daniels
Building Department Manager

MORTGAGE SURVEY

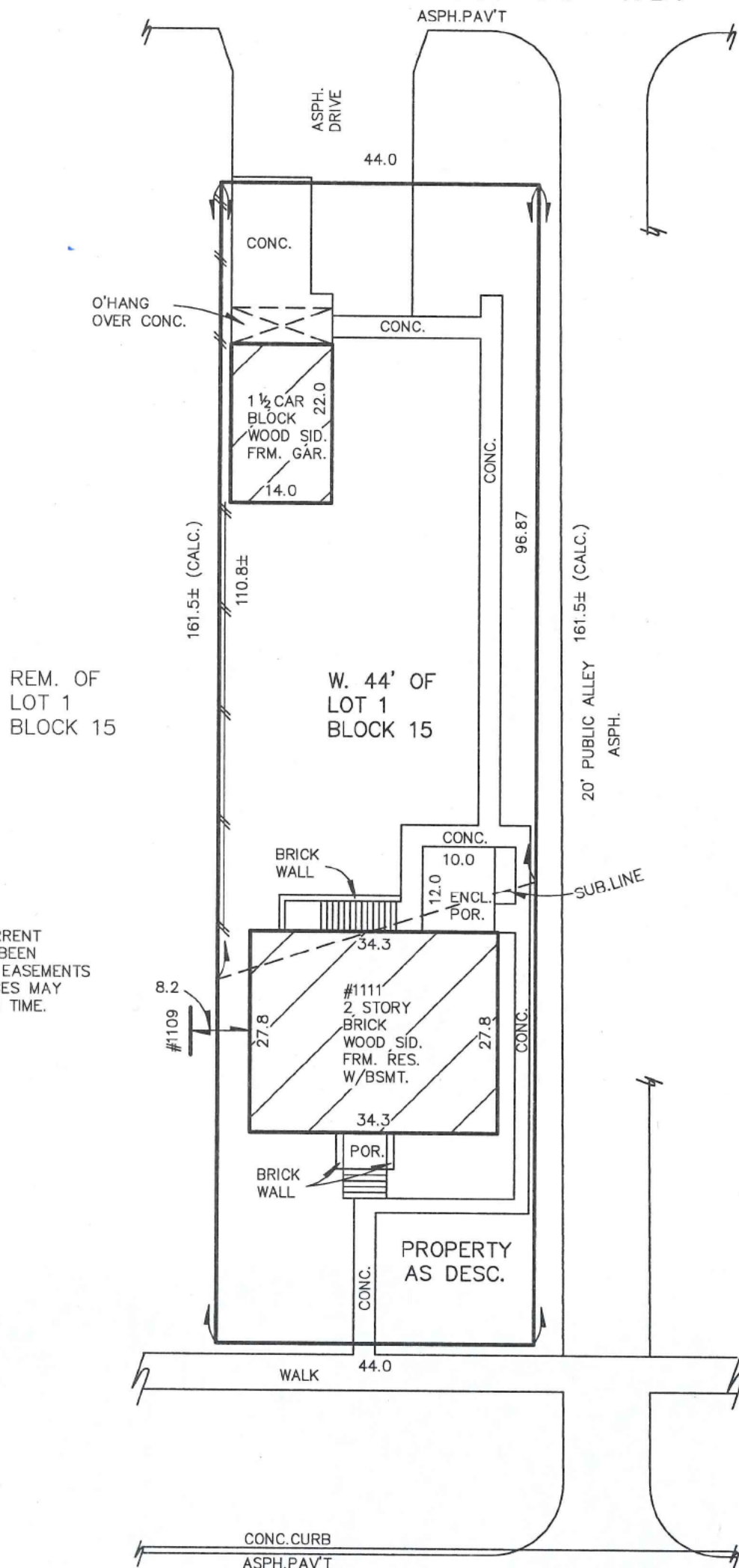
Certified to: PHANENDRA YALAMANCHILI

Applicant: PHANENDRA YALAMANCHILI

Property Description:

West 44 feet of Lot 1 Block 15, and all land lying between said Parcel and Cross Street; NORMAL PARK ADDITION, to the City of Ypsilanti, Washtenaw County, Michigan, as recorded in Liber 1 of Plats, Page 38 of Washtenaw County Records.

WESTMOORLAND ST. 66' WD.



WEST CROSS ST. 100' WD.

CERTIFICATE: We hereby certify that we have surveyed the above-described property in accordance with the description furnished for the purpose of a mortgage loan to be made by the forementioned applicants, mortgagor, and that the buildings located thereon do not encroach on the adjoining property, nor do the buildings on the adjoining property encroach upon the property heretofore described, except as shown. This survey is not to be used for the purpose of establishing property lines, nor for construction purposes, no stakes having been set at any of the boundary corners.



THIS SURVEY DRAWING IS VOID IF THE PROFESSIONAL SEAL IS NOT IN BLUE INK.

JOB NO: 17-00230 SCALE: 1"=20'
DATE: 01/23/17 DR BY: M.L.



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Cynthia Kochanek

From: Bonnie Wessler
Sent: Thursday, March 09, 2017 12:37 PM
To: Cynthia Kochanek
Subject: Fwd: 1111 W. Cross St

Happy Connecting. Sent from my Sprint Samsung Galaxy S® 5

----- Original message -----

From: Edward Wallace <[REDACTED]>
Date: 3/8/17 21:53 (GMT-05:00)
To: Bonnie Wessler <bwessler@cityofypsilanti.com>
Subject: 1111 W. Cross St

To whom it may concern,

I am Edward Wallace I live in the first floor Apartment at 1111 W. Cross, I've seen the entire building and the work done to restore this building to original 50's style. This is truly a building that Ypsilanti can be proud to have in it's community. This building should remain the same if anything bad ever happens to this building to it it would be a huge loss to the community. Keeping this building exactly as it was created would be the way to go kinda a landmark, it stands out a one of the best looking buildings in Ypsilanti. If you have any other questions for me your welcome to call my cell 1-[REDACTED]

Thanks,

Edward Wallace



February 20, 2017

**Staff Review of Site Plan Review Application
Patient Station New Build
539 S. Huron**

GENERAL INFORMATION

Applicant: Patient Station
James Nemeth
539 S. Huron
Ypsilanti, MI 48197

Project: Patient Station New Build

Application Date: January 18, 2017

Location: East side of S. Huron St between I-94 and Spring St

Zoning: GC-General Corridor

Action Requested: Approval of site plans for new building and location on site

Staff Recommendation: Conditional Approval

PROJECT AND SITE DESCRIPTION

Parcel # 11-11-37-101-002 has frontage on S. Huron St. There is some discrepancy in the total area of the parcel, assessing indicates that the parcel is 0.96 acres and the survey included with the plans indicates parcels 1 and 2 (which make up the parcel) are 1.24 acres. There is an existing 540 square foot single story building on site. There are approximately 15 parking spaces in the lot, but there does not appear to be an ADA compliant space. There are three curb cuts on the site, two off of S. Huron and one off of Kramer St, access from the Kramer St curb cut is blocked by wheel stops about 50' inside the lot.

The property was zoned B2-Community Business which allowed medical marijuana dispensaries as a permitted use in 2013 when this use was established. The property is currently zoned **GC- General Corridor**, which no longer permits medical marijuana dispensaries thus this is a legal nonconforming use. The moving of a nonconforming use is addressed in §122-205(2)(c) which states that an existing structure containing a nonconforming use shall not be enlarged, constructed, reconstructed, moved or structurally altered or extended, unless the use is changed to a use which is permitted in the district in which the structure is located. This refers to moving off-site. The proposed building is more conforming in regards to setbacks, frontage, and orientation than the current structure. If approved, the applicant will be required to limit the dispensary use to no more than 540 square feet in the new structure, under the current zoning ordinance, and eliminate the use in the existing building.

The submitted plans call for the building of a new 7,040 square foot structure to the southeast of the current 540 square foot structure, which is to remain. There are 27 parking spaces planned with 2 ADA spaces, the parking lot will be just to the north and east of the new structure, to the side and rear of the building. A dumpster enclosure is included to the southeast of the structure and the existing curb cuts are to remain.

The zoning ordinance states that a lot may consist of a portion of a lot of record, and 122-274(d)(3) allows for multiple building types on a single lot of record, provided the area requirements for each are met. Thus, due to the "boomerang" shape of the lot, we are considering the southern part of the lot of record the lot for the purposes of performing the site review. Figure 1 shows the split in building type lots; "Parcel 2," to the south is considered the subject lot; Parcel 1, to the north, is left as existing nonconforming.

Figure 1: Subject Site Location

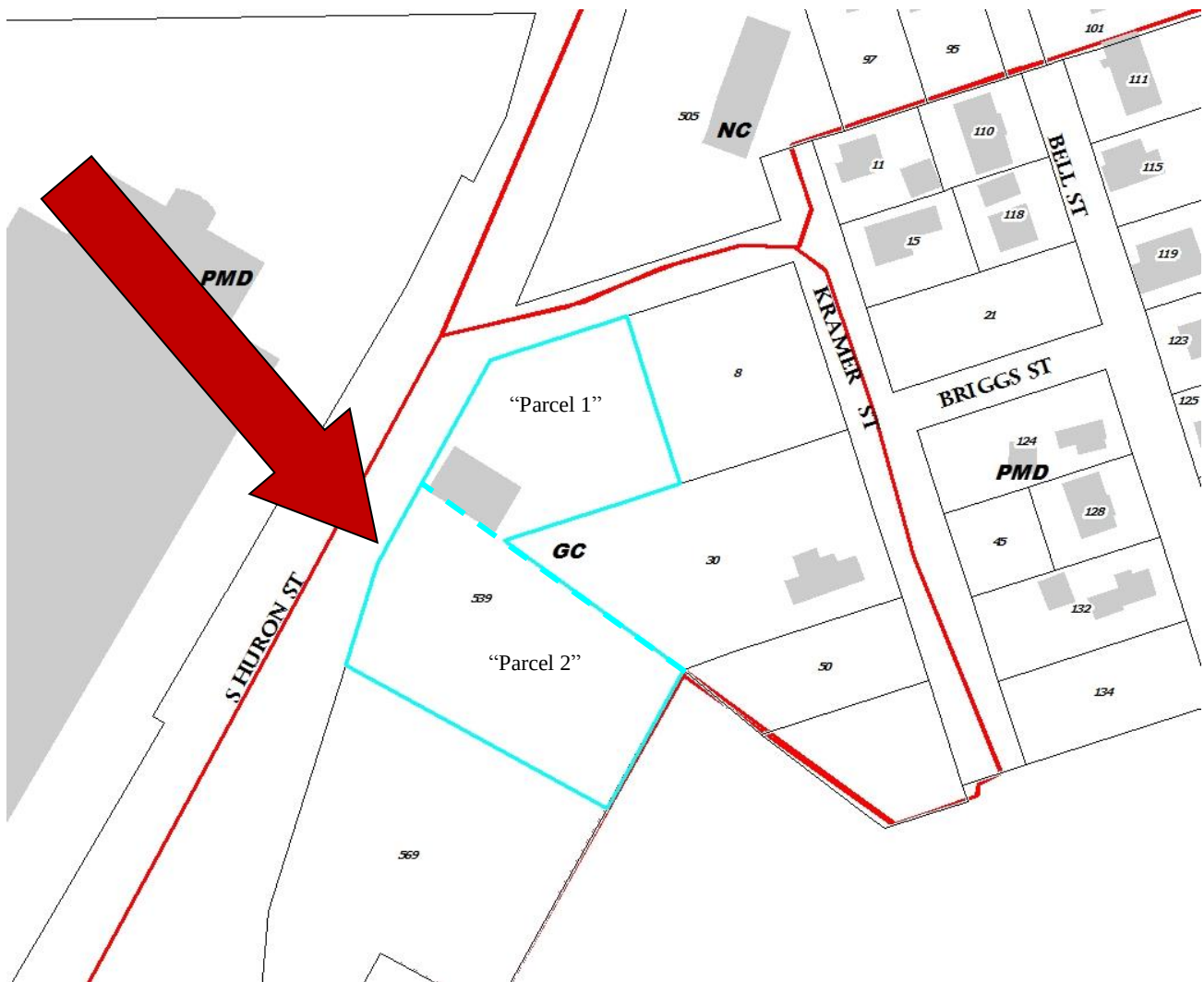


Figure 2: Site Aerial (2015)

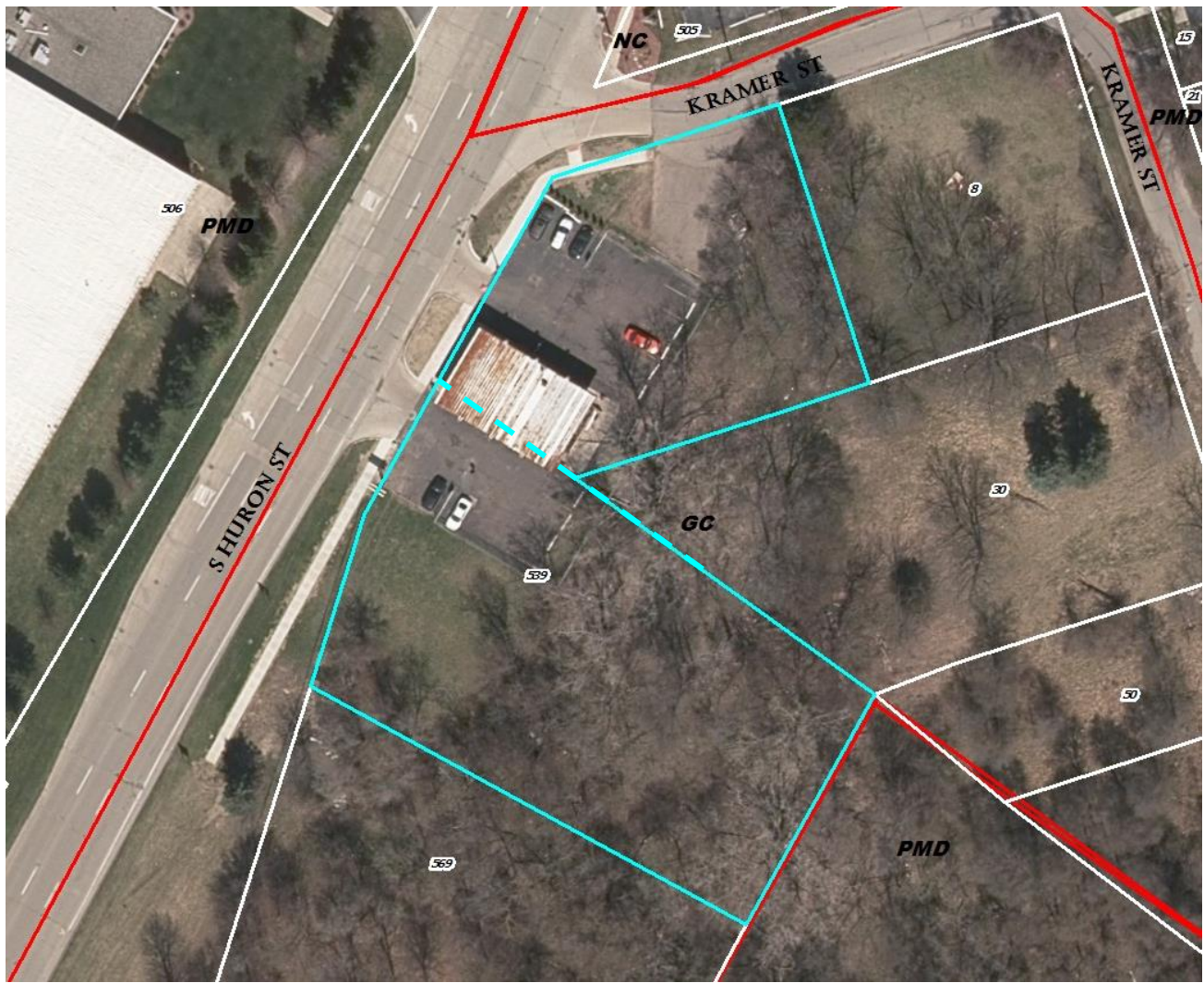


Figure 3: photograph of site (Google street view, Aug 2016)



Figure 4: Land Use and Zoning of Surrounding Area

	LAND USE	ZONING
NORTH	Gas Station	NC- Neighborhood Corridor
EAST	Residential	PMD- Production, Manufacturing, Distribution
SOUTH	Vacant Land I-94 Ramp	GC- General Corridor PMD- Production, Manufacturing, Distribution
WEST	Warehouse	PMD- Production, Manufacturing, Distribution

SITE PLAN: CRITERIA AND REVIEW

§122-128

STANDING

§122-128(1)

The applicant is legally eligible to apply for site plan review, and all required information has been provided.

REQUIREMENTS

§122-128(2)

"The proposed site plan conforms with all the provisions and requirements, as well as the spirit and intent of this chapter and the Master Plan. The proposed development will meet all the regulations of the zoning district in which it is located."

Figure 5: Requirements

ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
GC: BUILDING TYPE §122-274	Determined by lot size	Single story commercial	Single story commercial

ORDINANCE REFERENCE	REQUIRED		EXISTING CONDITIONS	PROPOSED
LOT REQUIREMENTS				
Width ft	Min 50	Max 300	164.65' (west) 121.83' (east)	Unchanged
Depth ft	Min 100	Max 300	238' (north) 210' (south)	Unchanged
Area sf	Min 7500	Max 90,000	33,453 sf (parcel 2)	Unchanged
Coverage %	Min -	Max 60%	Building footprint: 540 sf/33,453= 1.6%	Building footprint: 7,040+540/33,453= 22.7%, meets
BUILDING ENVELOPE AND HEIGHT				
Street setback ft	Min 5	Max 15		5' - 17.8', average: 11.4', meets, the property line is not on the same angle as S Huron. The proposed building is to be built in line with S. Huron.
Side setback ft	Min 0	Max -		6.6', south lot line 76.5', average from north lot line, meets
Rear setback ft	Min 15 (25 if adjacent to existing SF)	Max -		94' – 96', meets
Frontage buildout %	Min 50	Max 100		~39%, does not meet
Height stories	Min 1	Max 1	1	1
PARKING PROVISIONS	Location: side, street-side and rear		Side, street-side	Side, rear
PRIVATE FRONTAGES	Permitted: Commercial		Commercial	Commercial
Distance between façade openings ft	Min --	Max 2		0.5' – 7', does not meet
Door recess Ft	Min --	Max 5		n/a
Ground floor transparency %	Min 60	Max -		~31%, does not meet
Height to bottom of window ft	Min --	Max 2.5		~2', meets

ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
Interface zone	Extended sidewalk from right-of-way		Sidewalk exists along S. Huron, connects to the path surrounding the structure using the existing curb cut and driveway.
§122-861 et seq	SIGNAGE Master sign plan: HC, NC, GC, C, PMD, P; nonres uses in R1, CN-SF, CN-Mid, CN, MD	Existing pole sign is not used, signage exists in windows	No signage indicated on plans other than the existing pole sign. Abandoned pole sign should be removed.
Area maximum			submit master sign plan with sign application
Height maximum			submit master sign plan with sign application
Setbacks minimum	Front property line: 3' Side/rear property lines: 10'	Existing sign in the ROW.	n/a

Items to be Addressed:

1. Applicant to attempt to bring the west elevation more into compliance with the private frontages requirements.
2. Applicant to provide a 5' path from the sidewalk in the ROW to the interior paths on site.
3. Applicant to provide a master sign plan for all existing and proposed signage with sign permit applications.
4. Applicant to remove the abandoned pole sign on site.

BUILDING LOCATION AND SITE ARRANGEMENT

§122-128(3)

"All elements of the site plan shall be harmoniously and efficiently organized in relation to the character of the proposed use, the size and type of lot, the size and type of buildings, and the character of the adjoining property. The site shall be so developed as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this chapter."

The lot is an odd shape that does not run parallel to S. Huron, thus posing some issues with the siting of the new structure. The existing building is to remain on site and a new one story structure is proposed to be built south of the existing structure, perpendicular to S. Huron St. The three existing curb cuts, two on S. Huron and one on Kramer, are to remain with the southernmost one to be utilized as the main entrance for the new structure. The existing chain link fence to the south the current structure is to be removed.

The proposed entrance to the building is located in the northwest corner of the new structure facing the proposed parking lot to the north of the structure. The proposed parking lot includes 27 parking spaces, including two ADA compliant spaces, a 10' x 50' loading zone to the rear of the structure and a dumpster enclosure at the southeast corner.

This arrangement is not optimal however the shape of the lot provides some difficulties. Even with those issues the structure could be oriented differently.

Items to be Addressed: Applicant to explore other options in the location and siting of the proposed structure.

SITE ACCESS, TRAFFIC, AND PARKING

§122-128(4)

"With respect to vehicular and pedestrian circulation on the site, including walkways, interior drives, and parking; circulation shall to the extent possible create potential cross-and joint-access to adjacent parcels and the existing block layout. Special attention shall be given to the location, number and spacing of ingress and egress points; general interior circulation including turnaround areas; adequate provisions for delivery of services (trash removal, school buses, mail and parcel delivery); separation of pedestrian and vehicular traffic; avoidance of building corners next to access drives; identification of addresses; storage of plowed snow; and arrangement of parking areas that are safe and convenient, and insofar as practicable, do not detract from the design of the proposed buildings and structures, neighboring properties, pedestrian and bicyclist safety, access to transit and flow of traffic on adjacent streets. All buildings or groups of buildings shall be so arranged as to permit adequate access by emergency vehicles as required by the city building code."

Proposed vehicular access utilizes the current southernmost curb cut off of S. Huron. No new curb cuts will be added. Bicycle and pedestrian access is via the same point, thus sharing the driveway with vehicles. The closest AAATA bus stop is at S. Huron just north of Harriet St, this stop is approximately 635 feet from the proposed building. AAATA routes 45, 46 and 47 stop at that location. Routes 45 and 47 have stops on Harriet just east of Hamilton and route 46 has a stop on Hamilton just south of Harriet. The sidewalk continues on only another 45' to the south of this parcel as there is currently no pedestrian/bike lane over the S. Huron St bridge over I-94. There are 27 vehicle parking spaces proposed on site, with a loading area to the east of the proposed structure. No bicycle parking spaces appear on the site plan.

Figure 6: Site Access, Traffic and Parking

ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
GC: §122-273 CIRCULATION STANDARDS	CN, C, HC, NC, GC, HHS: Sites <3 acres: circulation plan to ID potential cross and joint access to adjacent parcels Sites >3 acres: block plan		None provided, please provide a circulation plan
§122-834 PARKING Dimensions	• 9'x18' minimum, exceptions if adjacent to wall or overhang provided • May have 20% small car (8'x16', signed) • May have 10% motorcycle (5x8', signed)		9'x18' parking dimensions proposed, meets

§122-835	Access	5' walkway from parking lot to parks, commercial, transit, walkways, institutions; raised/marked crosswalks within parking lot		5' sidewalk exists, 5' internal walkway, connection between the two utilizes the driveway, no marked crosswalks indicated within the parking lot. No ramp indicated at building entrance.
	Ingress & Egress	- Aligned across ROW, or offset by 25' >50' from intersection 20'-30' driveway	S. Huron: existing.	Requirements met for the existing S. Huron St. drives
	Internal Maneuvering	10' width driveway		20' width drive, meets
	Surfacing	paved with a durable bonded material in accordance with accepted engineering standards		See engineering letter.
	Drainage			See engineering letter.
	Striping	spaces shall be outlined with three-inch wide strips of white or yellow paint, except that barrier-free spaces shall be blue, with a symbol of compliance in blue.		Adequate
	Wheel Stops	wheel stops or curbing shall be provided for all parking spaces		Curbing indicated on plans, see engineering letter.
	Lighting	Parking lots utilized during night-time hours shall be artificially illuminated		Lighting fixture locations and type shown on plans. Photometric submitted.
	Screening & Landscaping (internal)	1 tree per 8 spaces		27/8=3.375, 4 trees required, 18 on site, 9 proposed and 9 existing, not including the 3 new & 9 existing trees up front counted to meet the street tree requirement, meets
		1 landscape island for each 16 spaces		Meets

		Islands w trees: 9' wide min and 160' sf Islands w 5' min walkway: 11' wide min Islands: curbed or used for stormwater		Island w/ tree just northeast of structure is listed at 128 sf does not meet the required min sf
		All aisle-ends & corners protected w curbed island		All aisle-ends & corners protected w/curbed island, meets
Screening & Landscaping (perimeter)		Screened in accordance with 703 if abutting R1, MD, CN, CN-Mid, CN-SF		Not required
		3'-4' screen 80% opacity where visible from ROW		Parking lot screening for the southern end includes existing trees, 3 new trees and 16 shrubs; northernmost spaces screened by 4 shrubs and a tree, the shrubs are on the low end of height for screening, applicant to consider switching those proposed with the wintergreen boxwoods located farther back on the site.
		Landscaped areas, walls, structures, walks- must be protected by curbing		See engineering letter.
§122-836	Motor spaces	1 for each 300 square feet of gross floor area.		7040/300=24 spaces required, proposed=27 spaces, less than 120% of requirement, meets
	Bicycle spaces	1 per 5 motor spaces, minimum of 2	None	27/5 = 5.4; 6 required, none provided, applicant to provide 6 bike spaces.
122-837	Parking discounts	Transit	~600' to closest transit stop	~635' to closest transit stop
		Alternative Vehicles	None	n/a
		Bicycle	None	n/a

		PC discretion, special circumstances not listed above		n/a
§122-647	SIDEWALKS	provide a sidewalk or shared-use path	None	A 5' sidewalk adjacent to S. Huron St exists on site. Internal 5' sidewalk surrounds the proposed structure. The connection between the two utilizes the driveway and is not acceptable. See engineering letter.
§122-649	TRAFFIC VISIBILITY	Maintain shrubs/other obstructions lower than 30" and trees/other obstructions higher than 8': At driveway: within a 10'x10' triangle formed by the street ROW line and the edge of the driveway At intersection: within a 25' x 25' triangle formed by an extension of the property lines, as measured from the pavement edges.		Unlabeled tree at northwest corner of property is at the corner of the 10' visibility triangle, it either needs to be moved or maintained higher than 8'; other site plantings are not anticipated to cause additional visibility issues. Existing unused pylon sign is likewise within the visibility triangle; applicant to remove.

Items to be Addressed:

1. Applicant to increase the size of the landscape island with the tree just northeast of structure to the required 160 sf.
2. Applicant to switch the proposed cranberry cotoneasters on the northwest aisle end with the wintergreen boxwoods located farther back on the site.
3. Applicant to provide 6 bike spaces on site.
4. Unlabeled tree at northwest corner of property at the corner of the 10' visibility triangle either needs to be moved or maintained higher than 8'.
5. Applicant to remove existing unused pylon sign located south of the drive.
6. Applicant to address issues as listed in the engineering review.

ENGINEERING & STORMWATER

§122-128(6), §122-128(7)

(6) Adequate services and utilities including sanitary sewers shall be available or provided, with sufficient capacity to properly serve the development. Appropriate measures will be taken to ensure that site drainage will not adversely affect adjoining properties or the capacity of the public storm drainage system, or nearby bodies of water. Provisions shall be made to accommodate stormwater and prevent soil erosion. All stormwater management facilities, including but not limited to storm sewers and detention/retention facilities, shall be

designed in accordance with the "Rules of the Washtenaw County Water Resources Commissioner," together with any special provisions established by the city.

(7) Natural resources will be protected to the maximum feasible extent. The proposed development will not cause soil erosion or sedimentation problems, and will respect floodways or floodplains on or in the vicinity of the subject property.

Site plan approval is subject to engineering review.

Items to be Addressed: See attached engineering review.

SCREENING

§122-128(8)

"The site plan shall provide reasonable visual and sound privacy for all dwelling units on or adjacent to the property. Fences, walks, barriers, and landscaping shall be used, as appropriate, for protection and enhancement of the property. All outdoor storage of materials, loading and unloading areas, and refuse containers shall be screened or located so as not to be a nuisance. Outdoor lighting shall be shielded so as to not adversely affect neighboring properties or traffic on adjacent streets."

Figure 7: Screening

ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
§122-641 Lighting	• Dark Sky compliant; may be full cutoff where affecting residential uses • not >0.5 fc @ lot line • not >16'in height • not < 0.3 fc		Seven light poles indicated on specs only 6 shown on photometric; more than 0.5 foot-candles indicated at west lot line near driveway and again near the building.
§122-650 Refuse Containers	masonry enclosure 1' taller than dumpster (no less than 6'), in rear yard, 80% opaque swing door, on a concrete pad	Not shown	Submitted; see engineering review.
§122-703 Screening Between Land Uses <i>if conflicting use</i>	visual buffer of at least 80% opacity and 6' height		n/a
§122-704 Street Trees	1 tree per 30' of lineal frontage, centered between sidewalk and back of curb	244.35'/30'=8 trees required	4 trees placed within front yard and 9 existing trees on site, meets
§122-708 Site Landscaping	10%	10%*54,084=5,408	~4,772 sq ft in southern portion of parcel plus ~1,000 sq ft existing in the northern portion, meets
122-711 Landscape Elements	Quality, composition, berms, spacing, species		Meets

ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
	Credit for existing vegetation		9 trees at the rear and 9 at front marked as existing
§122-712 Maintenance	Readily available and acceptable water supply; may install underground sprinkler system		Irrigation system or maintenance plans not indicated.
§122-713 Fencing, hedges, walls, berms	GC; shall not exceed ten (10) feet in height, and must be constructed in the side or rear yard.		n/a

Items to be Addressed:

1. Applicant to resubmit a photometric plan that includes compliant measurements and the missing pole light for staff review.
2. Applicant to submit plans for landscaping maintenance for staff review.

PHASING**§122-128(9)**

"Separate phases of development shall be in logical sequence, and each phase shall stand alone so that no one phase will depend upon a subsequent phase for adequate access, public utility services, drainage, or other improvements."

There is no indication of phasing on the plans.

OTHER DEPARTMENT AND AGENCY APPROVALS**§122-128(10)**

"Site plans shall conform to all applicable requirements of state and federal statutes, including health and pollution laws, fire or explosion hazards, toxic and hazardous materials, and barrier-free requirements. Site plan approval may be conditioned on the applicant receiving necessary county, state, or federal permits before a local building permit or occupancy permit is granted."

DEPARTMENT OF PUBLIC SERVICES

The applicant is responsible for obtaining permits from the Department of Public Services before beginning work on any portion of the City right-of-way, including sidewalks, curbs, and driveways on Kramer, if planned.

FIRE DEPARTMENT

As the applicant is requesting changes to parking area circulation, Fire Department review is required. The Fire Department has no objections to the proposed site plan; awaiting their response to the engineering review concern regarding the hydrant location.

MICHIGAN DEPARTMENT OF TRANSPORTATION

The applicant is responsible for obtaining permits from the Michigan Department of Transportation before beginning work on any portion of the State right-of-way, including sidewalks, curbs, and driveways on S. Huron St.

MASTER PLAN CONSIDERATIONS**§122-128(11)**

"An objective of site plan review shall be to protect and promote public health, safety, sustainability and general welfare. It is also the intent of site plan review to improve the quality of existing developments as they are expanded, contracted, or redeveloped in keeping with sound site development standards of this chapter and city master plan."

Great place to do business, especially green and creative. This new build helps with the potential growth of a local business, or creates new medical office space in a convenient location.

STAFF RECOMMENDATIONS: SITE PLAN

Staff recommends the Planning Commission **approve** the Site Plan for the Patient Station New Build at 539 S. Huron St. with the following finding and conditions:

Finding

1. The application substantially complies with §122-127.

Conditions

1. Applicant to limit the dispensary use to no more than 540 square feet in the new structure and to discontinue use in the existing structure. Zoning authorization will be required for any expansion of the dispensary use.
2. Applicant to attempt to bring the west elevation more into compliance with the private frontage requirements.
3. Applicant to provide a 5' path from the sidewalk in the ROW to the interior paths on site.
4. Applicant to provide a master sign plan for all existing and proposed signage with sign permit applications.
5. Applicant to remove the abandoned pole sign on site.
6. Applicant to increase the size of the landscape island with the tree just northeast of structure to the required 160 sf.
7. Applicant to switch the proposed cranberry cotoneasters on the northwest aisle end with the wintergreen boxwoods located farther back on the site.
8. Applicant to provide 6 bike parking spaces on site.
9. The unlabeled tree at northwest corner of property either needs to be moved or maintained with its lowest branches higher than 8'.
10. Applicant to address issues listed in the engineering review.
11. Applicant to resubmit a photometric plan that includes existing and proposed lighting, both cut sheets and photometric plan.
12. Applicant to submit plans for landscaping maintenance for staff review.

Cynthia Kochanek
Associate Planner, Community & Economic Development Department

CC File
 Applicant
 Site designer

February 28, 2017

City of Ypsilanti
Planning and Development Department
One South Huron Street
Ypsilanti, Michigan 48197

Attention: Ms. Bonnie Wessler

Regarding: 539 S. Huron
Site Plan Review No. 1
OHM Job No. 0094-17-1010

Dear Ms. Wessler:

The applicant is requesting site plan approval for site redevelopment at 539 S. Huron. The project consists of a building demolition and a new building and parking lot construction. We have reviewed the plans dated January 18, 2017 for compliance with local ordinances and general engineering standards and do not recommend site plan approval at this time. The following items shall be addressed prior to resubmitting the plans for review:

1. A permit from the Michigan Department of Transportation (MDOT) will be required for all work within the Huron Street right-of-way. It appears work will be required in the right-of-way for the utility service connections.
2. The Fire Department will review the plan to ensure adequate fire hydrant coverage exists for the proposed building.
3. Approval from YCUA will be required for all work associated with the water supply and sanitary sewer.
4. The plans are not clear if the 2" Type K copper water service is existing or proposed.
5. The proposed sewer lead is shown tapping an existing manhole in Huron Street. Service connections at manholes are not allowed.
6. Vehicle circulation templates shall be provided for the largest anticipated vehicle. It appears the entrance geometry may be problematic for incoming vehicles.
7. Sidewalk that abuts parking spaces shall be a minimum of seven feet wide to accommodate vehicle overhang.
8. Additional information is required regarding the proposed underground detention system. Based on the findings of the Phase I assessment, measures will need to be taken to ensure groundwater and potential contamination do not impact the storm water to be discharged from the site.
9. Curb does not appear to be proposed in the south east corner of the site between the dumpster and building. Clarification is needed in this area.

If you have any questions, please contact me at (734) 522-6711.

Sincerely,
OHM Advisors
Marcus McNamara

CC: Stan Kirton, Department of Public Works
Scott Westover, YCUA
File

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Ypsilanti Non-Motorized Advisory Committee Meeting Minutes

Thursday, March 2, 2017

1. Call to order - The meeting was brought to order at 7:05pm, March 2, 2017 at the Ypsilanti District Library, 229 West Michigan Avenue. Committee members attending were Tony Bedogne, Cathie Kinzel, Sarah Walsh and Bob Krzewinski. Also attending was City Council member Pete Murdock.
2. Introductions
 - a. Audience participation/public input – None.
3. General business
 - a. Agenda approval – A motion was made by Sarah, seconded by Tony, to approve the agenda, passing unanimously.
 - b. Approval of January meeting minutes – A motion was made by Tony, seconded by Sarah, to approve the January meeting minutes (the February 2017 meeting was cancelled), passing unanimously.
 - c. Officer reports - Contained in agenda items below.
 - d. By-laws – Committee Vice Chair & Secretary appointments – A motion was made by Tony, seconded by Cathie, to appoint Sarah as Committee Vice-Chair, passing unanimously.
4. Old & continuing business
 - a. 2017 Committee priorities
 - Bike lanes – Complete bike lane on Forest and extend the West Cross bike lane from Wallace Street to the western City limit – Pete indicated the Forest Avenue bike lane (Prospect to Norris) will be painted in the spring. Cathie discussed talking with Larry Deck of the Washtenaw Bicycling & Walking Coalition (WBWC) about cycling safety improvement to Cross/Packard from Ypsilanti to Ann Arbor and Bob will bring up installing more Share The Road signs at the next WBWC meeting. Pete indicated that West Cross is slated to be repaved in 2021 and now would be a good time to gather support from the Ypsilanti School Board, our County Commissioner for improvements around Estabrook School, as well as investigate Safe Route To Schools grants.
 - I-94/Huron non-motorized improvements – Indications are still looking at 2021 for improvements.
 - Border To Border Trail – On the Trail re-route through Riverside Park & Water Street, Bob passed out a map of route and is working with the City (and will contact the City Parks & Recreation Commission along with City Council) and Washtenaw County Parks for signage. The need for an Ypsilanti Trail completion master plan was also reemphasized and Bob will talk to the City and Washtenaw County Parks about this with a walking tour of potential routes in April. The Friends of the Border To Border Trail are researching revising Google maps to show more consistent Trail labeling on Google maps. The Michigan Avenue HAWK light near the Huron River is operational. Water Street soil contamination remediation is expected to start in March and will take 2-3 weeks after which a grand opening event will take place. Governor Snyder just put a request in for \$5 million for trail development during 2018/19 which could bring more local funds. The Michigan Department of Natural Resources is urging Boy/Girl Scout groups to conduct hikes National Trail Day (1st Saturday of June) and Bob has contact local Scout groups about this.

- Walk Friendly & Bike Friendly Community applications submitted – Bob will set up a Doodle poll for a separate meeting in March to work on completion of these applications.
- Pedestrian safety signage (including radar speed readout signs) – Pete talked about the recent City Council action to have MDOT make improvements to pedestrian safety signage on West Cross Street and also make the West Cross/Huron intersection safe for pedestrians. Pete also indicated that in the budget for 2017 street repaving projects, there may be room for radar speed readout signs.
- Sidewalks - Washtenaw Avenue – Fill gaps and bring up to standards sidewalks on both sides of the road from Oakwood Street to Hewitt Road – Bob will contact ReImagine Washtenaw about having a speaker at a future meeting.
- Accessibility in City parks – A short discussion was held on possibly having Washtenaw County Parks fund improvements.

- b. Non-motorized plan – A discussion was held on the need to complete the update of the Plan.
- c. Bike Friendly Business applications – No new updates.
- d. Traffic calming – Depot Town, Congress Street – As discussed in the “Pedestrian Safety Signage” bullet point above, Congress may be a good location for radar speed readout signs once the street is repaved in 2017.
- e. MDOT improvements (pedestrian signage-curb cuts) – The Planning Commission is expected to take action on the Committee resolution urging MDOT improvements at its March 15th meeting at which Bob will attend.
- f. Capitol Improvements Plan (CIP) inclusion of non-motorized projects- Pete indicated a number of non-motorized projects were added to the CIP at a recent City Council meeting.
- g. City Council budget non-motorized project recommendations – Tony attended the City Council budget meeting and reported on the proceedings. Pete also provided Committee members with projected City road and non-motorized budget amounts over the next five years.
- h. Bike repair stations – Sarah reported that Eastern Michigan University has purchased three bike repair stations with two to be installed on the main campus and one at the Business Center downtown. Bob is still working with the downtown Library for two stations, one at Library Plaza Park and the other at the Parkridge Community Center.

5. New Business

- a. Planning Department update – Contained in agenda item reports.
- b. Sidewalk snow removal – No updates.
- c. Wayfinding signs – A short discussion was held on a second phase of sign additions geared towards pedestrians and bicyclists.

6. Other Items – Announcements - Ypsi Bike Co-Op, Corner Brewery, Sunday, March 5, 4pm.

7. Adjournment – A motion was made by Bob, seconded by Tony to adjourn the meeting, passing unanimously.

The meeting adjourned at 8:18pm with the next meeting being Thursday, April 6 at the downtown Library.

BASELINE ENVIRONMENTAL ASSESSMENT

539 S. Huron Street, Ypsilanti, Michigan

PREPARED FOR James & James Holdings, LLC
539 S. Huron Street
Ypsilanti, Michigan, 48197

PROJECT # 12150F-2-26

DATE January 20, 2017

BASELINE ENVIRONMENTAL ASSESSMENT

539 S. Huron Street, Ypsilanti, Michigan

PREPARED FOR James & James Holdings, LLC
539 S. Huron Street
Ypsilanti, Michigan, 48197

PROJECT # 12150F-2-26

DATE January 20, 2017

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BASELINE ENVIRONMENTAL ASSESSMENT

539 S. Huron Street, Ypsilanti, Michigan

AKT Peerless Project No. 12150F-2-26

1.0 Introduction

AKT Peerless prepared this Baseline Environmental Assessment (BEA) for the property located at 539 S. Huron Street, Ypsilanti, Washtenaw County, Michigan (the subject property). AKT Peerless' scope of work was based on (1) Section 20126(1)(c) of Part 201 of the Natural Resources and Environmental Protection Act (NREPA), Michigan Public Act 451, 1994, as amended, and (2) AKT Peerless' proposal PF-20085, dated November 17, 2016, and the terms and conditions of that agreement.

AKT Peerless prepared this BEA to provide a written document that describes the results of an all appropriate inquiry (AAI) and the sampling and analysis that confirm that the subject property is a "facility."¹ This BEA was prepared in accordance with Section 20126(1)(c) of Part 201 of the NREPA, Michigan Public Act 451, 1994, as amended ("Part 201"), and provides an independent, professional evaluation and opinion regarding existing environmental conditions associated with the subject property. The BEA establishes a liability exemption for the cleanup of existing contamination at the subject property.

This BEA was conducted on January 20, 2017. On behalf of James & James Holdings, LLC, this BEA is being submitted to the Michigan Department of Environmental Quality (MDEQ).

The property is described in further detail in Section 2.0. A legal description for the property is included in Appendix A. Refer to Figure 1 for a topographic location map and Figure 2 for a site map.

1.1 Owner/Operator Information

This BEA was prepared by AKT Peerless on behalf of the following:

Prospective Property Owner:

James & James Holdings, LLC
539 S. Huron Street
Ypsilanti, Michigan 48197

¹ "Facility" means any area, place, or property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located. Facility does not include any area, place, or property where any of the following conditions are satisfied: (i) Response activities have been completed under this part that satisfy the cleanup criteria for unrestricted residential use. (ii) Corrective action has been completed under Part 213 that satisfies the cleanup criteria for unrestricted residential use. (iii) Site-specific criteria that have been approved by the department for application at the area, place, or property are met or satisfied and both of the following conditions are met: (A) The site-specific criteria do not depend on any land use or resource use restriction to ensure protection of the public health, safety, or welfare or the environment. (B) Hazardous substances at the area, place, or property that are not addressed by site-specific criteria satisfy the cleanup criteria for unrestricted residential use.

1.2 Intended Use of the Property

James & James Holdings, LLC intends to purchase the subject property on February 8, 2017, and intends to redevelop the subject property for continued commercial use as a medical marijuana dispensary.

1.3 Summary of All Appropriate Inquiry Phase I Environmental Site Assessment (ESA)

On November 3, 2016, McDowell & Associates (McDowell) prepared a Phase I ESA for the subject property in general conformance with American Society for Testing and Materials (ASTM) Standard Practice E 1527-13 on behalf of James & James Holdings, LLC. The area subject to McDowell's assessment included the subject property as described in Section 2.0 and the southern adjoining property located at 569 S. Huron Street, which consisted of wooded land totaling approximately 1.18 acres.

McDowell identified the following recognized environmental conditions (RECs) in connection with the subject property:

- REC 1** - Based on historic sources reviewed, the northern portion of the property was previously used as a gasoline station. The 1950 and 1964 fire insurance maps depict three underground storage tanks (USTs) along S. Huron Street. No records were found regarding the removal of these USTs. Building department records indicate a new gasoline station was constructed in 1972 with five USTs north of the building, near Kramer Street. Five USTs were reportedly removed in 1986. No prior sampling and analyses-related documentation has been provided to McDowell & Associates, nor was it available in local building, assessing, and fire department records or the MDEQ. Five monitoring well covers labeled "Amoco Test Well" were observed in the parking lots during the site reconnaissance.
- REC 2** - The database report identified the subject property address of 539 S. Huron Street on the Brownfield database. A Freedom of Information Act (FOIA) request was submitted to the MDEQ to review available files for that site; however, MDEQ personnel indicated that no files were found for that address.
- REC 3** - The log of soil boring sheets for two soil borings advanced on the property show between 3'9" and 7'-0" of fill soil on the property. The origin of the fill soil is unknown.
- REC 4** - The eastern and southern adjoining property was historically the City of Ypsilanti landfill. According to city records, methane was reported in soil borings made on that site in 2013 above the lower explosive limit (LEL) for methane gas. In addition, PNAs and metals were reported in groundwater at that site above MDEQ Generic Residential Cleanup Criteria. A Notice of Migration of Contamination was submitted for contaminants near the subject property boundary.
- REC 5** - The database report identified 30 Kramer Property, which adjoins the subject property to the east, as a Brownfield site. According to the database report, this site was developed in 1850 as a dwelling. Auto repair was conducted at this address from 2004 to 2010. Accomplished Brownfield activities at that site included a Phase I ESA. No other information was included in the database report. McDowell & Associates submitted an FOIA request to the MDEQ to review the file for that site. MDEQ personnel indicated that no files were found for that address. This data gap is considered a significant data gap at this time.

In addition, McDowell identified the following potential environmental concerns in connection with the subject property:

- The existing building is planned for demolition. Prior to demolition, an Asbestos Survey should be conducted. If regulated asbestos-containing materials are identified, the materials should be removed by a licensed asbestos contractor prior to demolition.
- The northern adjoining property is an existing gasoline station with four currently-in-use USTs. While this site is listed as a “closed” leaking underground storage tank (LUST) site, an adjoining gasoline station located up gradient from the subject property is considered a potential environmental concern to the subject property.

AKT Peerless has not evaluated the quality of the McDowell’s Phase I ESA report or formed an opinion as to whether environmental concerns were adequately investigated.

A copy of the Phase I ESA is included in Appendix B.

1.4 AAI Exceptions or Deletions

McDowell did not report deviations from the AAI Rule or ASTM Standard Practice E 1527-13 when performing the Phase I ESA (i.e., no components of that practice were deleted, and no additions to it were made).

1.5 Data Gaps

Except as noted above, McDowell did not report any instances of significant data gaps during the course of the Phase I ESA.

1.6 Phase II Environmental Site Assessment Activities

To further evaluate the RECs and one of the potential environmental concerns (i.e., the northern adjoining gasoline filling station) presented in Section 1.3, AKT Peerless conducted subsurface investigations at the subject property on behalf of James & James Holdings, LLC in accordance with ASTM Designation E 1903-11 “Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process.”

On November 28, 2016, December 5, 2016, and January 10, 2017, AKT Peerless: (1) completed a geophysical survey of the northwestern exterior portion of the subject property; (2) advanced nine soil borings; (3) installed four temporary groundwater monitoring wells; (4) installed one temporary shallow soil gas point; (5) excavated one exploratory test pit; (6) screened one temporary groundwater monitoring well for methane gas; (7) collected eight soil and four groundwater samples from soil borings/temporary monitoring wells, two soil samples from the exploratory test pit, and one soil gas sample; and (8) submitted ten soil samples, four groundwater samples, and one soil gas sample for laboratory analyses.

AKT Peerless submitted the soil, groundwater, and soil gas samples for laboratory analyses of select parameters, including: volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PNAs),

the Michigan Ten Metals (MI Ten Metals),² cadmium, chromium (total), lead, polychlorinated biphenyls (PCBs), dissolved methane, and/or leaded gasoline parameters.³

The following table summarizes each REC, the site investigation activities performed to address each REC, and the laboratory parameters used to address each REC.

Summary of Phase II ESA Investigation

REC #	Environmental Concern	Investigation Activity	Analytical Parameters
1	Historical use of the subject property as gasoline filling station	Geophysical survey, AKT-1, AKT-2, AKT-3W, AKT-4/4W, AKT-5, AKT-6/6W,* AKT-7, test pit	VOCs, PNAs, cadmium, chromium (total), lead, and/or leaded gasoline parameters
2	Identification of the subject property on the Brownfield database	Geophysical survey, AKT-1, AKT-2, AKT-3W, AKT-4/4W, AKT-5, AKT-6/6W, AKT-7, AKT-8, AKT-SG-1, test pit	VOCs, PNAs, MI Ten Metals, cadmium, chromium (total), lead, and/or leaded gasoline parameters
3	Identification of fill material of unknown origin on the subject property	AKT-8, AKT-SG-1	VOCs, PNAs, and/or MI Ten Metals
4	Historical use of the eastern and southern adjoining property as a landfill	AKT-8W, AKT-9, AKT-SG-1, methane gas screening	VOCs, PNAs, MI Ten Metals, PCBs, and/or dissolved methane
5	Identification of the eastern adjoining property on the Brownfield database	AKT-3W	VOCs, PNAs, cadmium, chromium (total), and lead

***Note:** AKT-6/6W was also intended to evaluate the northern adjoining gasoline filling station located at 505 S. Huron Street, which was identified as a potential environmental concern in McDowell's November 2016 Phase I ESA.

Geophysical Survey

On November 28, 2016, an AKT Peerless employee trained and certified in the theory and practice of applying subsurface interface radar in engineering and geophysical investigations completed a combined

² The Michigan Ten Metals include arsenic, barium, cadmium, chromium (total), copper, lead, mercury, selenium, silver, and zinc.

³ Leaded gasoline parameters include benzene, toluene, ethylbenzene, and xylenes (BTEX); trimethylbenzene isomers (TMBs); 1,2-dibromoethane; 1,2-dichloroethane; naphthalene; 2-methylnaphthalene; and lead.

electromagnetic induction (EMI) and ground penetrating radar (GPR) survey of accessible areas of the study area, which included the paved parking areas spanning from the south of the subject building north to Kramer Street. This survey targeted locations where historical information suggested that UST(s) might have been present. Based on a review of the EMI survey measurements and targeted GPR line scans, AKT Peerless did not identify readily apparent indications of subsurface objects that could be interpreted as being consistent with buried USTs, except for within an area northwest of the subject building beneath the parking lot fronting S. Huron Street. This area was further investigated by placement of soil borings AKT-4 and AKT-5. Suspect subsurface features were not encountered in soil boring location AKT-4. However, AKT Peerless encountered petroleum-like staining and odor in subsurface soil encountered between two and three feet below ground surface (bgs) followed by refusal at three feet bgs at soil boring location AKT-5. AKT Peerless therefore recommended an exploratory test pit excavation to further evaluate the area in the vicinity of soil boring location AKT-5.

Other areas yielding anomalies were interpreted as non-native materials including but not limited to fill in former excavation cavities, reinforced concrete, near surface metal, or subsurface utilities. One of these areas, interpreted as a suspected former UST excavation cavity located on the parking lot fronting Kramer Street on the northern portion of the subject property, was further investigated by placement of soil borings AKT-6 and AKT-7. Aside from approximately 3.5 feet of surficial fill material encountered at soil boring location AKT-7, AKT Peerless did not encounter suspect subsurface features at these locations.

Though remaining portions of the subject property do not appear to show clear and obvious anomalies indicating the possible presence of buried metal, this survey does not conclude that USTs or other forms of buried metal are absent in these regions.

Please be advised that EMI and GPR accuracy are highly dependent on a number of factors (e.g., anomaly size, soil types, groundwater table depth, construction materials, etc.), that may be out the control of the operator and data interpreter. The interpretation of subsurface conditions cannot be made in areas of the property not surveyed or in areas with steel-reinforced concrete. No targets can be identified below the maximum penetration depth or the local water table. Targets must have a distinct contrast in dielectric properties relative to the surrounding materials in order to be detected (i.e., a concrete pipe may not be detectable in dry, crushed aggregate). The EMI and GPR geophysical methods cannot determine the exact nature of an anomaly. The objective of a geophysical survey is to define the existence and configuration of features at depth. However, these features may bear a highly complex relationship to the geophysical measurements recorded. Therefore, conclusions drawn, no matter how logically deduced, should not be misconstrued as final fact. No warranty, certification, or statement of fact, either expressed or implied, regarding actual subsurface conditions within the surveyed area(s) is contained herein. If uncertainties exist regarding subsurface anomalies, test pit excavations should be conducted to explore the actual subsurface conditions.

Refer to Figure 2 as site map with the suspect geophysical anomaly location. A map depicting the EMI survey results is included in Appendix C.

Soil Evaluation

On December 5, 2016, AKT Peerless advanced nine soil borings at the subject property. AKT Peerless used hydraulic drive/direct push (Geoprobe®) sampling techniques and followed the guidance outlined in ASTM publication E1903-11 "Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process." AKT Peerless collected continuous soil samples from the soil

borings in four-foot intervals to the maximum depth explored of 16 feet bgs. AKT Peerless personnel inspected, field-screened, and logged the samples collected at each soil boring location.

Refer to Figure 2 for a site map with soil boring locations. Boring logs are provided in Appendix C.

Groundwater Evaluation

During subsurface investigation activities on December 5, 2016, AKT Peerless encountered groundwater in five of the nine soil borings (AKT-1, AKT-3, AKT-4, AKT-6, and AKT-8) advanced at the subject property. AKT Peerless installed a temporary groundwater monitoring well at four of these locations (AKT-3, AKT-4, AKT-6, and AKT-8). A one-inch poly(vinyl chloride) (PVC) riser with a five-foot screen was utilized for each temporary groundwater monitoring well.

AKT Peerless screened monitoring well AKT-8W for methane gas with a Landtec GEM™ 5000 landfill gas analyzer and extraction monitor; methane gas was not detected during screening activities.

Refer to Figure 2 for a site map with temporary groundwater monitoring well locations.

Soil Gas Evaluation

On December 5, 2016, AKT Peerless installed one shallow soil gas sampling point. Soil gas monitoring point installation and sampling activities were conducted in general accordance with the MDEQ Remediation and Redevelopment Division's (RRD's) May 2013 "Guidance Document for the Vapor Intrusion Pathway" ("Guidance Document").

AKT Peerless installed a six-inch GeoProbe® vapor point manufactured with a double-woven stainless steel wire screen, fitted with dedicated Nylon tubing. AKT Peerless advanced one shallow boring through the vegetated surface cover, inserted the soil gas screen fitted with tubing, and backfilled the annulus of the resulting soil gas well with a six-inch filter pack of fine silica sand followed by a one-foot bentonite seal. The soil gas well tubing was capped to allow subsurface conditions to equilibrate and vapor concentrations to stabilize for a minimum of 45 minutes. One discrete sample was subsequently collected from the tubing connected to the soil gas screen into a laboratory-supplied Bottle-Vac.

Refer to Figure 2 for a site map with the temporary shallow soil gas monitoring point location.

Test Pit Excavation

On January 10, 2017, AKT Peerless directed the excavation of one test pit on the northwestern portion of the subject property in the vicinity of soil boring location AKT-5 to further evaluate the potential presence of USTs. Test pit excavation activities unearthed several metallic features, including one-inch to three-inch diameter piping, one confirmed UST, and one suspect UST.

Piping, typically oriented north-south, was encountered throughout the excavation at depths ranging from 2.5 to four feet bgs. The metallic piping appeared to consist of former vent pipes, product piping, and electrical conduit associated with the former UST system.

The confirmed UST was encountered near the southern limit of the excavation. The top of the UST, including a vent pipe or fill port opening, was exposed at approximately four feet bgs. The northern end and eastern side of the UST were partly exposed during excavation activities. Based on field measurements, the radius of the UST appeared to be between 1.5 and two feet, and the distance from the center of the vent pipe/fill port opening to the northern end of the UST was approximately three

feet. Due to subsurface obstructions (the piping mentioned above as well as a section of crock pipe running east-west over the top of the southern exposed portion of the UST), the excavation contractor was unable to expose the western side and southern end of the UST and was able only to partly expose the eastern side and northern end. The excavation extended to approximately seven feet bgs along the northern end and 5.5 feet bgs along the eastern side of the UST. Based on field measurements of the exposed surfaces, the UST is likely of 550-gallon capacity or similar. Observations through the vent pipe/fill port opening indicated that the tank was mostly filled with solid material (sand and/or concrete). Therefore, sampling of tank contents was not possible.

Test pit excavation activities also exposed what appeared to be the fill port or vent pipe opening of a second UST to the north of the confirmed UST. The opening was first encountered at approximately four feet bgs, a depth consistent with that of the confirmed UST; this opening was measured by tape to extend from four to seven feet bgs, a vertical dimension also consistent with that of the confirmed UST. However, due to obstructions within the excavation, AKT Peerless was unable to verify that this approximately three-inch diameter opening was associated with a second UST (i.e., excavation activities failed to expose a definitive metallic tank surface). AKT Peerless therefore refers to this feature as a suspect UST in this report. Based on AKT Peerless' field observations, the suspect UST opening appeared to be empty. Therefore, sampling of suspect tank contents was not possible.

Petroleum impact was identified in overburden on top of the confirmed UST near the fill port/vent pipe opening, consistent with the soil previously collected during soil boring activities at boring location AKT-5. Evidence of petroleum impact was not observed on eastern or northern sides of the confirmed UST or elsewhere in the test pit excavation. AKT Peerless collected two soil samples (AKT-TP-1 and AKT-TP-2) from the test pit excavation for confirmatory laboratory analyses. As discussed above, the excavation contractor was unable to fully expose the western and southern sides and base of the confirmed UST, and unable to expose any definitive metallic surface of the suspect UST. The western edge of the confirmed UST was beyond the excavation limits (and obstructed by metal piping). The southern end of the confirmed UST was also beyond the limits of the excavation and obstructed by a crock pipe, which was not disturbed. Therefore, the possibility of additional subsurface soils impacted by potential release(s) from the UST system could not be determined.

Refer to Figure 2 for a site map with the test pit and associated sampling locations.

Quality Assurance/Quality Control

To ensure the accuracy of data collected during on-site sampling activities, AKT Peerless implemented proper quality assurance/quality control (QA/QC) measures. The QA/QC procedures included, but were not limited to, (1) decontamination of sampling equipment before and between sampling events, (2) calibration of field equipment, (3) documentation of field activities, and (4) sample preservation techniques.

During sample collection, AKT Peerless adhered to proper decontamination procedures. Sampling equipment was decontaminated using the following methods to minimize potential cross-contamination of soil samples:

- Steam-cleaning or washing and scrubbing the equipment with non-phosphate detergent
- Rinsing the equipment
- Air-drying the equipment

All field instruments were calibrated prior to first use on-site to ensure accuracy. Field instruments utilized during investigation activities at the subject property included a photoionization detector (PID) and a Landtec GEM™ 5000 landfill gas analyzer and extraction monitor.

During the subsurface investigation, the PID was used to screen soil extracted from the soil borings and test pit excavation for VOC vapors. The PID was maintained in a calibrated condition using 100 parts per million (ppm) isobutylene span gas prior to first use on the subject property.

The Landtec GEM™ 5000 landfill gas analyzer and extraction monitor was used to screen the percent methane, carbon dioxide, and oxygen within one soil boring (AKT-8) advanced at the subject property. The Landtec GEM™ 5000 was calibrated and clean air-purged prior to first use on the subject property.

During AKT Peerless' Phase II ESA activities, subject property conditions (i.e., soil boring/test pit locations, weather conditions) were documented. AKT Peerless visually inspected the soil and groundwater samples and prepared a geologic log for each soil boring/test pit. The logs include soil characteristics such as (1) color, (2) composition (e.g., sand, clay, or gravel), (3) soil moisture and water table depth, and (4) signs of possible contamination (i.e., stained or discolored soil, odors).

AKT Peerless collected samples according to United States Environmental Protection Agency (USEPA) Publication SW-846, "Testing Methods for Evaluating Solid Waste." Groundwater samples were collected from temporary monitoring wells with a peristaltic pump and dedicated tubing.

Soil and groundwater samples were collected in laboratory-supplied containers, stored on ice at approximately four degrees Celsius, and submitted under chain-of-custody documentation. Soil samples collected for VOCs analyses (including applicable leaded gasoline parameters) were field preserved with methanol in accordance with USEPA Method 5035. Soil samples collected for PNAs, metals, and PCBs analyses (including applicable leaded gasoline parameters) were stored in unpreserved eight-ounce wide-mouth jars. Groundwater samples for VOCs and dissolved methane analyses were collected with zero headspace into 40-milliliter (mL) glass vials and preserved with hydrochloric acid. Groundwater samples for PNAs analyses were collected into 250-mL high-density polyethylene (HDPE) bottles and preserved with nitric acid. Groundwater samples for metals analyses were collected into one-liter (L) amber glass jars.

The soil gas sample was collected into a one-L amber glass Bottle-Vac.

Local Geology/Hydrology

During subsurface investigation activities, AKT Peerless encountered the following soil types:

- FILL from below the surface cover to between approximately 1.5 and 14 feet bgs, except at soil boring locations AKT-6 and AKT-9, where fill material was not encountered. This fill consisted of a sand, silt, and/or clay matrix and contained gravel, masonry debris, red brick debris, wood debris, and/or trace coal in various locations. Apparent petroleum staining and odor was also observed in the fill encountered at soil boring location AKT-5 and the test pit excavation.
- SAND from below the fill or surface cover to between five and 12 feet bgs, except at soil boring location AKT-3, where the fill was underlain by organic silt, and at soil boring locations AKT-2 and AKT-5, where fill extended the full boring length. In addition, sand was encountered between 15 and 16 feet bgs (below the silt layer) at soil boring location AKT-3; groundwater was encountered in the sand layer at this soil boring location. This sand was generally brown to dark

brown, with some localized areas of orange and gray sand, ranged from fine- to coarse-grained, and contained varying amounts of gravel.

- ORGANIC SILT from 14 to 15 feet bgs (below the fill layer) at soil boring location AKT-3. This organic silt was black and contained sand. Organic silt was not encountered in other soil borings advanced at the subject property.
- CLAY from seven to 9.5 feet bgs (below the sand layer) at soil boring location AKT-7. This clay was brown and medium stiff.
- GRAVEL from between 5 and 16 feet bgs (below the sand layer), the maximum depth explored, at soil boring locations AKT-1, AKT-4, and AKT-6 through AKT-8. This gravel ranged from orange to gray and contained sand. Groundwater was encountered in this gravel layer across the subject property, except at soil boring location AKT-3, where groundwater was encountered in sand, and at soil boring location AKT-7, where groundwater was not encountered.

Groundwater was encountered in five soil boring locations (AKT-1, AKT-3, AKT-4, AKT-6, and AKT-8) at the subject property at depths ranging from 11 to 15 feet bgs. Based on the subsurface geology encountered, groundwater is likely continuous across the site; however, it is not used as a drinking water source.

With the exception of the fill material encountered, the subsurface soils at the property are consistent with the description of lacustrine sand and gravel as described in the Michigan Department of Natural Resources (MDNR) Geological Survey Division's publication, *Quaternary Geology of Southern Michigan* (1982).

Refer to Figure 2 for a site map with soil boring, temporary monitoring well, and test pit excavation locations. Refer to Appendix C for AKT Peerless' soil boring logs.

Laboratory Analysis and Methods

AKT Peerless submitted ten soil samples for laboratory analyses of VOCs, PNAs, MI Ten Metals, cadmium, chromium (total), lead, PCBs, and/or leaded gasoline parameters; four groundwater samples for laboratory analyses of VOCs, PNAs, cadmium, chromium (total), lead, and/or dissolved methane; and one soil gas sample for VOCs. The laboratory analyzed the samples for: (1) VOCs (including applicable leaded gasoline parameters) in accordance with USEPA Method SW5025A/5035A/8260C (soil), SW5030C/8260C (groundwater), or TO-15 (soil gas); (2) PNAs in accordance with USEPA Method SW8270D; (3) metals (including applicable leaded gasoline parameters) in accordance with USEPA Methods SW6020A and 7471B (soil) or E200.8 (groundwater); (4) PCBs in accordance with USEPA Method SW8082A; and (5) dissolved methane in accordance with USEPA Method RSK-175.

Analytical Results

The results of AKT Peerless' December 5, 2016 subsurface investigation identified the presence of benzene, ethylbenzene, 1,2,4-trimethylbenzene, and xylenes in subsurface soil on the northwestern portion of the subject property in the vicinity of the identified UST (soil boring location AKT-5) at concentrations exceeding the MDEQ Part 201 Residential Cleanup Criteria (RCC) for Drinking Water Protection (DWP) and/or Groundwater Surface Water Interface Protection (GSIP). In addition, AKT Peerless identified mercury (total) in subsurface soil (fill) on the southern portion of the subject property, within the footprint of the proposed commercial building (soil boring location AKT-8), at a concentration exceeding the MDEQ Part 201 Cleanup Criteria for GSIP. Further, AKT Peerless identified chromium (total), benzo(a)pyrene, benzo(b)fluoranthene, fluoranthene, and phenanthrene in subsurface

soil on the eastern portion of the subject property in an area adjacent to the former City of Ypsilanti landfill (soil boring location AKT-9) at concentrations exceeding the MDEQ Part 201 RCC for GSIP and/or Direct Contact (DC).

It should be noted that benzene and xylenes were detected in soil at soil boring location AKT-5 at concentrations exceeding the MDEQ's Non-Residential Vapor Intrusion Soil Screening Levels, which are the applicable screening levels for the current and proposed non-residential use of the subject property.

These Screening Levels for the vapor intrusion pathway are established in the MDEQ RRD's May 2013 "Guidance Document." These Screening Levels are not currently promulgated by the MDEQ, but their use is encouraged by MDEQ when addressing sites with potential vapor intrusion issues. The identified soil gas contamination is located on the northwestern portion of the subject property in the vicinity of the subject building. However, the proposed future use of the subject property involves the demolition of the subject building and construction of the proposed building on the southern portion of the subject property. As discussed below, target parameters were not detected in the soil gas sample collected from within the footprint of the proposed building at concentrations exceeding Non-Residential Vapor Intrusion Shallow (sub-slab) Soil Gas (SG_{VI-SS-nr}) Screening Levels. Therefore, the identified Non-Residential Vapor Intrusion Soil Screening Level exceedances on the northwestern portion of the subject property do not require further investigation unless the subject building is to remain in use, in which case the exceedances should be further investigated to determine whether the soil in this area poses a vapor intrusion risk.

The results of AKT Peerless' December 5, 2016 subsurface investigation also identified the presence lead in groundwater on the northeastern portion of the subject property (temporary monitoring well location AKT-3W) at a concentration exceeding the MDEQ Part 201 RCC for Drinking Water (DW).

The results of the laboratory analyses of the soil gas sample collected on December 5, 2016 were compared to the MDEQ RRD's SG_{VI-SS-nr} Screening Levels, which are established in the MDEQ RRD's May 2013 "Guidance Document" and are the applicable Screening Levels for the non-residential use of the subject property. In addition, the results of the laboratory analyses of the soil gas sample were compared to 10% values of each SG_{VI-SS-nr} Screening Level. These 10% values are a threshold established in the "Guidance Document" above which a potential need for further evaluation of the vapor intrusion risk is indicated.

Several parameters were detected in the soil gas sample collected from the southern portion of the subject property at concentrations exceeding analytical laboratory MDLs. However, target parameters were not detected in the soil gas sample at concentrations exceeding SG_{VI-SS-nr} Screening Levels. Further, no target parameters were detected in the soil gas sample at concentrations exceeding the 10% values of any SG_{VI-SS-nr} Screening Level.

Based on analytical laboratory results, the subject property meets the definition of a "facility," as defined in Part 201 of the NREPA, Michigan Public Act 451, 1994, as amended.

Refer to Figure 3 for a site map with soil analytical results exceeding MDEQ Part 201 RCC and Figure 4 for a site map with groundwater analytical results exceeding MDEQ Part 201 RCC. Refer to Table 1 for a summary of soil analytical results, Table 2 for a summary of groundwater analytical results, and Table 3 for a summary of soil gas analytical results. Refer to Appendix C for complete analytical laboratory reports.

1.7 General Location(s) of Known Contamination and Media Affected

The results of AKT Peerless' subsurface investigation identified the presence of benzene, ethylbenzene, 1,2,4-trimethylbenzene, and xylenes in subsurface soil on the northwestern portion of the subject property, in the vicinity of the identified UST (soil boring location AKT-5); mercury (total) in subsurface soil (fill) on the southern portion of the subject property, within the footprint of the proposed commercial building (soil boring location AKT-8); and chromium (total), benzo(a)pyrene, benzo(b)fluoranthene, fluoranthene, and phenanthrene in subsurface soil on the eastern portion of the subject property, in an area adjacent to the former City of Ypsilanti landfill (soil boring location AKT-9). AKT Peerless also identified the presence lead in groundwater on the northeastern portion of the subject property (temporary monitoring well location AKT-3W).

See Figure 3 for a site map with soil analytical results exceeding MDEQ Part 201 RCC and Figure 4 for a site map with groundwater analytical results exceeding MDEQ Part 201 RCC. See Tables 1, 2, and 3 for names and Chemical Abstract Service (CAS) numbers of all hazardous substances known to be present at the subject property.

1.8 Basis for Facility Determination

Based on the analytical laboratory results obtained during AKT Peerless' Phase II ESA, the following substances were detected above MDEQ Part 201 RCC:

Summary of MDEQ Part 201 RCC Exceedances

Hazardous Substance	CAS #	Hazardous Substance	CAS #
Chromium (total)	7440-47-3	Phenanthrene	85-01-8
Lead	7439-92-1	Benzene	71-43-2
Mercury (total)	7439-97-6	Ethylbenzene	100-41-4
Benzo(a)pyrene	50-32-8	1,2,4-Trimethylbenzene	95-63-6
Benzo(b)fluoranthene	205-99-2	Xylenes	1330-20-7
Fluoranthene	206-44-0		

Therefore, the subject property meets the definition of a "facility" as defined in Part 201 of the NREPA, Michigan Public Act 451, 1994, as amended. Additional information regarding contaminant concentrations can be found in Tables 1 and 2 of this BEA, and in the Phase II ESA documentation included as Appendix C.

2.0 Property Information

General property information is presented in the following subsections.

2.1 Legal Description

A legal description of the subject property is provided in Appendix A of this report.

2.2 Survey Map(s)

No survey maps were available for the subject property at the time of completion of this BEA. A parcel map from the Washtenaw County Geographic Information System (GIS) is included in Appendix D.

2.3 Scaled Site Map(s)

Scaled site maps with site structures, sample locations, and contaminant concentrations that exceed MDEQ Part 201 RCC are included as Figures 2, 3, and 4.

2.4 Scaled Area Map

Refer to Figure 1 for a scaled area map showing the property in relation to surrounding properties.

2.5 Property Location

The subject property is located on the eastern side of S. Huron Street, south of Kramer Street, and is currently zoned General Corridor (GC). See the following table for additional subject property details.

Subject Property Identifiers

Address	Tax Identification Number	Owner of Record	Approximate Acreage
539 S. Huron Street	11-11-37-101-002	Khailany Asad	0.96 acres

The subject property is improved with one approximately 540-square foot commercial building (the subject building) occupied by The Patient Station, a medical marijuana dispensary. The exterior of the subject property consists of paved and unpaved parking areas, landscaped areas, wooded areas, and fencing.

Refer to Figure 1 for a topographic site location map. See Figure 2 for a site map.

2.6 Spatial Data

The subject property is located in the city of Ypsilanti (T.3S./R.7E.), Washtenaw County, Michigan, as observed on the United States Geological Survey (USGS) Topographic Map which encompasses the subject property.

The coordinates of the subject property based on map interpolation are as follows:

Latitude (North): 42.232456

Longitude (West): -83.614506

Refer to Figure 1 for a topographic location map and Figure 2 for a site map.

3.0 Facility Status

3.1 Summary of Known Hazardous Substances

Hazardous substances known to exceed MDEQ Part 201 RCC and respective CAS numbers, sample locations, depths, and media affected are summarized in the following tables:

Summary of Soil Analytical Results

Parameter	CAS Number	Sample Identification with Criteria Exceedance (depth)	MDEQ Part 201 Residential Criteria Exceeded/ Established Criteria (µg/kg)	Maximum Concentration (µg/kg)/Sample Location
Chromium (total)	7440-47-3	AKT-9 (2'-3')	GSIP / 3,300	4,740 / AKT-9
Mercury (total)	7439-97-6	AKT-8 (2'-4')	GSIP / 50	58 / AKT-8
Benzo(a)pyrene	50-32-8	AKT-9 (2'-3')	DC / 2,000	12,900 / AKT-9
Benzo(b)fluoranthene	205-99-2	AKT-9 (2'-3')	DC / 20,000	22,000 / AKT-9
Fluoranthene	206-44-0	AKT-9 (2'-3')	GSIP / 5,500	21,300 / AKT-9
Phenanthrene	85-01-8	AKT-9 (2'-3')	GSIP / 2,100	13,300 / AKT-9
Benzene	71-43-2	AKT-5 (2'-3')	DWP / 100	680 / AKT-5
Ethylbenzene	100-41-4	AKT-5 (2'-3')	GSIP / 360	710 / AKT-5
1,2,4-Trimethylbenzene	95-63-6	AKT-5 (2'-3')	GSIP / 570	1,680 / AKT-5
Xylenes	1330-20-7	AKT-5 (2'-3')	DWP / 5,600 GSIP / 820	6,730 / AKT-5

Notes:

Sample identification: AKT-# indicates soil boring and (#-#) indicates sample depth in feet.

µg/kg – micrograms per kilogram

DWP – Drinking Water Protection Criteria

GSIP – Groundwater Surface Water Interface Protection Criteria

DC – Direct Contact Criteria

Summary of Groundwater Analytical Results

Parameter	CAS Number	Sample Identification with Criteria Exceedance (well screen depth)	MDEQ Part 201 Residential Criteria Exceeded/ Established Criteria (µg/L)	Maximum Concentration (µg/L)/Sample Location
Lead	7439-92-1	AKT-3W (11'-16')	DW / 4.0	5.0 / AKT-3W

Notes:

Sample identification: AKT-#W indicates temporary monitoring well and (#-#) indicates well screen depth in feet.

µg/L – micrograms per liter

DW – Drinking Water Criteria

Refer also to the attached Tables 1 and 2 for summaries of hazardous substances detected at the subject property and comparisons to MDEQ Part 201 RCC.

3.2 Laboratory Analytical Data

Laboratory analytical data sheets and chain of custody documents are included in Appendix C.

4.0 Signatures of Environmental Professionals and Qualifications

The following individuals contributed to the completion of this BEA. Copies of their resumes are provided as Appendix E.



Deanna L. Hutsell, P.E.

Project Manager – Group Leader
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Environmental Consultant
AKT Peerless
Farmington, Michigan
Phone: 248.615.1333
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5.0 Phase I ESA Report

A copy of the November 2016 Phase I ESA, conducted in accordance with ASTM Standard Practice E 1527-13, is included in Appendix B.

6.0 References

The following is a list of reference material not included in this document:

- Part 201 of the NREPA, Michigan Public Act 451, 1994, as amended.
- “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,” ASTM Designation: E 1527-13.

“Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process,” ASTM Designation: E 1903-11.

- USEPA Standards and Practices for AAI, 40 CFR Part 312

7.0 Limitations

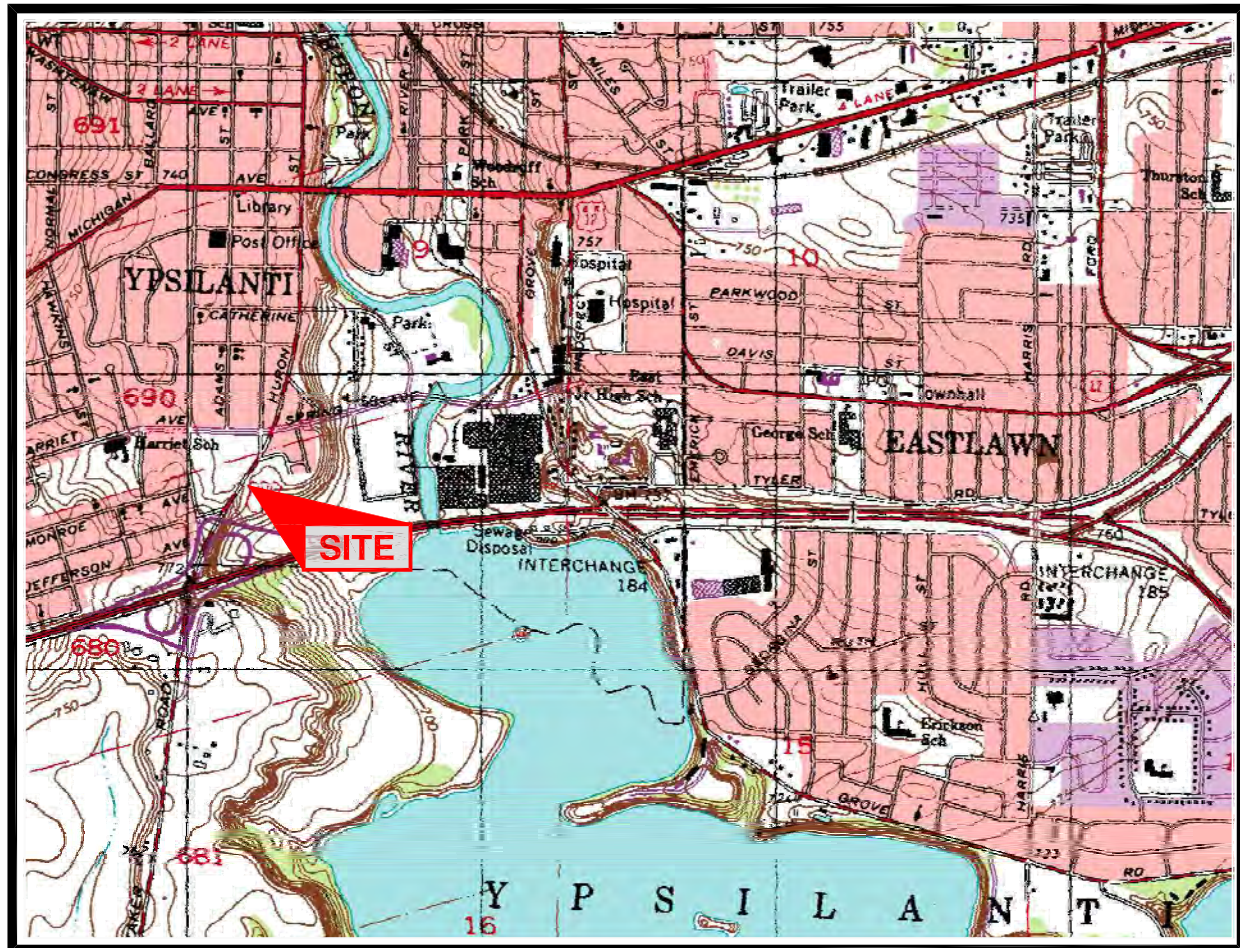
In performing its assessment, AKT Peerless has used reasonable care and has performed its work in keeping with industry standards and standard agency procedures as appropriate. AKT Peerless can offer no assurances and assumes no responsibility for site conditions or activities outside the limited scope of the inquiry requested by the Client. There can be no assurance, and AKT Peerless offers no assurance, that site conditions do not exist or could not exist in the future which could lead to liability in connection with the subject property. Accordingly, AKT Peerless has analyzed the information obtained in its limited investigation in keeping with existing environmental standards and enforcement practices, but cannot accurately predict what actions any given agency may take presently or what standards and practices may apply to the subject property in the future.

Although reasonable due diligence has been exercised in the design and conduct of this study, it must be noted that the results of this investigation do not provide sufficient information to warranty that no environmental risks are associated with well-disguised or illegal chemical and/or waste management activities.

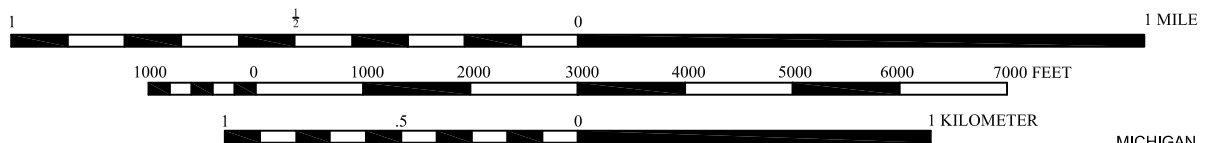
This report has been prepared for the sole use of the Client. This report and the findings contained herein shall not be relied upon by any third party, in whole or in part, without the prior written consent of AKT Peerless. This report and the findings contained herein shall not be disclosed, disseminated or conveyed to any third party, in whole or in part, except as directed by the Client or as required by law or regulation.

Figures

YPSILANTI EAST QUADRANGLE
MICHIGAN - WASHTENAW COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)



T.3 S. - R.7 E.

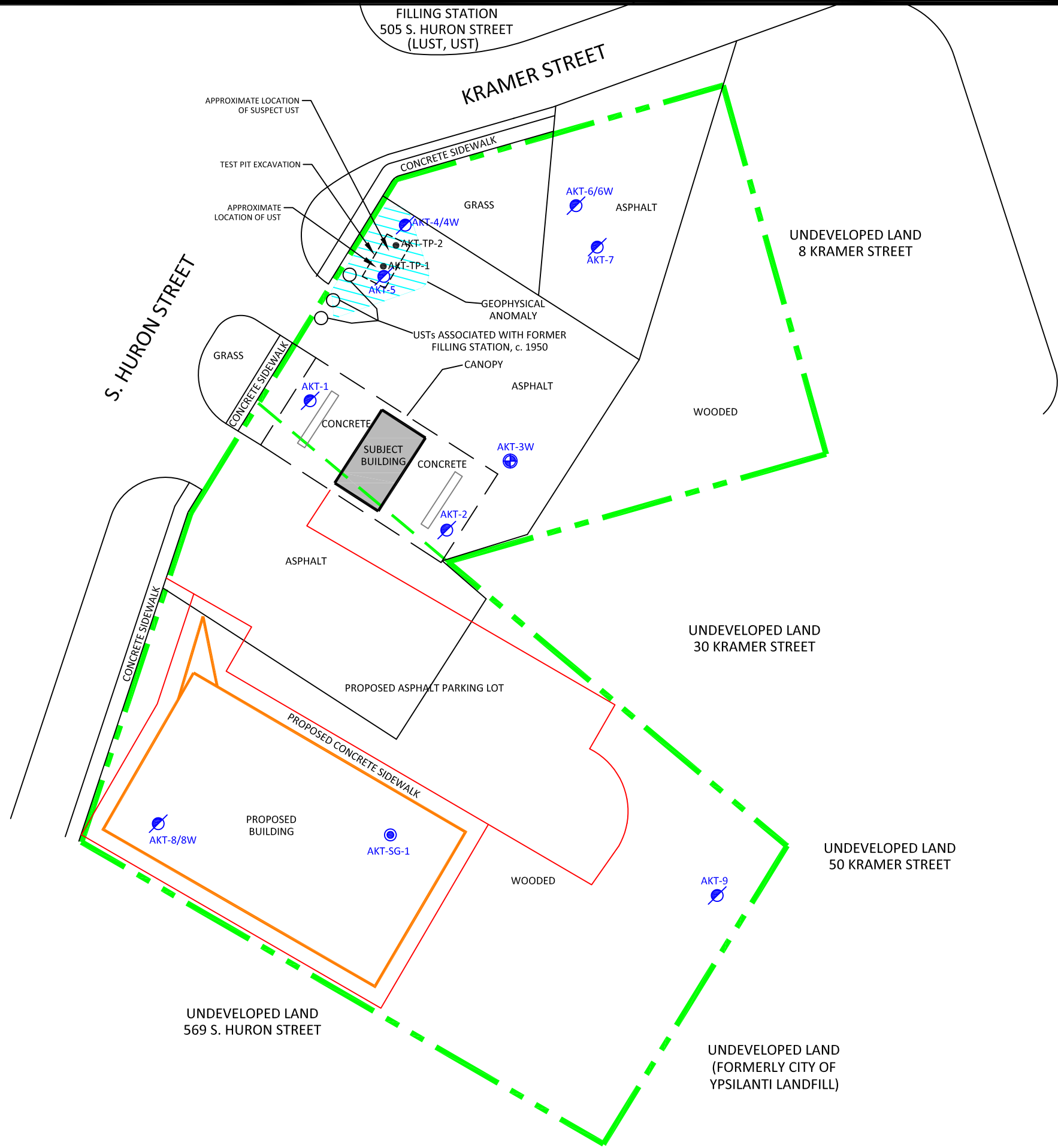


CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL



IMAGE TAKEN FROM 1967 U.S.G.S. TOPOGRAPHIC MAP
PHOTOREVISED 1973

G.W. KENT, INC.
506 S. HURON STREET



DRAWN BY: ARR
DATE: 12/22/2016

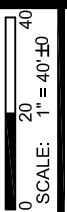


FIGURE 2

- LEGEND
- = PROPERTY LINE
 - AKT-6/6W = AKT PEERLESS 2016 SOIL BORING
 - AKT-4/4W = AKT PEERLESS 2016 TEMPORARY MONITORING WELL
 - AKT-5 = AKT PEERLESS 2016 SOIL GAS POINT
 - AKT-TP-1 = AKT PEERLESS 2016 TEST PIT SAMPLE

SITE MAP WITH SOIL BORING, TEMPORARY MONITORING WELL AND SOIL GAS LOCATION

539 S. HURON STREET
YPSILANTI, MICHIGAN

PROJECT NUMBER : 12150F-2-26



G.W. KENT, INC.
506 S. HURON STREET

AKT-5 (2-3')	
12/05/2016	
Benzene	680 ug/Kg (1)
Ethylbenzene	710 ug/Kg (2)
1,2,4-Trimethylbenzene	1,680 ug/Kg (2)
Xylenes	6,730 ug/Kg (1,2)

S. HURON STREET

FILLING STATION
505 S. HURON STREET
(LUST, UST)

KRAMER STREET

APPROXIMATE LOCATION
OF SUSPECT UST

TEST PIT EXCAVATION

APPROXIMATE
LOCATION OF UST

CONCRETE SIDEWALK

GRASS

AKT-6/6W

ASPHALT

UNDEVELOPED LAND
8 KRAMER STREET

AKT-7

GEOPHYSICAL
ANOMALY

USTs ASSOCIATED WITH FORMER
FILLING STATION, c. 1950

CANOPY

ASPHALT

WOODED

GRASS

CONCRETE SIDEWALK

CONCRETE

SUBJECT
BUILDING

CONCRETE

AKT-3W

AKT-2

ASPHALT

PROPOSED ASPHALT PARKING LOT

UNDEVELOPED LAND
30 KRAMER STREET

CONCRETE SIDEWALK

PROPOSED CONCRETE SIDEWALK

PROPOSED
BUILDING

WOODED

UNDEVELOPED LAND
50 KRAMER STREET

UNDEVELOPED LAND
569 S. HURON STREET

UNDEVELOPED LAND
(FORMERLY CITY OF
YPSILANTI LANDFILL)

AKT-8 (2-4')	
12/05/2016	
Mercury, Total	58 ug/Kg (2)

AKT-8/8W

AKT-SG-1

AKT-9 (2-3')	
12/05/2016	
Chromium, Total	4,740 ug/Kg (2)
Benzo(a)pyrene	12,900 ug/Kg (3)
Benzo(b)fluoranthene	22,000 ug/Kg (3)
Fluoranthene	21,300 ug/Kg (2)
Phenanthrene	13,300 ug/Kg (2)

AKT-9



DRAWN BY: ARR
DATE: 12/22/2016

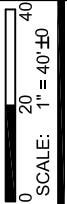


FIGURE 3

LEGEND

- = PROPERTY LINE
- ⊗ = AKT PEERLESS 2016 SOIL BORING
- ⊕ = AKT PEERLESS 2016 TEMPORARY
- ⊙ = AKT PEERLESS 2016 SOIL GAS POINT
- = AKT PEERLESS 2016 TEST PIT SAMPLE

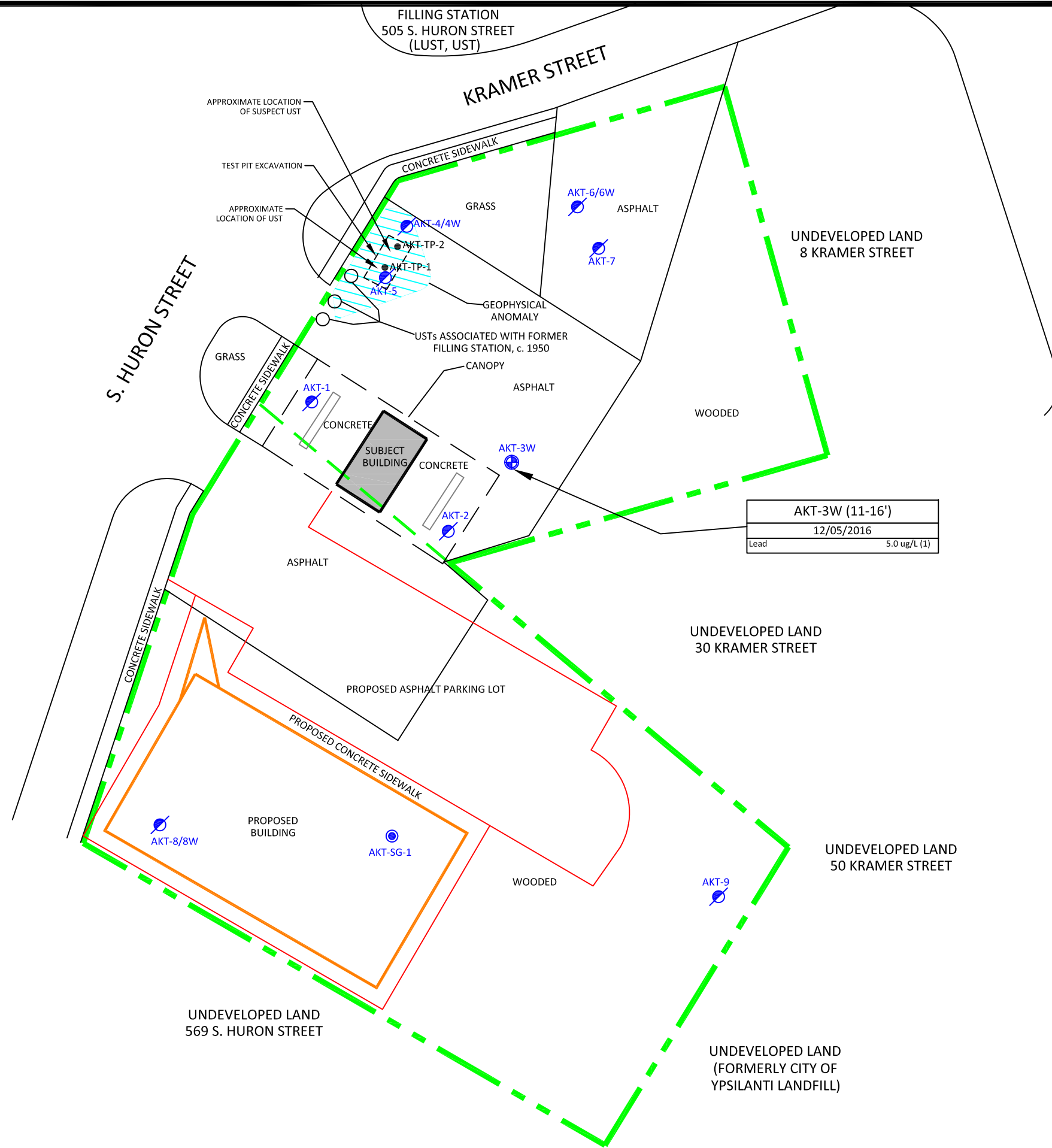
SITE MAP WITH SOIL ANALYTICAL RESULTS
EXCEEDING MDEQ RCC

539 S. HURON STREET
YPSILANTI, MICHIGAN
PROJECT NUMBER : 12150F-2-26

AKTPEERLESS
www.aktpeerless.com

- CRITERIA NOTE
- (1) - Exceeds Residential Drinking Water Protection Criteria
 - (2) - Exceeds Groundwater Surface Water Interface Protection Criteria
 - (3) - Exceeds Residential Direct Contact Criteria

G.W. KENT, INC.
506 S. HURON STREET



CRITERIA NOTE
(1) - Exceeds Residential Drinking Water Criteria

DRAWN BY: ARR
DATE: 12/22/2016

LEGEND

—

= PROPERTY LINE

●

= AKT PEERLESS 2016 SOIL BORING

⊕

= AKT PEERLESS 2016 TEMPORARY

⊙

= AKT PEERLESS 2016 SOIL GAS POINT

●

= AKT PEERLESS 2016 TEST PIT SAMPLE

0

20

40

SCALE: 1" = 40'-0"

FIGURE 4

SITE MAP WITH GROUNDWATER
ANALYTICAL RESULTS EXCEEDING MDEQ
RCC

539 S. HURON STREET
YPSILANTI, MICHIGAN
PROJECT NUMBER : 12150F-2-26

AKTPEERLESS

www.aktpeerless.com

Tables

Table 1: Summary of Soil Analytical Results
539 S. Huron Street
Ypsilanti, Michigan
AKT Peerless Project No. 12150F-2-26

Parameters	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Residential Soil Volatilization to Indoor Air Inhalation Criteria	Residential Particulate Soil Inhalation Criteria	Residential Direct Contact Criteria	Soil Saturation Concentration Screening Levels	Maximum Concentration Detected	Sample Location	AKT-1	AKT-2	AKT-4	AKT-5	AKT-6	AKT-7	AKT-8	AKT-9
										Collection Date	12/5/2016	12/5/2016	12/5/2016	12/5/2016	12/5/2016	12/5/2016	12/5/2016	12/5/2016
										Depth	1'-3'	1'-3'	3'-5'	2'-3'	6'-8'	6'-8'	2'-4'	2'-3'
Metals, µg/kg																		
Arsenic	7440-38-2	5,800	4,600	4,600	NLV	7.2E+5	7,600	NA	2,280		NS	NS	NS	NS	NS	NS	1,570	2,280
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	NLV	3.3E+8	3.7E+7	NA	86,300		NS	NS	NS	NS	NS	NS	47,600	86,300
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	NLV	1.7E+6	5.5E+5	NA	1,710		NS	NS	<200	270	490	<200	<200	1,710
Chromium, Total	7440-47-3	18,000 (total)	30,000	3,300	NLV	2.6E+5	2.5E+6	NA	4,740		NS	NS	2,980	1,790	1,920	1,540	3,190	4,740
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	NLV	1.3E+8	2.0E+7	NA	24,300		NS	NS	NS	NS	NS	NS	8,830	24,300
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	NLV	1.0E+8	4.0E+5	NA	242,000		50,500	26,200	242,000	27,100	5,030	5,320	26,300	45,000
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2	48,000	2.0E+7	1.6E+5	NA	58		NS	NS	NS	NS	NS	NS	58	<50
Selenium (B)	7782-49-2	410	4,000	400	NLV	1.3E+8	2.6E+6	NA	0		NS	NS	NS	NS	NS	NS	<400	<400
Silver (B)	7440-22-4	1,000	4,500	100 (M)*; 27	NLV	6.7E+6	2.5E+6	NA	0		NS	NS	NS	NS	NS	NS	<200	<200
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	NLV	ID	1.7E+8	NA	260,000		NS	NS	NS	NS	NS	NS	20,100	260,000
Semivolatiles, PNAs, µg/kg																		
Acenaphthylene	208-96-8	NA	5,900	ID	1.6E+6	2.3E+9	1.6E+6	NA	3,500		<300	NS	<300	<300	NS	<300	<300	3,500
Anthracene	120-12-7	NA	41,000	ID	1.0E+9 (D)	6.7E+10	2.3E+8	NA	3,900		<300	NS	<300	<300	NS	<300	<300	3,900
Benzo(a)anthracene (Q)	56-55-3	NA	NLL	NLL	NLV	ID	20,000	NA	11,200		400	NS	<300	<300	NS	<300	<300	11,200
Benzo(a)pyrene (Q)	50-32-8	NA	NLL	NLL	NLV	1.5E+6	2,000	NA	12,900		500	NS	<300	<300	NS	<300	<300	12,900
Benzo(b)fluoranthene (Q)	205-99-2	NA	NLL	NLL	ID	ID	20,000	NA	22,000		1,000	NS	<300	<300	NS	<300	<300	22,000
Benzo(k)fluoranthene (Q)	207-08-9	NA	NLL	NLL	NLV	ID	2.0E+5	NA	24,300		1,100	NS	300	<300	NS	<300	<300	24,300
Benzo(g,h,i)perylene	191-24-2	NA	NLL	NLL	NLV	8.0E+8	2.5E+6	NA	4,300		400	NS	<300	<300	NS	<300	<300	4,300
Chrysene (Q)	218-01-9	NA	NLL	NLL	ID	ID	2.0E+6	NA	10,300		500	NS	<300	<300	NS	<300	<300	10,300
Dibenzo(a,h)anthracene (Q)	53-70-3	NA	NLL	NLL	NLV	ID	2,000	NA	400		<300	NS	<300	<300	NS	<300	<300	400
Fluoranthene	206-44-0	NA	7.3E+5	5,500	1.0E+9 (D)	9.3E+9	4.6E+7	NA	21,300		700	NS	<300	<300	NS	<300	<300	21,300
Fluorene	86-73-7	NA	3.9E+5	5,300	5.8E+8	9.3E+9	2.7E+7	NA	1,300		<300	NS	<300	<300	NS	<300	<300	1,300
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NA	NLL	NLL	NLV	ID	20,000	NA	4,500		300	NS	<300	<300	NS	<300	<300	4,500
Naphthalene	91-20-3	NA	35,000	730	2.5E+5	2.0E+8	1.6E+7	NA	600		<300	NS	<300	<300	NS	<300	<300	600
Phenanthrene	85-01-8	NA	56,000	2,100	2.8E+6	6.7E+6	1.6E+6	NA	13,300		<300	NS	<300	<300	NS	<300	<300	13,300
Pyrene	129-00-0	NA	4.8E+5	ID	1.0E+9 (D)	6.7E+9	2.9E+7	NA	20,600		600	NS	<300	<300	NS	<300	<300	20,600
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	2.7E+6	6.7E+8	8.1E+6	NA	400		<300	NS	<300	<300	NS	<300	<300	400
1-Methylnaphthalene	90-12-0	NA	CNE	CNE	CNE	CNE	CNE	CNE	300		<300	NS	<300	<300	NS	<300	<300	300
Remaining PNAs	Various	-	-	-	-	-	-	-	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Volatiles, µg/kg																		
Benzene (I)	71-43-2	NA	100	4,000 (X)	1,600	3.8E+8	1.8E+5	4.0E+5	680		<60	<60	<60	680	<50	<50	<80	<70
Ethylbenzene (I)	100-41-4	NA	1,500	360	87,000	1.0E+10	2.2E+7 (C)	1.4E+5	710		<60	<60	<60	710	<50	<50	<80	<70
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	2.7E+6	6.7E+8	8.1E+6	NA	<200		<100	<100	<100	<100	<100	<100	<200	<100
Naphthalene	91-20-3	NA	35,000	730	2.5E+5	2.0E+8	1.6E+7	NA	<400		<300	<300	<300	<300	<300	<300	<400	<300
n-Propylbenzene (I)	103-65-1	NA	1,600	ID	ID	1.3E+9	2.5E+6	1.0E+7	120		<60	<60	<60	120	<50	<50	<80	<70
Toluene (I)	108-88-3	NA	16,000	5,400	3.3E+5 (C)	2.7E+10	5.0E+7 (C)	2.5E+5	1,970		<60	<60	<60	1,970	<50	<50	<80	<70
1,2,3-Trimethylbenzene	526-73-8	NA	CNE	CNE	CNE	CNE	CNE	CNE	440		<60	<60	<60	440	<50	<50	<80	<70
1,2,4-Trimethylbenzene (I)	95-63-6	NA	2,100	570	4.3E+6 (C)	8.2E+10	3.2E+7 (C)	1.1E+5	1,680		<60	<60	<60	1,680	<50	<50	<80	<70
1,3,5-Trimethylbenzene (I)	108-67-8	NA	1,800	1,100	2.6E+6 (C)	8.2E+10	3.2E+7 (C)	94,000	840		<60	<60	<60	840	<50	<50	<80	<70
Xylenes (I)	1330-20-7	NA	5,600	820	6.3E+6 (C)	2.9E+11	4.1E+8 (C)	1.5E+5	6,730		<100	<100	<100	6,730	<100	<100	<200	<100
Remaining VOCs	Various	-	-	-	-	-	-	-	BDL									

Table 1: Summary of Soil Analytical Results
539 S. Huron Street
Ypsilanti, Michigan
AKT Peerless Project No. 12150F-2-26

Parameters	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Residential Soil Volatilization to Indoor Air Inhalation Criteria	Residential Particulate Soil Inhalation Criteria	Residential Direct Contact Criteria	Soil Saturation Concentration Screening Levels	Maximum Concentration Detected	Sample Location	AKT-TP-1	AKT-TP-2
(Refer to detailed laboratory report for method reference data)										Collection Date	1/10/2017	1/10/2017
										Depth	6'	4'
Metals, µg/kg												
Arsenic	7440-38-2	5,800	4,600	4,600	NLV	7.2E+5	7,600	NA	2,280		NS	NS
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	NLV	3.3E+8	3.7E+7	NA	86,300		NS	NS
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	NLV	1.7E+6	5.5E+5	NA	1,710		NS	NS
Chromium, Total	7440-47-3	18,000 (total)	30,000	3,300	NLV	2.6E+5	2.5E+6	NA	4,740		NS	NS
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	NLV	1.3E+8	2.0E+7	NA	24,300		NS	NS
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	NLV	1.0E+8	4.0E+5	NA	242,000		34,200	13,900
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2	48,000	2.0E+7	1.6E+5	NA	58		NS	NS
Selenium (B)	7782-49-2	410	4,000	400	NLV	1.3E+8	2.6E+6	NA	0		NS	NS
Silver (B)	7440-22-4	1,000	4,500	100 (M)*; 27	NLV	6.7E+6	2.5E+6	NA	0		NS	NS
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	NLV	ID	1.7E+8	NA	260,000		NS	NS
Semivolatiles, PNAs, µg/kg												
Acenaphthylene	208-96-8	NA	5,900	ID	1.6E+6	2.3E+9	1.6E+6	NA	3,500		NS	NS
Anthracene	120-12-7	NA	41,000	ID	1.0E+9 (D)	6.7E+10	2.3E+8	NA	3,900		NS	NS
Benzo(a)anthracene (Q)	56-55-3	NA	NLL	NLL	NLV	ID	20,000	NA	11,200		NS	NS
Benzo(a)pyrene (Q)	50-32-8	NA	NLL	NLL	NLV	1.5E+6	2,000	NA	12,900		NS	NS
Benzo(b)fluoranthene (Q)	205-99-2	NA	NLL	NLL	ID	ID	20,000	NA	22,000		NS	NS
Benzo(k)fluoranthene (Q)	207-08-9	NA	NLL	NLL	NLV	ID	2.0E+5	NA	24,300		NS	NS
Benzo(g,h,i)perylene	191-24-2	NA	NLL	NLL	NLV	8.0E+8	2.5E+6	NA	4,300		NS	NS
Chrysene (Q)	218-01-9	NA	NLL	NLL	ID	ID	2.0E+6	NA	10,300		NS	NS
Dibenzo(a,h)anthracene (Q)	53-70-3	NA	NLL	NLL	NLV	ID	2,000	NA	400		NS	NS
Fluoranthene	206-44-0	NA	7.3E+5	5,500	1.0E+9 (D)	9.3E+9	4.6E+7	NA	21,300		NS	NS
Fluorene	86-73-7	NA	3.9E+5	5,300	5.8E+8	9.3E+9	2.7E+7	NA	1,300		NS	NS
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NA	NLL	NLL	NLV	ID	20,000	NA	4,500		NS	NS
Naphthalene	91-20-3	NA	35,000	730	2.5E+5	2.0E+8	1.6E+7	NA	600		NS	NS
Phenanthrene	85-01-8	NA	56,000	2,100	2.8E+6	6.7E+6	1.6E+6	NA	13,300		NS	NS
Pyrene	129-00-0	NA	4.8E+5	ID	1.0E+9 (D)	6.7E+9	2.9E+7	NA	20,600		NS	NS
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	2.7E+6	6.7E+8	8.1E+6	NA	400		NS	NS
1-Methylnaphthalene	90-12-0	NA	CNE	CNE	CNE	CNE	CNE	CNE	300		NS	NS
Remaining PNAs	Various	-	-	-	-	-	-	-	BDL		NS	NS
Volatiles, µg/kg												
Benzene (I)	71-43-2	NA	100	4,000 (X)	1,600	3.8E+8	1.8E+5	4.0E+5	680		<60	<70
Ethylbenzene (I)	100-41-4	NA	1,500	360	87,000	1.0E+10	2.2E+7 (C)	1.4E+5	710		<60	<70
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	2.7E+6	6.7E+8	8.1E+6	NA	<200		<100	<100
Naphthalene	91-20-3	NA	35,000	730	2.5E+5	2.0E+8	1.6E+7	NA	<400		<300	<300
n-Propylbenzene (I)	103-65-1	NA	1,600	ID	ID	1.3E+9	2.5E+6	1.0E+7	120		<60	<70
Toluene (I)	108-88-3	NA	16,000	5,400	3.3E+5 (C)	2.7E+10	5.0E+7 (C)	2.5E+5	1,970		<60	<70
1,2,3-Trimethylbenzene	526-73-8	NA	CNE	CNE	CNE	CNE	CNE	CNE	440		<60	<70
1,2,4-Trimethylbenzene (I)	95-63-6	NA	2,100	570	4.3E+6 (C)	8.2E+10	3.2E+7 (C)	1.1E+5	1,680		<60	<70
1,3,5-Trimethylbenzene (I)	108-67-8	NA	1,800	1,100	2.6E+6 (C)	8.2E+10	3.2E+7 (C)	94,000	840		<60	<70
Xylenes (I)	1330-20-7	NA	5,600	820	6.3E+6 (C)	2.9E+11	4.1E+8 (C)	1.5E+5	6,730		<60	<70
Remaining VOCs	Various	-	-	-	-	-	-	-	BDL			

Table 2: Summary of Groundwater Analytical Results
539 S. Huron Street
Ypsilanti, Michigan
AKT Peerless Project No. 1250F-2-26

Parameters	Chemical Abstract Service Number	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Residential Groundwater Volatilization to Indoor Air Inhalation Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria	Water Solubility	Flammability and Explosivity Screening Level	Maximum Concentration Detected	Sample Location	AKT-3W	AKT-4W	AKT-6W	AKT-8W
									Collection Date	12/5/2016	12/5/2016	12/5/2016	12/5/2016
Well Screen Depth									11'-16'	10'-15'	7'-12'	10'-15'	
(Refer to detailed laboratory report for method reference data)													
Metals, µg/L													
Cadmium (B)	7440-43-9	5.0 (A)	(G,X)	NLV	NLV	NA	ID	<0.5		<0.5	<0.5	<0.5	NS
Chromium, Total	7440-47-3	100 (A)	11	NLV	NLV	NA	ID	<5.0		<5.0	<5.0	<5.0	NS
Lead (B)	7439-92-1	4.0 (L)	(G,X)	NLV	NLV	NA	ID	5.0		5.0	<3.0	<3.0	NS
Nonspecific Grouping, µg/L													
Methane (K)	74-82-8	ID	NA	(K)	(K)	NA	28,000	1.9		NS	NS	NS	1.9
Semivolatiles, PNAs, µg/L													
PNAs	Various	-	-	-	-	-	-	BDL		BDL	BDL	BDL	NS
Volatiles, µg/L													
VOCs	Various	-	-	-	-	-	-	BDL		BDL	BDL	BDL	NS

Table 3: Summary of Soil Gas Analytical Results
539 S. Huron Street
Ypsilanti, Michigan
AKT Peerless Project No. 12150F-2-26

Hazardous Substance (a)	Chemical Abstract Service Number	Non-Residential Vapor Intrusion Shallow Soil Gas (sub-slab) Screening Levels (b) (Samples collected less than or equal to 1.5 meters bgs or building foundation)	10% of Screening Level (Non-Residential)	Maximum Concentration Detected	Sample Location	AKT-SG-1
					Collection Date	12/5/16
		(Refer to detailed laboratory report for method reference data)			(µg/m³)	Depth
Chemicals of Concern						
Cyclohexane	110827	3.50E+06	350,000	10		10
Heptane	142825	2.00E+06	200,000	25		25
Hexane	110543	4.10E+05	41,000	25		25
Propylene	115071	SLNE	NA	46		46
2,2,4-Trimethylpentane	540841	2.00E+06	200,000	28		28
Toluene	108883	2.90E+06	290,000	11		11
Remaining Chemicals of Concern	Various	-	-	BDL		BDL

Footnotes:

(a) - Part 201 Hazardous substances without inhalation toxicity values at this time are not included in this table.

(b) - The IAVI and SGVI presented in this table are health-based values. The applicable IAVI and SGVI are based on the higher of the health-based value and the appropriate analytical reporting limit.

SLNE - Screening Level Not Established

- (A) Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
- (B) Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.
- (C) The criterion developed under R 299.20 to R 299.26 exceeds the chemical-specific soil saturation screening level (C_{sat}). The person proposing or implementing response activity shall document whether additional response activity is required to control free-phase liquids or NAPL to protect against risks associated with free-phase liquids by using methods appropriate for the free-phase liquids present. Development of a site-specific C_{sat} or methods presented in R 299.22, R 299.24(5), and R 299.26(8) may be conducted for the relevant exposure pathways.
- (D) Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or $1.0E+9$ parts per billion (ppb).
- (E) Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact may be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value [as provided in the table in Footnote (E) in R 299.49].
- (F) Criterion is based on adverse impacts to plant life and phytotoxicity.
- (G) Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO_3/L , use 400 mg CaCO_3/L for the FCV calculation. The FCV formula provides values in units of $\mu\text{g}/\text{L}$ or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. [See table in Footnote (G) in R 299.49].
- (H) Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 $\mu\text{g}/\text{L}$. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.
- (I) Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules.
- (J) Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.
- (K) Hazardous substance may be flammable or explosive, or both.
- (L) Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(9) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 $\mu\text{g}/\text{L}$ is linked to the generic residential soil direct contact criterion of 400 mg/kg. A higher concentration in the drinking water, up to the state action level of 15 $\mu\text{g}/\text{L}$, may be allowed as a site-specific remedy and still allow for drinking water use, under Section 20120a(2) of the NREPA if soil concentrations are appropriately lower than 400 mg/kg. If a site-specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 $\mu\text{g}/\text{L}$ to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase. Acceptable concentrations of site-specific soil and drinking water concentrations are presented in the [table in Footnote (L) in R 299.49].
- (M) Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
- (N) The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 $\mu\text{g}/\text{L}$. Where leaching to groundwater is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen shall not, when added together, exceed the nitrate drinking water protection criterion of $2.0E+5$ $\mu\text{g}/\text{kg}$.
- (O) The concentration of all polychlorinated and polybrominated dibenzodioxin and dibenzofuran isomers present at a facility, expressed as an equivalent concentration of 2,3,7,8-tetrachlorodibenzo-p-dioxin based upon their relative potency, shall be added together and compared to the criteria for 2,3,7,8-tetrachlorodibenzo-p-dioxin. The generic cleanup criteria for 2,3,7,8-tetrachlorodibenzo-p-dioxin are not calculated according to the algorithms presented in R 299.14 to R 299.26. The generic cleanup criteria are being held at the values that the DEQ has used since August 1998, in recognition of the fact that national efforts to reassess risks posed by dioxin are not yet complete. Until these studies are complete, it is premature to select a revised slope factor and/or reference dose for calculation of generic cleanup criteria.
- (P) Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria. Total cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with soil criteria. Nonresidential direct contact criteria may not be protective of the potential for release of hydrogen cyanide gas. Additional land or resource use restrictions may be necessary to protect for the acute inhalation concerns associated with hydrogen cyanide gas.
- (Q) Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.
- (R) Hazardous substance may exhibit the characteristic of reactivity as defined in 40 C.F.R. §261.23 (revised as of July 1, 2001), which is adopted by reference in these rules.
- (S) Criterion defaults to the hazardous substance-specific water solubility limit.
- (T) Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules. Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the following table if TSCA standards are not applicable. [See table in Footnote (T) in R 299.49].
- (U) Hazardous substance may exhibit the characteristic of corrosivity as defined in 40 C.F.R. §261.22 (revised as of July 1, 2001), which is adopted by reference in these rules.
- (V) Criterion is the aesthetic drinking water value as required by Section 20120a(5) of the NREPA. Concentrations up to 200 $\mu\text{g}/\text{L}$ may be acceptable, and still allow for drinking water use, as part of a site-specific cleanup under Section 20120a(2) and 20120b of the NREPA.
- (W) Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 80 $\mu\text{g}/\text{L}$. Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criterion of 1,600 $\mu\text{g}/\text{kg}$.
- (X) The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in close proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the [table in Footnote (X) in R 299.49], except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the WV, and the calculated FCV. See formulas in [the table in Footnote (G) in R 299.49]. Soil protection criteria based on the HDV shall be as listed in the [table in Footnote (X) in R 299.49], except for those values with an asterisk. Soil GSI protection criteria based on the HDV shall be as listed in the [table in Footnote (X) in R 299.49], except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be the greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.
- (Y) Source size modifiers shown in the [table in Footnote (Y) in R 299.49] shall be used to determine soil inhalation criteria for ambient air when the source size is not one-half acre. The modifier shall be multiplied by the generic soil inhalation criteria shown in the table of generic cleanup criteria to determine the applicable criterion. See Footnote (C) [in R 299.49].
- (Z) Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.
- (AA) Use 10,000 $\mu\text{g}/\text{L}$ where groundwater enters a structure through the use of a water well, sump or other device. Use 28,000 $\mu\text{g}/\text{L}$ for all other uses.
- (BB) The state drinking water standard for asbestos (fibers greater than 10 micrometers in length) is in units of a million fibers per liter of water (MFL). Soil concentrations of asbestos are determined by polarized light microscopy.
- (CC) Groundwater: The generic GSI criteria are based on the toxicity of unionized ammonia (NH_3); the criteria are 29 $\mu\text{g}/\text{L}$ and 53 $\mu\text{g}/\text{L}$ for cold water and warm water surface water, respectively. As a result, the GSI criterion shall be compared to the percent of the total ammonia concentration in the groundwater that will become NH_3 in the surface water. This percent NH_3 is a function of the pH and temperature of the receiving surface water and can be estimated using the [table in Footnote (CC) in R 299.49], taken from Emerson, et al., (Journal of the Fisheries Research Board of Canada, Volume 32(12):2382, 1975). The generic approach for estimating NH_3 assumes a default pH of 8 and default temperatures of 68 °F and 85 °F for cold water and warm water surface water, respectively. The resulting NH_3 is 3.8 percent and 7.2 percent for cold water and warm water, respectively. This default percentage shall be multiplied by the total ammonia-nitrogen ($\text{NH}_3\text{-N}$) concentration in the groundwater and the resulting NH_3 concentration compared to the applicable GSI criterion. As an alternative, the maximum pH and temperature data from the specific receiving surface water can be used to estimate, from the [table in Footnote (CC) in R 299.49], a lower percent unionized ammonia concentration for comparison to the generic GSI.
Soil: The generic soil GSI criterion criteria for unionized ammonia are 580 $\mu\text{g}/\text{kg}$ and 1 100 $\mu\text{g}/\text{kg}$ for cold water and warm water surface water, respectively.
- (DD) Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.
- (EE) The [values listed in the table in Footnote (EE) in 299.49] are applicable generic GSI criteria as required by Section 20120e of the NREPA.
- (FF) The chloride GSI criterion shall be 125 mg/L when the discharge is to surface waters of the state designated as public water supply sources or 50 mg/L when the discharge is to the Great Lakes or connecting waters. Chloride GSI criteria shall not apply for surface waters of the state that are not designated as a public water supply source, however, the total dissolved solids criterion is applicable.
- (GG) Risk-based criteria are not available for methane due to insufficient toxicity data. An acceptable soil gas concentration (presented for both residential and nonresidential land uses) was derived utilizing 25 percent of the lower explosive level for methane. This equates to 1.25 percent or $8.4E+6$ $\mu\text{g}/\text{m}^3$.
- (HH) The residential criterion for sodium is 230,000 $\mu\text{g}/\text{L}$ in accordance with the Sodium Advisory Council recommendation and revised Groundwater Discharge Standards.
- ID Insufficient data to develop criterion.
- NA A criterion or value is not available or, in the case of background and CAS numbers, not applicable.
- NLL Hazardous substance is not likely to leach under most soil conditions.
- NLV Hazardous substance is not likely to volatilize under most conditions.
- $\mu\text{g}/\text{kg}$ Micrograms per kilogram
- $\mu\text{g}/\text{L}$ Micrograms per liter
- NS Not sampled
- CNE Criteria Not Established
- BDL Below Laboratory Method Detection Limits
- * Concentration detected exceeds MDEQ Cleanup Criteria but is below the respective Statewide Default Background Level.
- BOLD** Elevated laboratory method detection limits due to matrix interference
- BOLD** Exceeds highlighted criteria.

Appendix A

Legal Description

General Property Information

City of Ypsilanti

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Parcel: 11-11-37-101-002 Unit: CITY OF YPSILANTI

Property Address [collapse]

539 S HURON ST
YPSILANTI, MI 48197

Owner Information [collapse]

KHAILANY ASAD
PO BOX 980647
YPSILANTI, MI 48198

Unit: 11

Taxpayer Information [collapse]

SEE OWNER INFORMATION

General Information for Tax Year 2016 [collapse]

Property Class:	201 - COMMERCIAL IMPROVED	Assessed Value:	\$40,200
School District:	81020 - YPSILANTI SCHOOLS	Taxable Value:	\$27,680
State Equalized Value:	\$40,200	Map #	K-2 9-3 (B)
User Number Indx:		Date of Last Name Chg:	N/A
		Date Filed:	
		Notes:	N/A
Historical District:	NO	Census Block Group:	N/A
Principal Residence Exemption	June 1st	Final	
2017	0.0000 %	-	
2016	0.0000 %	0.0000 %	

Previous Year Info	MBOR Assessed	Final S.E.V.	Final Taxable
2015	\$36,700	\$36,700	\$27,598
2014	\$36,600	\$36,600	\$27,164

Land Information [collapse]

Frontage	Depth
Lot 1: 130.00 Ft.	153.00 Ft.
Lot 2: 105.00 Ft.	210.00 Ft.
Lot 3: 0.00 Ft.	0.00 Ft.
Total Frontage: 235.00 Ft.	Average Depth: 178.47 Ft.

Total Acreage:	0.96		
Zoning Code:	Split		
Total Estimated Land Value:	\$77,000	Mortgage Code:	N/A
Land Improvements:	N/A	Lot Dimensions/Comments:	AVERAGE LOT SIZE IS
Renaissance Zone:	NO		
Renaissance Zone Expiration Date:			
ECF Neighborhood Code:	00068 - 68. GARAGE		

Legal Information for 11-11-37-101-002 [collapse]

*OLD SID - 11 11-150-002-00 YP CITY 18W-2 AND 1W-29 BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF MONROE STREET (NOW ABANDONED) AND THE CENTERLINE OF HURON STREET THENCE N 31 DEG 00' 48" E ALONG THE CENTERLINE OF HURON STREET 126.52 FT THENCE N 72 DEG 53' 48" E ALONG THE S RIGHT-OF-WAY OF KRAMER ST 167.67 FT THENCE S17 DEG 06' 12" E 132.00 FT THENCE S 72 DEG 53'48" W 138.61 FT THENCE S 50 DEG 49' 47" E 152.92 FT THENCE S31 DEG 02' 51" W 121.83 FT THENCE N 60 DEG 30' 47" W 269.07 FT THENCE ALONG THE CENTERLINE OF HURON STREET N31 DEG 00' 48" E 90.67 FT TO THE POINT OF BEGINNING EXCEPT THAT PORTION TAKEN DEEDED OR USED FOR HIGHWAY PURPOSES. 539 S HURON

Sales Information

1 sale record(s) found.						
Sale Date	Sale Price	Instrument	Grantor	Grantee	Terms Of Sale	Liber/ Page
12/01/1987	\$0.00		AMOCO OIL CO	KHAILANY ASAD	BANK SALE USED	2192-887

Building Information

1 building(s) found.			
Description	Floor Area	Yr Built	Est. TCV
 Commercial/Industrial Building 1 - Garage, Service/Repair	540 Sq. Ft.	0	\$2,643

General Information

Floor Area:	540 Sq. Ft.	Estimated TCV:	\$2,643
Occupancy:	N/A	Class:	C
Stories Above Ground:	1	Average Story Height:	8
Basement Wall Height:	0		
Year Built:	0	Year Remodeled:	0
Percent Complete:	N/A	Heat:	N/A
Physical Percent Good:	N/A	Functional Percent Good:	N/A
Economic Percent Good:	N/A	Effective Age:	N/A

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Appendix B

McDowell & Associates 2016 Phase I ESA Report

McDowell & Associates

Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

21355 Hatcher Avenue, Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157

November 3, 2016

James & James Holdings, LLC
539 S. Huron Street
Ypsilanti, Michigan 48197

Job No. 16-15594

Attention: Mr. James Nameth

Subject: Phase I Environmental Site Assessment
Approximate 2.15-Acre Parcel
539 S. Huron Street
Ypsilanti, Washtenaw County, Michigan

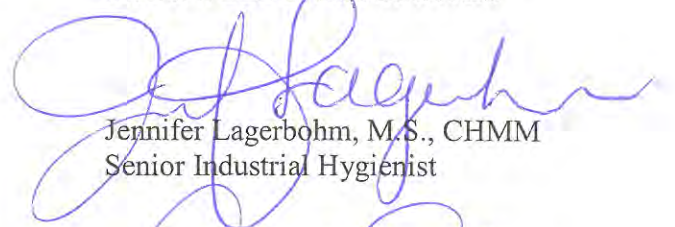
Dear Mr. Nameth,

In accordance with your request, McDowell & Associates has performed a Phase I Environmental Site Assessment for the subject property. This assessment was prepared for the exclusive use of James & James Holdings, LLC, and they may rely on its contents.

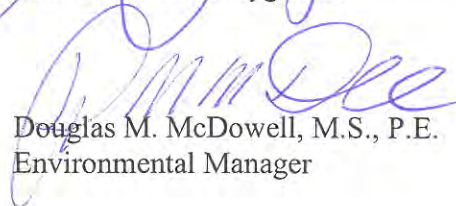
If you have any questions, or if we can be of further service, please do not hesitate to call.

Very truly yours,

McDOWELL & ASSOCIATES



Jennifer Lagerbohm, M.S., CHMM
Senior Industrial Hygienist



Douglas M. McDowell, M.S., P.E.
Environmental Manager

Mid-Michigan Office

3730 James Savage Road, Midland, MI 48642
Phone: (989) 496-3610 • Fax: (989) 496-3190

PHASE I ENVIRONMENTAL SITE ASSESSMENT
APPROXIMATE 2.15-ACRE PARCEL
539 S. HURON STREET
YPSILANTI, WASHTENAW COUNTY, MICHIGAN

JAMES & JAMES HOLDINGS, LLC
539 S. HURON STREET
YPSILANTI, MICHIGAN 48197

BY
McDOWELL & ASSOCIATES
21355 HATCHER AVENUE
FERNDAL, MICHIGAN 48220
Ph: (248) 399-2066
Fax: (248) 399-2157
www.mcdowasc.com

NOVEMBER 3, 2016

McDowell & Associates

Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

21355 Hatcher Avenue, Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157

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Mid-Michigan Office

3730 James Savage Road, Midland, MI 48642
Phone: (989) 496-3610 • Fax: (989) 496-3190

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1.0 SUMMARY

McDowell & Associates was retained by James & James Holdings, LLC, “the User,” as defined by ASTM E 1527-13, to perform a Phase I Environmental Site Assessment (ESA) for a parcel located 539 S. Huron Street in Ypsilanti, Washtenaw County, Michigan. A Site Location Map, which shows the approximate location of the subject property, is appended.

The subject property consists of an irregular-shaped parcel containing approximately 2.15 acres of land. The subject property is currently occupied by the Patient Station (a medical marijuana dispensary), parking lots, and wooded land. The proposed use of the subject property is for demolition of the existing building and construction of a new dispensary.

This assessment has identified the following potential environmental concerns in connection with the subject property:

1. The existing building is planned for demolition. Prior to demolition, an Asbestos Survey should be conducted. If regulated asbestos-containing materials are identified, the materials should be removed by a licensed asbestos contractor prior to demolition.
2. The north adjoining property is an existing gasoline station with four currently-in-use USTs. While that site is listed as a “closed” leaking underground storage tank (LUST) site, an adjoining gasoline station located upgradient from the subject property is considered a potential environmental concern to the subject property.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property, except for the following:

1. Based on historic sources reviewed, the north portion of the subject property was previously used as a gasoline station. The 1950 and 1964 Sanborn Fire Insurance Maps depict three underground storage tanks (USTs) along S. Huron Street. No records were found regarding the removal of those USTs. Building department records indicate a new gasoline station was constructed in 1972 with five USTs north of the building, near Kramer Street. Five USTs were reportedly removed in 1986. No prior sampling and analyses related documentation has been provided to McDowell & Associates, nor was it not available in local building, assessing, and fire department records or the MDEQ. Five monitoring well covers labeled “Amoco Test Well” were observed in the parking lots during the site reconnaissance.
2. The database report identified the subject property address of 539 S. Huron Street on the Brownfield database. A Freedom of Information Act (FOIA) was submitted to the MDEQ to review available files for that site; however, MDEQ personnel indicated that no files were found for that address.
3. The log of soil boring sheets for two soil borings made on the subject property show between 3’9” and 7’0” of fill soil on the property. The origin of the fill soil is unknown.

4. The east and south adjoining property was historically the City of Ypsilanti landfill. According to city records, methane was reported in soil borings made on that site in 2013 above the lower explosive limit (LEL) for methane gas. In addition, PNAs and metals were reported in groundwater at that site above MDEQ Generic Residential Criteria. A Notice of Migration of Contamination was submitted for contaminants near the subject property boundary.
5. “30 Kramer Property” was identified as a Brownfield site which adjoins the subject property to the east. According to the SERS Report, that site was developed in 1850 as a dwelling. Auto repair was conducted at that address from 2004 to 2010. Accomplished Brownfield activities at that site included a Phase I ESA. No other information was included in the SERS report. McDowell & Associates submitted a Freedom of Information Act (FOIA) request to the MDEQ to review the file for that site. MDEQ personnel indicated that no files were found for that address. That data gap is considered a significant data gap and a recognized environmental condition to the subject property at this time.

This summary is an integral part of the entire report and should be used in that context. This summary should not be utilized as a substitute for a thorough review of the entire report.

2.0 INTRODUCTION

2.1 PROPERTY LEGAL DESCRIPTION

The legal description for the subject property, provided by the User, is included within the appendix. The property is located at 539 S. Huron Street in Ypsilanti, Washtenaw County, Michigan. The subject property also contained structures associated with the address 569 S. Huron Street.

2.2 PURPOSE

This assessment was intended to be in general accordance with ASTM E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, which meets or exceeds the ASTM E 1527-05 Standard.

US EPA’s Final Rule - “Amendment to Standards and Practices for All Appropriate Inquiries Under CERCLA” for 40 CFR Part 312, published December 30, 2013, indicates, “EPA is establishing that parties seeking liability relief under CERCLA’s landowner liability protections, as well as recipients of brownfields grants for conducting site assessments, will be considered to have met the standards and practices for all appropriate inquiries, as set forth in the Brownfields Amendments to CERCLA and 40 CFR Part 312, if such parties follow the procedures provided in the ASTM E1527–13 ‘Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.’”

The purpose of this report is to investigate for evidence of recognized environmental conditions in connection with the subject property using practically reviewable and reasonably ascertainable information. According to the ASTM E 1527-13 Standard, a recognized environmental condition is defined as:

Recognized environmental conditions (REC) – the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

For the purpose of this report, the following ASTM E 1527-13 defined terms may also be used:

Abandoned property – property that can be presumed to be deserted, or an intent to relinquish possession or control can be inferred from the general disrepair or lack of activity thereon such that a reasonable person could believe that there was an intent on the part of the current owner to surrender rights to the property.

Controlled recognized environmental condition (CREC) – a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

De minimis condition – a condition that generally does 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 conditions are not recognized environmental conditions nor controlled recognized environmental conditions.

Historical recognized environmental condition – a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

Release – a release of any hazardous substance or petroleum product shall have the same meaning as the definition of “release” in CERCLA 42 U.S.C. § 9601(22). [A release or threatened release of a hazardous substance includes any “spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment, (including the abandonment or discharging of barrels, containers and other closed receptacles containing any hazardous substance, or pollutant or contaminant).”]

User – the party seeking to use Practice E 1527 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.

For the purpose of this report, the following term developed by McDowell & Associates may also be used:

Potential environmental concern (PEC) - The term “potential environmental concern” has been developed to address on-site or off-site issues of environmental interest that do not meet the technical definition of a recognized environmental condition, but in our professional opinion should be brought to the attention of the User or other potential third parties that may obtain reliance from McDowell & Associates for the report.

2.3 SCOPE OF SERVICES

This Phase I ESA was completed in general conformance with ASTM E 1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." Typical local lender requirements have also been considered when determining the scope of services. Limitations and Exceptions are noted in Sections 2.5 "Limitations and Exceptions."

This assessment consisted of the following scope:

- Review of user provided information including the User Questionnaire.
- Review of state records for environmental liens.
- Review of United States Geological Survey (USGS) Topographic Maps and a United States Department of Agricultural (USDA) Soil Survey Map to identify surface and subsurface features on the subject property.
- Review of Farrand and Bell Quaternary Geology and Segall and Wilson Bedrock Geology Maps to identify subsurface geology.
- Review of geotechnical boring logs completed for the subject property.
- Review of the Washtenaw County Arsenic in Groundwater Map.
- A database search of reasonably ascertainable standard environmental record sources for the subject property and nearby properties.
- Review of reasonably ascertainable regulatory agency - such as Michigan Department of Environmental Quality (MDEQ), US Environmental Protection Agency (US EPA), and county environmental health department - files and records regarding the subject property and nearby sites of interest.
- Review of local government records.
- Review of aerial photographs of the subject property and adjoining properties taken at various times between 1949 and 2016 obtained from various sources, as noted in the attached bibliography.
- A review of city directory information to identify prior owners, occupants, and/or uses of the subject property and adjoining properties.
- Review of Sanborn Fire Insurance Maps to identify prior uses of the subject property and adjoining properties.
- Completion of a site reconnaissance by an Environmental Professional. Site reconnaissance, including a site visit, is performed to obtain information indicating the likelihood of recognized environmental conditions in connection with the property.
- Observation of adjoining properties for obvious evidence of migration of contaminants onto the subject property.
- Visual observation for suspect asbestos-containing materials during the site reconnaissance.

- Interviews were conducted.

2.4 SIGNIFICANT ASSUMPTIONS

In preparing this report, McDowell & Associates has relied on information provided by the User, governmental agencies and officials, interviews, and data available at the time of the report. McDowell & Associates has not attempted to independently verify all information reviewed and received during the course of this investigation.

2.5 LIMITATIONS AND EXCEPTIONS

According to the ASTM E 1527-13 Standard,

“This practice is intended for use on a voluntary basis by parties who wish to assess the environmental condition of commercial real estate taking into account commonly known and reasonably ascertainable information. While use of this practice is intended to constitute all appropriate inquiries for purposes of the LLPs [landowner liability protections], it is not intended that its use be limited to that purpose.”

“No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, and this practice [ASTM E 1527-13] recognizes reasonable limits of time and cost.”

ASTM E 1527-13 indicates that information is reasonably ascertainable if it is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable. McDowell & Associates has compiled historical information from sources believed to be reasonably ascertainable and practically reviewable. Information available from Sanborn Fire Insurance Maps, city directories, municipal building and assessor departments, interviews, and local fire and health departments is summarized in this report. In some cases, historical records are not reasonably ascertainable that relate to historic structures, such as original construction date, or utilities associated with the original construction or redevelopment. This report presents information obtained during the course of the Phase I Environmental Site Assessment.

The term Vapor Encroachment Condition (VEC) was introduced in the ASTM E 2600-10 (June 2010) Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. Recent changes to the ASTM E 1527-13 Standard indicate that the evaluation of the vapor pathway is included in determination of a release to the environment and migration of hazardous substances or petroleum products. According to ASTM E 1527-13, use of Guide E 2600 is not required to achieve compliance with all appropriate inquiries. The scope of work for this Phase I ESA considers the potential for vapor encroachment to the property; however, it is not intended to meet the scope of E 2600-10.

Discussion of soil and groundwater conditions at, or near, the subject property is based only on published maps and other readily available information. With the exception of geotechnical

borings, which were completed for construction purposes, subsurface soil conditions or groundwater were not investigated.

Unless specifically noted, an intrusive investigation has not been completed. Observation under floors, above ceilings, within walls, within confined spaces, or within inaccessible areas has not been performed by McDowell & Associates.

The User did not provide McDowell & Associates with a copy of the recorded land title records search.

The approximate boundaries shown on report attachments are not intended to be exact, but rather estimates to assist with review, as the boundaries are limited by aerial photograph resolution and scale inaccuracies.

Nothing in this report constitutes a legal opinion or legal advice. It is suggested that environmental counsel is retained to evaluate site conditions and property transaction related issues from a legal perspective.

Data gaps identified during this assessment are contained within the body of the report, if encountered.

Information identified as a suspect recognized environmental condition, which, based upon additional information obtained as part of this assessment, is not considered a recognized environmental condition, is discussed within the body of the report and not separately in Section 8.1.

2.6 SPECIAL TERMS AND CONDITIONS

The User did not convey any special terms and conditions in regards to the Phase I ESA to McDowell & Associates.

2.7 USER RELIANCE

This Phase I Environmental Site Assessment was performed for the exclusive use of James & James Holdings, LLC, and they may rely on its contents.

3.0 USER PROVIDED INFORMATION

McDowell & Associates provided the User a "User Questionnaire" regarding the subject property. The format of the questionnaire was based on the sample "User Questionnaire" as provided in the ASTM E 1527-13.

A follow-up call was placed on November 3, 2016 regarding the status of the questionnaire. At the time this report was prepared, we had not received a copy of the completed "User Questionnaire." If the questionnaire is received, it will be maintained on file with the report.

3.1 TITLE RECORDS

The User provided McDowell & Associates with title information related to the sale of the property to Asad Khailany in 1987 from Amoco Oil Company and a Quit Claim Deed from BP Products North America to Asad Khailany and Laura Ann Khailany in 2006.

No other title records were provided to McDowell & Associates.

3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

Mr. Bivins was not aware of any environmental liens or activity and land use limitations in regards to the subject property.

The Standard Environmental Record Sources (SERS) report did not identify any environmental liens or activity and use limitations at the property.

The State of Michigan Remediation and Redevelopment Perfected Lien List (revised 9/24/2015) was reviewed as part of this assessment and no perfected environmental liens were identified in connection with the subject property.

3.3 SPECIALIZED KNOWLEDGE

The User did not provide to McDowell & Associates any specialized knowledge regarding the subject property that is considered to represent a recognized environmental condition to the subject property.

3.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

The User did not provide to McDowell & Associates any commonly known or reasonably ascertainable information of environmental interest regarding the local community in which the subject property is located.

3.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

According to the User Questionnaire, the subject property is not being sold for well below the fair market value.

3.6 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The User identified Asad Khailany as the owner and James Nameth as a key site manager and occupant at the subject property.

3.7 REASON FOR PERFORMING PHASE I ESA

Based on information provided to McDowell & Associates by the User, this Phase I ESA was conducted to satisfy "one of the requirements to qualify for the innocent landowner, or bona fide prospective purchaser limitations on CERCLA liability: that is, the practice that constitutes 'all

appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice' as defined at 42 U.S.C. 9601 (35) (B).”

3.8 OTHER INFORMATION

No other information was provided to McDowell & Associates from the User.

4.0 RECORDS REVIEW

The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions in connection with the property using practically reviewable and reasonably ascertainable information.

4.1 PHYSICAL SETTING SOURCES

USGS Topographic Map Ypsilanti East Quadrangle Photorevised 1996	Approximately 730 to 760 feet above the National Geodetic Vertical Datum of 1929. Topography would appear to slope southeast toward the Huron River. Surface water flow on the subject property would appear to be in a southeasterly direction. While shallow groundwater flow tends to follow surface topography, it should be noted that subsurface geotechnical conditions, underground utilities, and nearby landfilling, nearby River, and I-94 could influence the local direction of groundwater flow. If an accurate determination of the direction of groundwater flow is desired, a hydrogeological investigation would be necessary.
USDA Soil Survey Washtenaw County	StB- St. Clair loam (2% to 6% slopes) Mb- Made land is depicted at the southeast edge of the property and on the adjoining property to the south and east. The symbols for non-bedrock escarpments are shown on the southeast portion.
Farrand and Bell Quaternary Geology	Lacustrine sand and gravel
Segall and Wilson Bedrock Geology	Antrim shale

Arsenic in Groundwater Washtenaw County Elevated Arsenic Distribution Map	The US EPA and MDEQ standard for arsenic in safe drinking water is 10 ppb. The area in the vicinity of the property is not listed as having observations of arsenic in groundwater. Based on the utilities at the subject property which include municipal water, the potential for elevated arsenic in groundwater at the subject property is not considered to represent a recognized environmental condition at this time.
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Soils Investigation Report

In 2016, McDowell & Associates began a Soils Investigation Report for the subject property. The results of that investigation will be presented in an engineering report, McDowell & Associates Job No. 16-347, dated November 2, 2016. As that was a Soils Investigation for site preparation and foundation purposes, no special attempt was made to evaluate subsoil conditions for chemical contamination and/or hazardous waste. Such evaluation requires special site assessment procedures that are performed only if specifically required.

As part of that assessment, two soil borings were made on the subject property in the location of a proposed building. The Log of Soil Boring sheets generally show topsoil, sand, and clay fill soil to depths of 3'9" and 7'0" below ground surface (bgs), underlain by sand and gravel. Trace concrete was noted in Soil Boring 1 at a depth between 4'0" and 6'6" bgs. Groundwater was noted in both of the soil borings at depths of 9'6" and 14'0" bgs.

No evidence of stained or odorous soils was noted in the soil boring. Copies of the Log of Soil Boring Sheets and Soil Boring Location Map from that investigation are appended.

4.2 STANDARD ENVIRONMENTAL RECORD SOURCES

A database search of Standard Environmental Record Sources (SERS) from federal, state, and local governmental agencies has been conducted by Environmental Data Resources, Inc. (EDR). A copy of that report is included in the appendix. The referenced regulatory agencies indicate that the subject property is not now the subject of an environmental agency investigation.

The following table summarizes the SERS reviewed as recommended by ASTM, as well as the number of sites identified within the ASTM specified radii. Sites identified outside the specified radii and/or sites identified on databases not recommended by ASTM that do not appear to represent a recognized environmental condition to the subject property are not summarized below, but are presented in the attached SERS Report.

An orphan site is defined by EDR as "unmappable." No orphan sites were identified in the database search.

Standard Environmental Record Source	Approximate Minimum Search Distance	Number of Sites Identified
Federal NPL (National Priority List) site list	1.0 mile	0
Federal Delisted NPL site list	0.5 mile	0
Federal CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) list	0.5 mile	0
Federal CERCLIS NFRAP (No Further Remedial Action Planned) site list	0.5 mile	2
Federal RCRA (Resource Conservation and Recovery Act) generators list ⁽¹⁾	Property and adjoining properties	0
Federal RCRA CORRACTS (Corrective Action Activity) facilities list	1.0 mile	0
Federal RCRA non-CORRACTS TSD (Treatment, Storage, and Disposal) facilities list	0.5 mile	0
Federal institutional control/engineering control registries	Property only	0
Federal ERNS (Emergency Response Notification System) list	Property only	0
State and tribal lists of hazardous waste sites identified for investigation or remediation		
- State and tribal equivalent NPL	1.0 mile	0
- State and tribal equivalent CERCLIS (Part 201 Sites)	0.5 mile	5
State and tribal landfill and/or solid waste disposal site lists (Solid Waste Facilities (SWF/LF))	0.5 mile	0
State and tribal leaking storage tank lists (Leaking Underground Storage Tank (LUST) sites)	0.5 mile	9
State and tribal registered storage tank lists (Registered Underground Storage Tank (RUST) sites) ⁽²⁾	Property and adjoining properties	3
State and tribal institutional control/engineering control registries (AUL)	Property only	0
State and tribal voluntary cleanup sites	0.5 mile	0
State and tribal Brownfield sites	0.5 mile	13
Baseline Environmental Assessment sites (BEA) ⁽³⁾	0.5 mile	5

(1): Identification of a site as a hazardous waste generator indicates that the site or business is or was an entity that, at one time or on a routine basis, generated hazardous waste that must be disposed. Identification on this list is an indicator that the site is a former or current source of hazardous waste, but does not indicate that a release has occurred.

(2): Identification of a site as a RUST site indicates that the site has or at one time had registered USTs. Identification on the RUST list does not indicate whether or not the USTs have had a release.

(3): BEAs are Michigan-specific documents that indicate hazardous substances or petroleum products above MDEQ Generic Residential Criteria have been reported on a site.

Subject Property

The subject property has been identified as “Former Gas Station- Huron St” at 539 S. Huron Street as a Brownfield site. The address was also listed on the MDEQ’s on-line database of UST sites (Facility ID 50002380). No tank information was listed.

McDowell & Associates submitted a Freedom of Information Act (FOIA) request to the MDEQ to review the file for the subject property. MDEQ personnel indicated that no files were found for that address.

Nearby Sites

- “Ypsilanti Township Landfill” was identified as a CERC-NFRAP site at 1S Huron Street, which adjoins the subject property to the southeast. “I-94 and Huron Street” was identified as a Part 201 SHWS at I-94 and Whitaker, which adjoins the subject property to the southeast. That site was also listed as a Brownfield site. According to the SERS Report, that site was discovered in 1984, assessed in 1987 and 1991, and archived in 1993.

Based on the close proximity between that site and the subject property, that site was considered a suspect recognized environmental condition. Therefore, MDEQ information and City records for that site was reviewed.

Information in the MDEQ file for that site included correspondence regarding response activities at that site. It was reported in a Screening Site Inspection Report, dated 1991, that the landfill accepted municipal and industrial waste and that fires and smoldering had been documented at the landfill.

The City of Ypsilanti planning department provided McDowell & Associates with a copy of a Phase I ESA and Phase II ESA completed for the former landfill property by SME in 2013. According to the Phase I ESA, that property consists of approximately 6.82 acres of land and was used as landfill from the mid-1940’s to 1966. The Phase II ESA reportedly consisted of completion of 5 soil borings to depths up to 34’ below ground surface (bgs). Subsurface conditions reportedly consisted of fill soil to depths up to 26’ and underlain by peat and sandy gravel. Borings were field screened for methane using a portable meter. Methane was reportedly detected in three of the five borings at concentrations above the lower explosive limit (LEL) for methane.

Seven soil samples, six groundwater samples, and one seep water sample were reportedly submitted for chemical testing. Results of chemical testing reportedly showed xylenes, PNAs, and metals in soil and PNAs and metals in groundwater above MDEQ Generic Residential Criteria.

Included in the City of Ypsilanti Planning Department file was a Notice of Migration of Contamination to the subject property for contaminants found near the property boundary.

Based on the above information, the former adjoining landfill is considered to represent a recognized environmental condition to the subject property at this time.

- “Barrick Enterprises” was identified as a “closed” LUST site and RUST site at 505 S. Huron Street, which adjoins the subject property to the north, across Kramer Street. According to the SERS Report, that site has four currently in use USTs containing gasoline and diesel which were installed in 1998. Four former USTs were reportedly installed in 1972 and removed in 1992. A release of gasoline was reported in 1991 and closed in 1995.

Based on the close proximity between that site and the subject property, that site was considered a suspect recognized environmental condition. Therefore, MDEQ information for that site was reviewed.

According to information in the MDEQ LUST file for that site, four former USTs and approximately 784 cubic yards of soil was removed in 1992. Results of chemical testing of confirmatory soil samples showed benzene in one soil sample above MDEQ Cleanup Criteria at that time. Results of soil borings made in the area of the sample with elevated benzene reported no detectable concentrations of benzene. One temporary monitoring well was reportedly installed, and no benzene was detected in the groundwater sample.

The MDEQ audited the Closure Report and agreed with the conclusions. Based on that information, the former LUST is not considered to represent a recognized environmental condition to the subject property at this time.

The site is an existing gasoline station with four currently-in-use USTs. While that site is listed as a “closed” leaking underground storage tank (LUST) site, an adjoining gasoline station located upgradient from the subject property is considered a potential environmental concern to the subject property.

- “30 Kramer Property” was identified as a Brownfield site at 30 Kramer, which adjoins the subject property to the east. According to the SERS Report, that site was developed in 1850 as a dwelling. Auto repair was conducted at that address from 2004 to 2010. Accomplished Brownfield activities at that site included a Phase I ESA. No other information was included in the SERS report.

Based on the close proximity between that site and the subject property, that site was considered a suspect recognized environmental condition. McDowell & Associates submitted a Freedom of Information Act (FOIA) request to the MDEQ to review the file for that site. MDEQ personnel indicated that no files were found for that address. That data gap is considered a significant data gap and a recognized environmental condition to the subject property at this time.

- “Ypsilanti Commons Parcel” was identified as an “open” LUST site, RUST site, Part 201 SHWS, and BEA site at 510 S. Huron Street, which adjoins the subject property to the west, across S. Huron Street. “Ypsilanti Commons Sr” was identified as a Part 201 SHWS at Spring. According to the SERS Report, that site had 10 former USTs removed from the ground between 1992 and 1997. Releases of gasoline and kerosene were reported in 1992 and remain “open.” A BEA was submitted for Exemplar Manufacturing

in 1997. No information was identified related to the Part 201 listing. “Exemplar” was identified as an “open” LUST site and BEA site at 506 S. Huron Street, which appears to be the same property as 510 S. Huron Street. BEAs were reportedly submitted for Post Effective Date Committee of EMC, GW Kent Inc., and Reichuang, LLC in 2006.

Based on the close proximity between that site and the subject property, that site was considered a suspect recognized environmental condition. Therefore, MDEQ information for that site was reviewed.

Information for that site indicated that property contained a former gasoline station, grocery store, cider mill, commercial, and residential properties. Reports in the MDEQ file dated back to 1992 and included LUST information related to former USTs. A total of 1,015 cubic yards of soil was removed in 1992 at the time of UST removal. Results of a hydrogeologic investigation completed at that time reported groundwater flow to the east, towards the subject property.

Environmental assessments were reportedly completed at that site in 1997 and 1998 at the time of property redevelopment. Four additional USTs and approximately 377 cubic yards of soil removed at that time.

Based on information presented in the BEAs, that site is a “facility” based on metals and PNAs in soil. No off-site migration was reported across S. Huron Road, toward the subject property. Based on that information, that site is not considered to represent a recognized environmental condition to the subject property at this time.

- “Huron Petroleum Inc” was identified as an “open” LUST site, RUST site, Part 201 SHWS, BEA site, and Brownfield site at 445 S. Huron Street, which is plotted approximately 0.1 mile north of the subject property, across Kramer Street. According to the SERS Report, that site has four currently in use USTs installed in 1968 and had two USTs installed in 1968 and removed in 2000 and 2001. Releases of gasoline and used oil were reported in 1992 and 1998 and remain “open.” BEAs were submitted in 2002, 2013, and 2016.

The sites listed in the table below were identified within the ASTM specified radii in the SERS Report.

Site Name	Address	Databases	Distance and Direction from Subject Property
Gilbert Park	Gilbert Park	Brownfield	0.35 mile northeast
Varsity Linen Svc	75 Catherine St.	“open” LUST, Brownfield	0.35 mile north/northeast
YCUA Water Plant & Shop	30 Catherine St.	“closed” LUST	0.35 mile northeast
James River Corp	1000 N. Huron St.	“closed” LUST	0.4 mile south/southwest
Mi Dept/ Military & Veterans Affairs	1025 S. Huron St.	“closed” LUST	0.4 mile south/southwest

Site Name	Address	Databases	Distance and Direction from Subject Property
Eagle Crest Golf Course	1055 Whitaker	“closed” LUST	0.4 mile south/southwest
Massey	33 Water St.	Brownfield	0.5 mile north/northeast
Havranek #2	31 Water St.	Brownfield	0.5 mile north/northeast
Duke	3 Water St.	Brownfield	0.5 mile north/northeast
Havranek #1	14 and 30 Water St.	Brownfield	0.5 mile north/northeast
High Scope Foundation	24 Water St. and vacant River St.	Brownfield	0.5 mile north/northeast
Griffin	27 Water St.	Brownfield, BEA	0.5 mile north/northeast
Lowell’s Towing	31, 45, 47 and vacant Water St.	Brownfield	0.5 mile north/northeast
Factory St. Pump Station	128 Factory St.	Part 201 SHWS	0.5 mile east/northeast
Ford Motor Co	128 Factory St.	CERC-NFRAP	0.5 mile east/northeast

Based on distance from the subject property and area topography, the sites provided in the preceding table are not considered to represent a recognized environmental condition to the subject property at this time.

4.3 ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to the MDEQ Geological and Land Management Division of Oil and Gas Wells, no oil or gas wells are located on the subject property.

4.4 HISTORICAL USE INFORMATION ON THE PROPERTY

McDowell & Associates reviewed the following historical records: aerial photographs, topographic maps, local building and assessor department records, Sanborn Fire Insurance Maps, fire department records, and city directories.

Partial copies of those sources listed above that could be easily reproduced at reasonable cost are included in the appendix.

Previous Reports

No previous reports were provided by the User for the subject property.

Historic Use Summary

The table below presents a consolidated summary of historic use information pertaining to the subject property.

Year	Source	Information
1927	Sanborn Fire Insurance Map (north only)	No structures are depicted on the property. It is unclear if the property was covered in the map.
1949	Aerial Photograph	The subject property appears with two driveways on the south portion. One apparent residence is visible near the center. Due to the resolution of the photograph, it is unclear if other buildings are located on the property.
1950	Sanborn Fire Insurance Map (partial)	The north portion of the property is depicted with a building. The symbols for three underground storage tanks are shown on the west boundary, near S. Huron.
1956	Aerial Photograph	The subject property appears with two driveways on the south portion. One apparent residence is visible near the center. The north portion of the property appears disturbed. Due to the resolution of the photograph, it is unclear if other buildings are located on the property.
1961	Aerial Photograph	One new building is visible on the north portion of the property and another newer building is visible near the center. The south portion of the property appears disturbed.
1964	Sanborn Fire Insurance Map (partial)	The north portion of the property is depicted with a building. The symbols for three underground storage tanks are shown on the west boundary, near S. Huron.
1969	Aerial Photograph	The subject property appears with three buildings along S. Huron.
1969	City Directory	539 S. Huron- not listed.
1972	Aerial Photograph	The subject property appears cleared. Due to the resolution of the photograph, it is unclear if buildings are located on the property.
1972	Planning Department	Site plan for a gasoline station depicting 5 USTs north of the building.
1974	City Directory	539 S. Huron- Minuteman Standard
1978	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and idle.
1979	City Directory	539 S. Huron- Minuteman Standard
1983	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and idle.
1984	City Directory	539 S. Huron- Minuteman Standard
1986	Planning Department	Invoice for removal of five USTs.
1987	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and overgrown.
1987	Assessing Department	Properties at 539 and 569 S. Huron Street purchased by Asad Khailany.
1989	City Directory	Not listed

Year	Source	Information
1994	City Directory	Not listed
1999	City Directory	539 S. Huron- Pars Ice Cream
2000	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and overgrown.
2004	City Directory	539 S. Huron- Pars Ice Cream
2005	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and overgrown.
2006	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and overgrown.
2009	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and overgrown.
2009	City Directory	539 S. Huron- Pars Ice Cream
2010	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and overgrown.
2012	Aerial Photograph	One rectangular-shaped building is visible on the north portion. The remainder of the property appears vacant and overgrown.
2013	Planning Department	Notice of Migration of Contamination submitted to the subject property from adjoining former landfill.
2013	Building Department	Interior of the building renovated with new drywall.
2014	City Directory	539 S. Huron- Auto Line
2016	Site Reconnaissance	The property was occupied by The Patient Station as a medical marijuana dispensary. The remainder of the property was parking lots and wooded land.

ASTM E 1527-13 indicates that the historic use objective for a property is to identify the uses of the property back to the property's first developed use, or 1940, whichever is earlier. Historic information for the subject property was available back to 1927. The property was vacant at that time, and appeared with buildings in the 1949 aerial photograph.

Data failure was encountered trying to determine the date of the property's first developed use. In our professional opinion, this data failure is not considered to represent a significant data gap or recognized environmental condition to the property at this time due to apparent residential use with a filling station on the north portion by 1950.

4.5 HISTORICAL USE INFORMATION ON ADJOINING PROPERTIES

To assess past uses of adjoining properties, McDowell & Associates reviewed the following historical sources: Sanborn Fire Insurance maps, aerial photographs, topographic maps, and city directories.

Based on historic sources reviewed, adjoining properties have historically been residential and wooded land. Gasoline stations have adjoined to the west since at least 1949 and to the north since 1972. The south and east adjoining property was historically a landfill from the 1940's through 1960s.

Partial coverage of adjoining properties is shown on those attachments which could be easily reproduced.

5.0 SITE RECONNAISSANCE

OBSERVER: Jennifer Lagerbohm

DATE: October 25, 2016

TIME: 11:30 a.m.

WEATHER CONDITIONS: Sunny, approximately 45° Fahrenheit

5.1 METHODOLOGY AND LIMITING CONDITIONS

LIMITING CONDITIONS: Dense brush and woods were present on the property which precluded ground observations/access to portions of the property.

The key site manager indicated that access to the building was restricted, and only the lobby was observed during the site reconnaissance. In addition, no interior photographs were permitted.

The property boundaries were not staked at the time of the site reconnaissance.

METHODOLOGY: Meander and search of subject property based upon review of historical information available at the time of the site reconnaissance.

Pictures taken during the site reconnaissance are included in the appendix. A Site Sketch showing characteristics observed on the subject property during the site reconnaissance is also included in the appendix.

5.2 GENERAL SITE SETTING

The property is currently occupied by The Patient Station, a medical marijuana dispensary, and is located within a vacant and residential area. The property consists of approximately 2.15 acres of land with an uneven terrain.

5.3 DESCRIPTIONS OF IMPROVEMENTS TO THE PROPERTY

5.3.1 STRUCTURES

One structure is located on the subject property, associated with the address 539 S. Huron Street. Summarized below is information obtained from building and assessor department records and observations made during the site reconnaissance.

- Built in 1972.
- Approximately 800 square feet.
- One story with no basement.
- Exterior – wood siding with a flat roof. Apparent transite siding was noted on the fascia.
- Interior building components – drywall and wood floor.

5.3.2 ASBESTOS-CONTAINING MATERIALS (ACM)

Structures built prior to 1989 are considered by the industry to have a greater potential to contain ACM than those constructed after that date. The building observed on the subject property was constructed in 1972. Accessible portions of the building were observed by a Certified Asbestos Inspector during the site reconnaissance. Suspect asbestos-containing materials included transite panels, drywall, compound, and exterior caulks.

Prior to demolition, an Asbestos Survey should be conducted. If regulated asbestos-containing materials are identified, the materials should be removed by a licensed asbestos contractor prior to demolition.

5.3.3 ROADS

The subject property is accessible from S. Huron Street and Kramer Street, which adjoin to the west and north, respectively.

Paved areas are located on the north portion of the subject property.

5.3.4 UTILITIES

The subject property is serviced with municipal water, sanitary sewer, natural gas, and electric utilities.

No transformers were observed on the subject property during the site reconnaissance.

5.4 EXTERIOR OBSERVATIONS

General Observations

Exterior portions of the property generally consisted of parking lots and wooded land.

No excavations or stockpiles were noted during the site reconnaissance.

Odors

No strong, pungent, or noxious odors were noted during the site reconnaissance.

Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on the subject property during the site reconnaissance.

Standing Water

No standing water was observed on the subject property during the site reconnaissance.

Stained Soil or Pavement

No stained soils or pavement were observed on the land surrounding the structure during the site reconnaissance.

Stressed Vegetation

No stressed vegetation was observed on the subject property during the site reconnaissance.

Solid Waste Disposal

No solid waste disposal bins or concentrated debris areas were observed on the property during the site reconnaissance.

Scattered debris was noted in the wooded areas on the southeast portion.

Wastewater

No wastewater discharge was observed on the subject property during the site reconnaissance.

Stormwater on the subject property would appear to follow surface topography to the southeast.

Wells

Five monitoring well covers labeled "Amoco Test Well" were observed in the parking lots on the subject property during the site reconnaissance.

No drinking water wells were observed on the subject property during the site reconnaissance.

Septic Systems

No evidence of a septic system was observed on the subject property during the site reconnaissance.

Underground Storage Tanks/Aboveground Storage Tanks

No fill or vent pipes or other evidence of existing underground storage tanks (USTs) was observed during the site reconnaissance.

No aboveground storage tanks (ASTs) were observed during the site reconnaissance.

The 1950 and 1964 Sanborn Fire Insurance Maps depict three underground storage tanks (USTs) along S. Huron Street. No records were found regarding the removal of those USTs. Building department records indicate a new gasoline station was constructed in 1972 with five USTs north of the building, near Kramer Street. Five USTs were reportedly removed in 1986.

5.5 INTERIOR OBSERVATIONS

General Observations

The building is an approximate 800-square foot medical marijuana dispensary. Only the lobby area was accessible during the site reconnaissance.

Heating/Cooling

The building utilizes a natural gas forced-air furnace for heating and an electric air conditioning unit.

Stains or Corrosion

No obvious stains or corrosion were observed within the accessible portions of the building that would be considered a recognized environmental condition to the subject property.

Drains and Sumps

According to the Key Site Manager, there is no sump within the building.

5.6 CURRENT USES OF THE ADJOINING PROPERTIES

Direction from Property	Property Use	Description
North	Commercial	Kramer Street with Citgo gasoline station at 505 S. Huron Street beyond.
East	Residential and Vacant	Former City of Ypsilanti landfill and residences along Kramer Street.
South	Vacant	Former City of Ypsilanti landfill with I-94 beyond.
West	Commercial	S. Huron Street with GW Kent at 506 S. Huron Street beyond.

6.0 INTERVIEWS

Interviews conducted as part of this assessment were completed by Jennifer Lagerbohm and Mark P. Kochanski, who meet the ASTM E 1527-13 definition of an Environmental Professional.

6.1 INTERVIEWS WITH OWNER

Mr. Asad Khailany was identified as the owner at the subject property. No contact information was provided for the owner. Based on information available in city department records, this is not considered a significant data gap or recognized environmental condition to the subject property.

6.2 INTERVIEWS WITH KEY SITE MANAGER

Mr. James Nameth with The Patient Station was identified as a Key Site Manager. Mr. Nameth indicated that he has been at the property since 2013. He was aware of the former use of the property as a gasoline station, but was not aware of any outstanding environmental concerns with the property.

6.3 INTERVIEWS WITH OCCUPANTS

The Patient Station was identified as the occupant. Mr. James Nameth was interviewed.

6.4 INTERVIEWS WITH PAST OWNERS/OCCUPANTS

No contact information was provided for past owners or operators on the subject property.

6.5 INTERVIEWS WITH GOVERNMENT OFFICIALS

A Freedom of Information Act (FOIA) request was submitted to the Ypsilanti Fire Department on October 17, 2016 in regards to the subject property. Information received from Fire Chief Max Anthouard, dated October 19, 2016, indicated that the department maintained records from 1999 through the present, and had no records for the subject property.

A FOIA request was submitted to the Washtenaw County Environmental Health Department on October 17, 2016 in regards to the subject property. A written response was received from Rai Green, dated October 26, 2016, which indicated that the department had one Activity Report for the property, dated March 16, 1990. According to that Activity Report, the property was an abandoned gas station (Mike's Marathon).

Copies of the FOIA requests and responses are appended.

6.6 INTERVIEWS WITH OTHERS

No additional interviews were conducted other than those discussed previously in this report.

7.0 NON-SCOPE SERVICES

No additional non-scope services were performed as part of this assessment.

8.0 EVALUATION

8.1 FINDINGS AND OPINIONS

Following review of data obtained for this assessment, the following have been identified:

Two potential environmental concerns were identified:

1. **Finding:** The existing building is planned for demolition. **Opinion:** Prior to demolition, an Asbestos Survey should be conducted. If regulated asbestos-containing materials are identified, the materials should be removed by a licensed asbestos contractor prior to demolition.
2. **Finding:** The north adjoining property is an existing gasoline station with four currently-in-use USTs. **Opinion:** While that site is listed as a “closed” leaking underground storage tank (LUST) site, an adjoining gasoline station located upgradient from the subject property is considered a potential environmental concern to the subject property.

Five recognized environmental conditions were identified:

1. **Finding:** Based on historic sources reviewed, the north portion of the subject property was previously used as a gasoline station. **Opinion:** The 1950 and 1964 Sanborn Fire Insurance Maps depict three underground storage tanks (USTs) along S. Huron Street. No records were found regarding the removal of those USTs. Building department records indicate a new gasoline station was constructed in 1972 with five USTs north of the building, near Kramer Street. Five USTs were reportedly removed in 1986. No prior sampling and analyses related documentation has been provided to McDowell & Associates, nor was it available in local building assessing, and fire department records or the MDEQ. Five monitoring well covers labeled “Amoco Test Well” were observed in the parking lots during the site reconnaissance.
2. **Finding:** The database report identified the subject property address of 539 S. Huron Street on the Brownfield database. **Opinion:** A Freedom of Information Act (FOIA) request was submitted to the MDEQ to review available files for that site; however MDEQ personnel indicated that no files were found for that address.
3. **Finding:** The log of soil boring sheets for two soil borings made on the subject property show between 3’9” and 7’0” of fill soil on the property. **Opinion:** The origin of the fill soil is unknown.
4. **Finding:** The east and south adjoining property was historically the City of Ypsilanti landfill. **Opinion:** According to city records, methane was reported in soil borings made on that site in 2013 above the lower explosive limit (LEL) for

methane gas. In addition, PNAs and metals were reported in groundwater at that site above MDEQ Generic Residential Criteria. A Notice of Migration of Contamination was submitted for contaminants near the subject property boundary.

5. **Finding:** “30 Kramer Property” was identified as a Brownfield site which adjoins the subject property to the east. According to the SERS Report, that site was developed in 1850 as a dwelling. Auto repair was conducted at that address from 2004 to 2010. Accomplished Brownfield activities at that site included a Phase I ESA. No other information was included in the SERS report. **Opinion:** McDowell & Associates submitted a Freedom of Information Act (FOIA) request to the MDEQ to review the file for that site. MDEQ personnel indicated that no files were found for that address. That data gap is considered a significant data gap and a recognized environmental condition to the subject property at this time.

8.2 ADDITIONAL INVESTIGATION

In our professional opinion, two potential environmental concerns and five recognized environmental conditions require additional investigation to be addressed. A proposal for additional investigation will be provided under separate cover.

8.3 CONCLUSIONS

McDowell & Associates has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-13 of 539 S. Huron Street in Ypsilanti, Washtenaw County, Michigan. Exceptions and deletions are described in Section 2.4 of this report.

This assessment has identified the following potential environmental concerns in connection with the subject property:

1. The existing building is planned for demolition. Prior to demolition, an Asbestos Survey should be conducted. If regulated asbestos-containing materials are identified, the materials should be removed by a licensed asbestos contractor prior to demolition.
2. The north adjoining property is an existing gasoline station with four currently-in-use USTs. While that site is listed as a “closed” leaking underground storage tank (LUST) site, an adjoining gasoline station located upgradient from the subject property is considered a potential environmental concern to the subject property.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property, except for the following:

1. Based on historic sources reviewed, the north portion of the subject property was previously used as a gasoline station. The 1950 and 1964 Sanborn Fire Insurance Maps depict three underground storage tanks (USTs) along S. Huron Street. No records were found regarding the removal of those USTs. Building department records indicate a new

gasoline station was constructed in 1972 with five USTs north of the building, near Kramer Street. Five USTs were reportedly removed in 1986. No prior sampling and analyses related documentation has been provided to McDowell & Associates, nor was it not available in local building, assessing, and fire department records or the MDEQ. Five monitoring well covers labeled “Amoco Test Well” were observed in the parking lots during the site reconnaissance.

2. The database report identified the subject property address of 539 S. Huron Street on the Brownfield database. A Freedom of Information Act (FOIA) was submitted to the MDEQ to review available files for that site; however, MDEQ personnel indicated that no files were found for that address.
3. The log of soil boring sheets for two soil borings made on the subject property show between 3’9” and 7’0” of fill soil on the property. The origin of the fill soil is unknown.
4. The east and south adjoining property was historically the City of Ypsilanti landfill. According to city records, methane was reported in soil borings made on that site in 2013 above the lower explosive limit (LEL) for methane gas. In addition, PNAs and metals were reported in groundwater at that site above MDEQ Generic Residential Criteria. A Notice of Migration of Contamination was submitted for contaminants near the subject property boundary.
5. “30 Kramer Property” was identified as a Brownfield site which adjoins the subject property to the east. According to the SERS Report, that site was developed in 1850 as a dwelling. Auto repair was conducted at that address from 2004 to 2010. Accomplished Brownfield activities at that site included a Phase I ESA. No other information was included in the SERS report. McDowell & Associates submitted a Freedom of Information Act (FOIA) request to the MDEQ to review the file for that site. MDEQ personnel indicated that no files were found for that address. That data gap is considered a significant data gap and a recognized environmental condition to the subject property at this time.

8.4 DEVIATIONS OR DELETIONS

No deviations or deletions from, or additional services beyond those of ASTM E 1527-13, have been noted during completion of this Phase I ESA with the exception of:

- Information identified as a suspect REC for the subject property was discussed within the body of the report, and not separately under Section 7.1 “Findings and Opinions.”
- The format of this report was modeled after the recommended format provided by ASTM E 1527-13. Some adjustments may have been made to meet User, lender, or site-specific requirements.
- Any data gaps identified during this assessment were discussed within the body of the report, if encountered.

8.5 REFERENCES

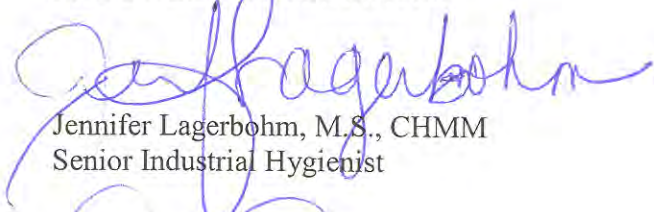
Please refer to the attached Bibliography page within the appendices.

8.6 SIGNATURES

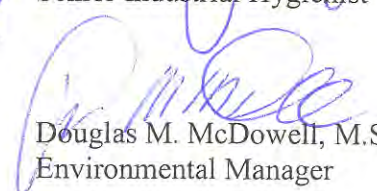
If you have any questions, or if we can be of further assistance, please do not hesitate to call.

Very truly yours,

McDOWELL & ASSOCIATES



Jennifer Lagerbohm, M.S., CHMM
Senior Industrial Hygienist



Douglas M. McDowell, M.S., P.E.
Environmental Manager

JL/jl/ks

8.7 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

We, Mark P. Kochanski, Jennifer Lagerbohm, and Douglas M. McDowell, declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312.

We, Mark P. Kochanski, Jennifer Lagerbohm, and Douglas M. McDowell, have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Copies of our résumés are attached.

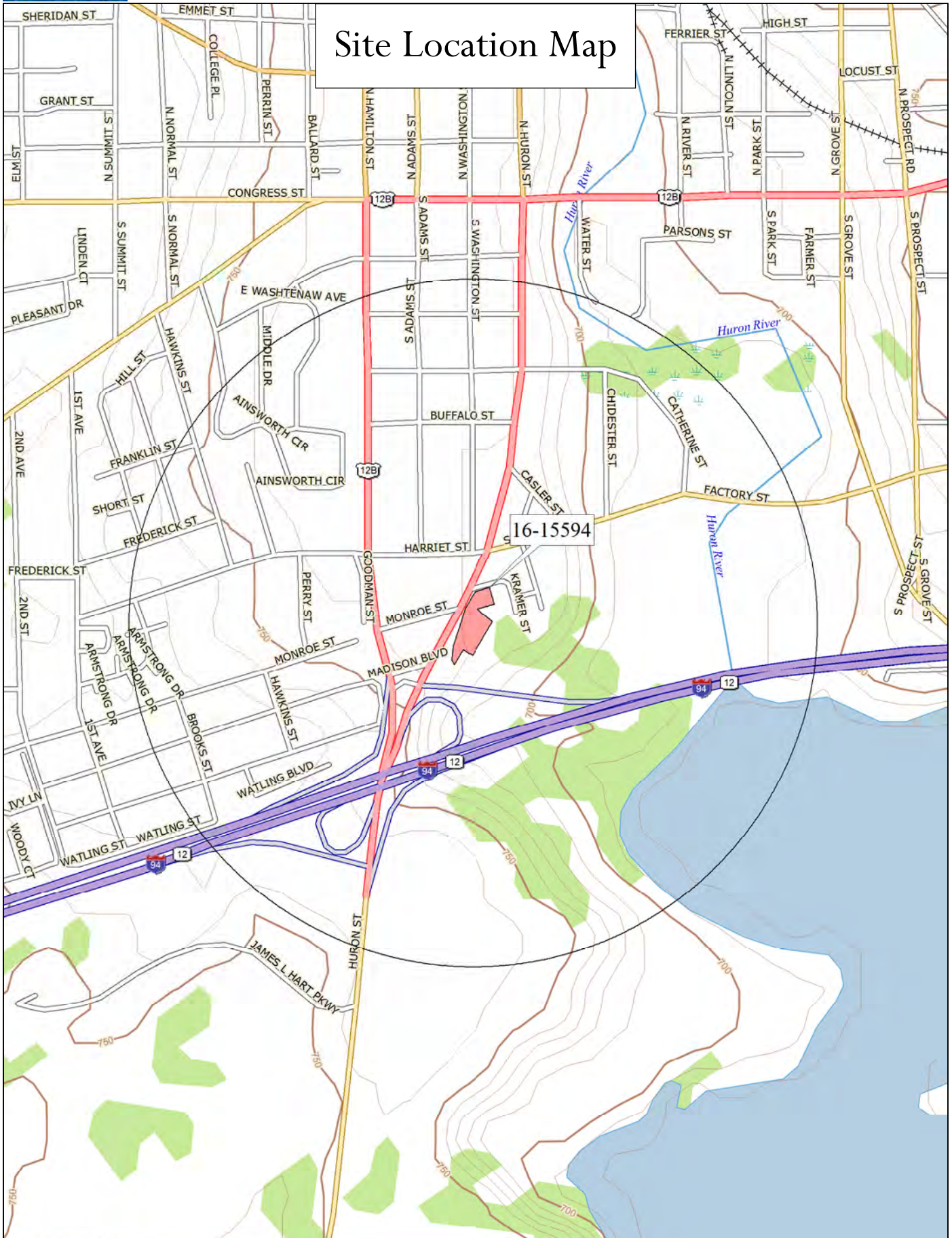
9.0 APPENDICES

- 9.1 Site Location Map
- 9.2 Legal Description of Subject Property
- 9.3 User Provided Information
- 9.4 Site Sketch
- 9.5 Color Photographs of Subject Property
- 9.6 Aerial Photographs
- 9.7 USGS Topographic Maps
- 9.8 USDA Soil Survey Map
- 9.9 Sanborn Fire Insurance Map
- 9.10 Washtenaw County Elevated Arsenic Distribution Map
- 9.11 Log of Soil Boring Sheets and Location Map
- 9.12 Local Government Records
- 9.13 SERS Report
- 9.14 FOIA Requests/Responses
- 9.15 Bibliography
- 9.16 Résumés

9.1

Site Location Map

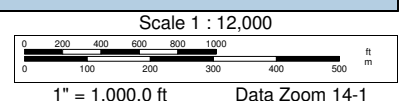
Site Location Map



Data use subject to license.

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www.delorme.com



9.2

Legal Description of Subject Property

**EXHIBIT A
LEGAL DESCRIPTION**

File No.: 131097

The land referred to in this Commitment, situated in the County of Washtenaw, City of Ypsilanti, State of Michigan, is described as follows:

PARCEL 1

Lot 2 and part of Lot 3, PLAN OF CLARKSVILLE, according to the plat there of recorded in Liber 3, page 1, Washtenaw County Records, described as follows: Beginning at the Northeast corner of said Lot 2; thence Southerly 132.12 feet along the Easterly line of Lots 2 and 3; thence Westerly deflecting 89 degrees 56 minutes 30 seconds to the right 138.64 feet along the Southerly line of said Lot 3; thence Northwesterly deflecting 56 degrees 17 minutes 20 seconds to the right 85.54 feet; thence Northeasterly deflecting 81 degrees 54 minutes to the right 91.25 feet along the easterly line of Huron Street as now laid out and used; thence Easterly deflecting 41 degrees 47 minutes to the right 118.29 feet along the Northerly line of said Lot 2 to the point of beginning.

PARCEL 2

Part of Lot 3 PLAN OF CLARKSVILLE, according to the plat there of recorded in Liber 3, page 1, Washtenaw County Records, and part of French Claim 680, described as follows: Beginning at the intersection of the centerline of Huron Street with the centerline of Monroe Avenue (now abandoned); thence Northeasterly 76.89 feet along the centerline of Huron Street; thence Southeasterly deflecting 98 degrees 14 minutes to the right 271.80 feet; thence Southwesterly deflecting 81 degrees 46 minutes to the right 121.83 feet; thence Northwesterly deflecting 88 degrees 33 minutes to the right 269.07 feet to the center of Huron Street; thence Northeasterly deflecting 91 degrees 27 minutes to the right 90.67 feet along the center of Huron Street to the point of beginning, excepting therefrom that part taken for Highway purposes as set forth in Declaration of Taking recorded in Liber 1296, page 428.

Tax Item No. for PARCELS 1 AND 2
11-37-101-002

PARCEL 3

All that part of French Claim 680, City of Ypsilanti, Washtenaw County, Michigan, described as follows: Commencing at the intersection of the centerline of Huron Street and Monroe Avenue; thence South 31 degrees 00 minutes 48 seconds West a distance of 91.51 feet along the centerline of Huron Street to the point of beginning; thence South 60 degrees 26 minutes 12 seconds East a distance of 269.08 feet; thence South 31 degrees 00 minutes 48 seconds West a distance of 179.39 feet; thence North 58 degrees 59 minutes 12 seconds West a distance of 86.00 feet; thence South 31 degrees 00 minutes 48 seconds West a distance of 150.00 feet; thence North 58 degrees 59 minutes 12 seconds West a distance of 183.00 feet to the centerline of Huron Street; thence North 31 degrees 00 minutes 48 seconds East a distance of 322.58 feet to the point of beginning, which lies southeasterly of a line described as: Commencing at the intersection of the centerlines of Monroe Avenue and Huron Street; thence North 31 degrees 00 minutes 48 seconds East along the centerline of Huron Street a distance of 26.56 feet; thence South 58 degrees 59 minutes 12 seconds East a distance of 33.00 feet to the point of beginning; thence South 17 degrees 57 minutes 08 seconds West a distance of 308.44 feet; thence South 07 degrees 41 minutes 52 seconds West a distance of 111.81 feet; thence South 27 degrees 38 minutes 50 seconds East a distance of 111.81 feet to a point of ending.

Tax Item No. 11-37-101-006

9.3

User Provided Information



OFFICIAL SEAL

Washtenaw Co., MI

01/16/08

Lawrence Kestenbaum

L-4661 P-998

Clerk Register



Page: 1 of 2

ACS-5828537-D-2008-2

Lawrence Kestenbaum, Washtenaw

10:49 A
01/16/08

L-4661 P-998

QUIT CLAIM DEED

BP PRODUCTS NORTH AMERICA INC., a Maryland corporation, successor in interest to the American Oil Company, a Maryland corporation ("Grantor"), with an address at 4101 Winfield Road, MC 5E, Warrenville, Illinois 60555, quitclaims to **ASAD KHAILANY** and **LAURA ANN KHAILANY**, husband and wife ("Grantee"), whose address is P.O. Box 980647, Ypsilanti, Michigan 48198, the premises situated in the City of Ypsilanti, County of Washtenaw, State of Michigan (the "Premises"), more specifically described as:

Lot 2 and part of Lot 3, PLAN OF CLARKSVILLE, according to the plat thereof recorded in Liber 3, page 1, Washtenaw County Records, described as follows: Beginning at the Northeast corner of said Lot 2; thence Southerly 132.12 feet along the Easterly line of Lots 2 and 3; thence Westerly deflecting 89 degrees 56 minutes 30 seconds in the right 138.64 feet along the Southerly line of said Lot 3; thence Northwesterly deflecting 56 degrees 17 minutes 20 seconds to the right 85.54 feet; thence Northeasterly deflecting 81 degrees 54 minutes to the right 91.25 feet along the easterly line of Huron Street as now laid out and used; thence Easterly deflecting 41 degrees 47 minutes to the right 118.29 feet along the Northerly of said Lot 2 to the point of beginning.

Tax Parcel No. 11-37-101-002

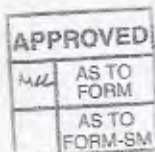
for One Dollar (\$1.00) and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged. This instrument is exempt from State Transfer Tax under MCL 207.526(a) and exempt from County Transfer Tax under MCL 207.505(a).

Grantor grants to Grantee the right to make all available division(s) under Section 108 of the Land Division Act, Act No. 288 of the Public Acts of 1967, as amended.

This property may be located within the vicinity of farmland or a farm operation. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan Right to Farm Act.

GRANTOR:

BP PRODUCTS NORTH AMERICA INC.,
a Maryland corporation, successor in interest to the
American Oil Company, a Maryland corporation



By:

Print Name:

Its:

Crystal E. Ashby
Vice President

Dated as of June 27, 2006.



ACS-5828537-D-2008-2
Lawrence Kestenbaum, Washtenaw

10:49 A
01/16/08

L-4661 P-998

STATE OF ILLINOIS)
COUNTY OF DUPAGE) SS.

The foregoing instrument was acknowledged before me this 27th day of June, 2006, by Crystal E. Ashby, Vice President of BP Products North America Inc., a Maryland corporation, successor in interest to the American Oil Company, a Maryland corporation, on behalf of the corporation.

Tammy L. Rambow
Notary Public
Print Name: Tammy L. Rambow
County of Kendall, State of Illinois
My commission expires 7-22-06
Acting in DuPage County, Illinois
[Seal]

Drafted by and when recorded return to:
Vincent Kuebler, Esq.
Honigman Miller Schwartz and Cohn LLP
2290 First National Building
660 Woodward Avenue
Detroit, MI 48226



Send subsequent tax bills to: Grantee

Recording Fee: \$ _____

Transfer Tax: Exempt from State Transfer Tax under MCL 207.526(a).
Exempt from County Transfer Tax under MCL 207.505(a).

DETROIT.2139557.1

Asad & Laura Khailany
3662 Knoll CREEK CT. ✓
ANN ARBOR, MI 48105

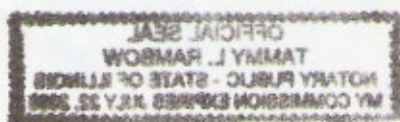
SUBMITTED
FOR RECORDING

JAN 16 2008

Washtenaw County, MI
Clerk Register's Office

Notary Public - State of Illinois
My Commission Expires July 22, 2008

Tammy L. Rambo
Notary Public
My Commission Expires July 22, 2008



TAMMY L. RAMBO
NOTARY PUBLIC
MY COMMISSION EXPIRES JULY 22, 2008

NOTARY PUBLIC
STATE OF ILLINOIS
JAN 18 2008
CHIEF CLERK

RECORDED
WASHTENAW COUNTY, MI

DEC 1 8 55 AM '87

ROBERT M. HARRISON
COUNTY CLERK/REGISTERWARRANTY DEED

This Indenture Witnesseth: That the Grantor, **AMOCO OIL COMPANY**, a corporation organized and existing under and by virtue of the laws of the State of Maryland, for and in consideration of the sum of **Thirty Five Thousand and no/100 Dollars (\$35,000.00)**, to it in hand paid, conveys and warrants to:

Asad Khailany and Laura Ann Khailany,
husband and wife
340 S. Ford Boulevard
Ypsilanti (Washtenaw), Michigan

the following described real estate, situated in the County of Washtenaw and State of Michigan to wit:

Being a part of Lot 3, PLAN OF CLARKESVILLE, City of Ypsilanti, Washtenaw County, Michigan, according to the Plat thereof as recorded in Liber M of Deeds at Page 1, Washtenaw County Records, also a part of French Claim 680, being described as:

Beginning at the intersection of the centerline of Huron Street with the centerline of Monroe Avenue (now abandoned); thence Northeasterly 76.89 feet along the centerline of Huron Street; thence Southeasterly deflecting 98° 14' to the right 271.80 feet; thence Southwesterly deflecting 81° 46' to the right 121.83 feet; thence Northwesterly deflecting 88° 33' to the right 269.07 feet to the center of Huron Street; thence Northeasterly deflecting 91° 27' to the right 90.67 feet along the center of Huron Street to the Place of Beginning.

EXCEPTING THEREFROM that part taken for highway purposes as set forth in Declaration of Taking recorded in Liber 1296 at Page 428, Washtenaw County Records.

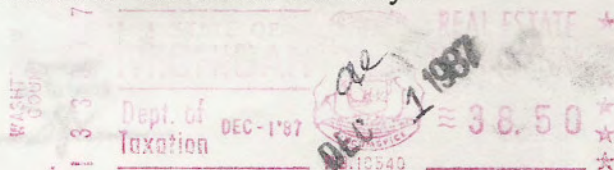
Washtenaw County Treasurer
Tax Certificate No. 9117 BA

Permanent Tax Code: 11-37-101-002 (YP 18W-2 and IW-29)
Tax Code prior to 1984: 11-150-002-00
Property Address: 539 S. Huron & I-94, Ypsilanti, MI

Subject To:

- (1) Existing leases, easements, sidetrack and license agreements, if any, whether of record or not.
- (2) Covenants and conditions of record, if any.
- (3) Taxes and special assessments against the said premises, if any.
- (4) Zoning laws and municipal regulations, if any:

- (4) Zoning laws and municipal regulations, if any; environmental laws and regulations, if any; building line restrictions, use restrictions and building restrictions of record, if any; and any party wall agreements of record.
- (5) Encroachments, overlaps and other matters which would be disclosed by an accurate current survey.



In Witness Whereof, the said Grantor has caused this instrument to be signed by its Manager, Capital Investment (West) and its corporate seal to be hereto affixed and attested by its Assistant Secretary, all this 15th day of September, 19 87.

In the Presence of:

AMOCO OIL COMPANY

Wm. L. Baron
L. J. Berry

K. C. Forsgren
 K. C. Forsgren, Manager
 Capital Investment (West)

Wm. L. Baron
L. J. Berry

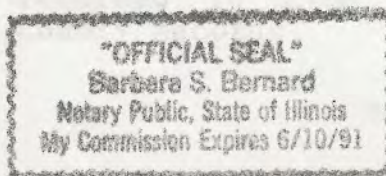
Attest:

Henry M. Carle
 Henry M. Carle
 Assistant Secretary

STATE OF ILLINOIS)
) ss
 COUNTY OF COOK)

I, Barbara S. Bernard, a Notary Public in said State and County, do hereby certify that K. C. Forsgren and Henry M. Carle, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as Manager, Capital Investment (West) and Assistant Secretary of AMOCO OIL COMPANY, a Maryland corporation, appeared before me this day in person and acknowledged that they signed, sealed with the corporate seal of said corporation, and delivered the said instrument as their own free and voluntary act, and as the free and voluntary act of said corporation, for the uses and purposes therein set forth, and that they were duly authorized to execute the said instrument by the Board of Directors of said corporation.

Given under my hand and seal, this 15th day of September, 1987.



Barbara S. Bernard
 Barbara S. Bernard
 Notary Public

My commission expires: June 10, 1991.

Return Recorded Deed To:

Mail Tax Bills To:

Asad Khailany

Asad Khailany

340 S. Ford Blvd.

340 S. Ford Blvd.

Ypsilanti, MI 48197

Ypsilanti, MI 48197

This instrument prepared by:

T. J. Buehler
 Real Estate Attorney

This instrument prepared by:

(4) Zoning laws and municipal
environmental laws and
line restrictions.
restrictions of record,
agreements of record.

T. J. Buehler
Real Estate Attorney
Amoco Oil Company
200 East Randolph Drive
Mail Code 1401B
Chicago, Illinois 60601

Approved
As To Form


-2-

as directed

38.50

RECORDED
WASHINGTON COUNTY, MI

DEC 1 8 55 AM '87

ROBERT M. HARRISON
COUNTY CLERK/REGISTER

In Witness Whereof, the said Grantor has caused this instrument to be signed by its Manager, Capital Investment (West) and its corporate seal to be hereunto affixed and attested by the Assistant Secretary, all this 12th day of April, 1987.

In the Presence of:

[Signature]
[Signature]
[Signature]

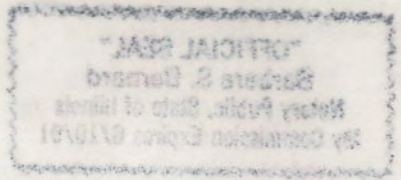
Attest:
[Signature]
Henry M. Certe
Assistant Secretary

[Signature]
[Signature]
[Signature]

STATE OF ILLINOIS)
) ss
COUNTY OF COOK)

I, Barbara S. Bernard, a Notary Public in said State and County do hereby certify that K. C. Foregren and Henry M. Certe personally known to me to be the same persons whose names are subscribed to the foregoing instrument as Manager, Capital Investment (West) and Assistant Secretary of AMOCO OIL COMPANY, a Maryland corporation, appeared before me this day in person and acknowledged that they signed, sealed with the corporate seal of said corporation, and delivered the said instrument as their own free and voluntary act, and as the free and voluntary act of said corporation, for the uses and purposes therein set forth, and that they were duly authorized to execute the said instrument by the Board of Directors of said corporation.

Given under my hand and seal, this 12th day of April, 1987.



[Signature]
Barbara S. Bernard
Notary Public

My commission expires: June 10, 1991.

Return Recorded Dued To: Mail Tax Bills To:

Asad Khattany
340 S. Ford Blvd.
Ypsilanti, MI 48197

This instrument prepared by: T. J. Bush



PHILIP R. SEAVER TITLE COMPANY, Inc.

WARRANTY DEED—Statutory Form
C.L. 1948, 565.151 M.S.A. 26.571

2700 N. Woodward / Bloomfield Hills, Michigan 48013 / (313) 647-2171 — (313) 338-7135

KNOW ALL MEN BY THESE PRESENTS: That FRANCES M. LEASON, as Trustee of a certain Living Trust Agreement, dated March 4, 1986 whose address is 404 N. Rosevere, Dearborn, MI 48128

Convey(s) and Warrant(s) to ASAD KHAILANY and LAURA KHAILANY, his wife whose address is 340 S. Ford Blvd., Ypsilanti, MI 48198

the following described premises situated in the City of Ypsilanti County of Washtenaw and State of Michigan, to-wit:

See attached legal description made a part hereof.

for the full consideration of Four Thousand and 00/100 (\$4,000.00) Dollars subject to easements and restrictions of record

Dated this 23rd day of October 19 87

Witnesses:

Signed and Sealed:

S. Gerald Gorcyca
S. GERALD GORCYCA
Tamie P. Keillor
TAMIE P. KEILLOR

Frances M. Leason, Trustee (L.S.)
FRANCES M. LEASON, Trustee of a certain Living Trust Agreement, dated March 4, 1986 (L.S.)

____ (L.S.)

STATE OF MICHIGAN }
COUNTY OF Oakland } ss.

____ (L.S.)

The foregoing instrument was acknowledged before me this 23rd day of October 1987 by Frances M. Leason, Trustee of a certain Living Trust Agreement dated March 4, 1986. My commission expires

S. Gerald Gorcyca
S. Gerald Gorcyca
Notary Public Oakland County, Michigan

Instrument Drafted by S. GERALD GORCYCA, ESQ.

Business Address 30600 Telegraph Rd., Ste. 3250 Birmingham, MI 48010

County Treasurer's Certificate

City Treasurer's Certificate

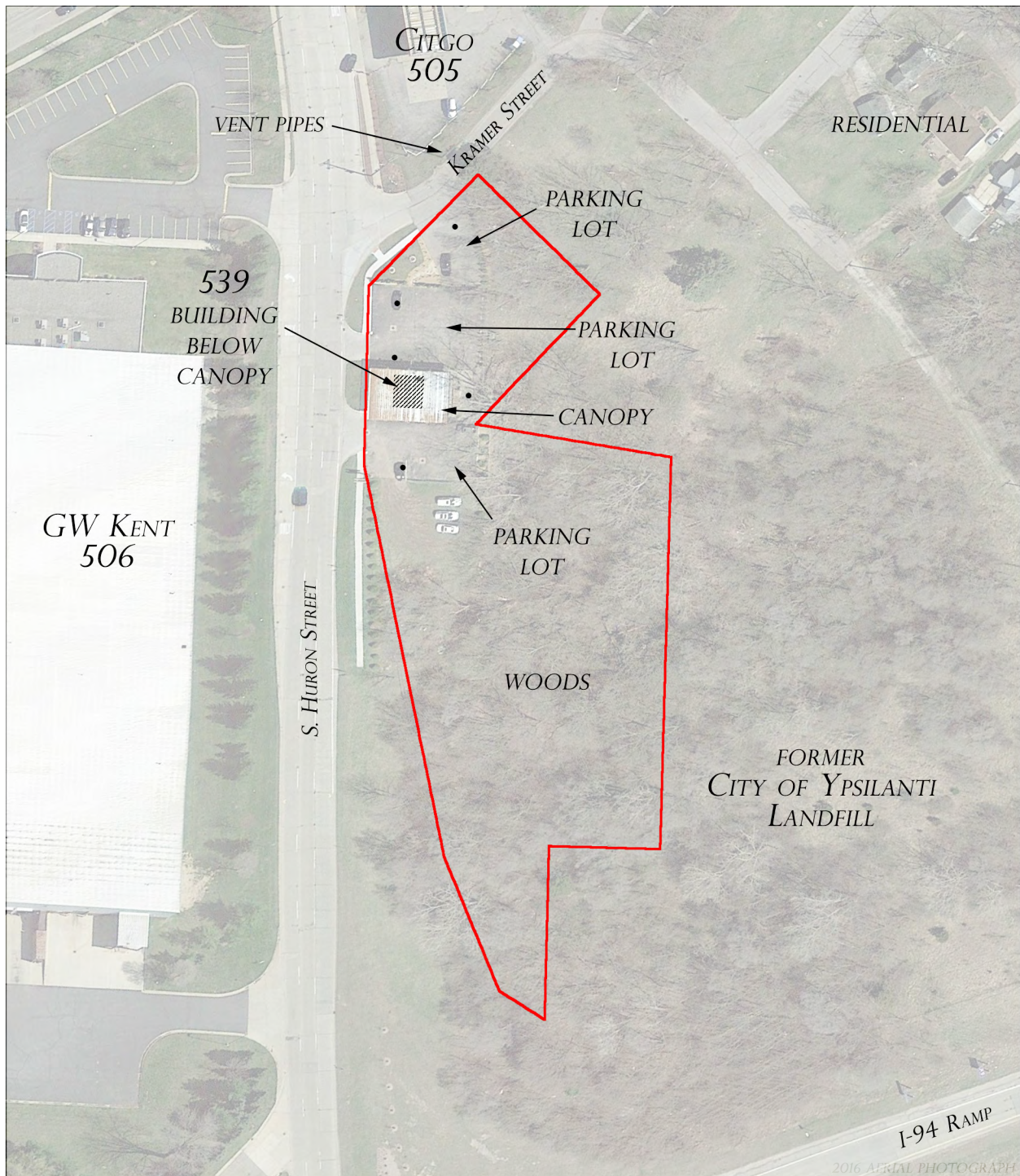
All that part of French Claim 680, City of Ypsilanti, Washtenaw County, Michigan, described as: Commencing at the intersection of the centerline of Huron Street and Monroe Avenue; thence South 31 deg. 00' 48" West a distance of 91.51 feet along the centerline of Huron Street to the point of beginning; thence South 60 deg. 26' 12" East a distance of 269.08 feet; thence South 31 deg. 00' 48" West a distance of 179.39 feet; thence North 58 deg. 59' 12" West a distance of 86.00 feet; thence South 31 deg. 00' 48" West a distance of 150 feet; thence North 58 deg. 59' 12" West a distance of 183.00 feet to the centerline of Huron Street; thence North 31 deg. 00' 48" East a distance of 322.58 feet to the place of beginning; which lies Southeasterly of a line described as: Commencing at the intersection of the centerlines of Monroe Avenue and Huron Street, thence North 31 deg. 00' 48" East along the centerline of Huron Street a distance of 26.56 feet; thence South 58 deg. 59' 12" East a distance of 33.00 feet to the point of beginning; thence South 17 deg. 57' 08" West a distance of 308.44 feet; thence South 07 deg. 41' 52" West a distance of 111.81 feet; thence South 27 deg. 38' 50" East a distance of 111.81 feet to a point of ending.

Fluid mineral and gas rights are reserved under provisions of Act 22 of the Public Acts of 1962, as amended with the lands herein described. Except with that part described as: Commencing at the intersection of the centerline of Huron Street with the centerline of Monroe Avenue, thence South 31 deg. 00' 48" West a distance of 157.09 feet along the centerline of Huron Street to the point of beginning; thence South 59 deg. 42' 12" East a distance of 269.02 feet; thence South 31 deg. 00' 48" West a distance of 110.37 feet; thence North 58 deg. 59' 12" West a distance of 269.00 feet; thence North 31 deg. 00' 48" East a distance of 107.00 feet to the point of beginning, where they are included.

9.4

Site Sketch

SITE SKETCH



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- "AMOCO TEST WELL" MONITORING WELL



9.5

Color Photographs of Subject Property



1. NEAR THE NORTHEAST CORNER, LOOKING SOUTH.



2. NEAR THE NORTHEAST CORNER, LOOKING SOUTHWEST.



3. NEAR THE NORTHWEST CORNER, LOOKING SOUTH.



4. NEAR THE NORTHWEST CORNER, LOOKING SOUTHEAST.



5. NEAR THE SOUTH END, LOOKING NORTH.



6. NEAR THE WEST CENTRAL, LOOKING NORTH.



7. NEAR THE WEST CENTRAL, LOOKING NORTHEAST.



8. NEAR THE WEST CENTRAL, LOOKING EAST.



9.-10. SOUTH SIDE OF BUILDING.



11. NORTH AND EAST SIDES OF BUILDING.



12. LOOKING WEST, NORTH OF BUILDING.



13.-14. TYPICAL "AMOCO TEST WELL" COVERS.

9.6

Aerial Photographs

1949 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



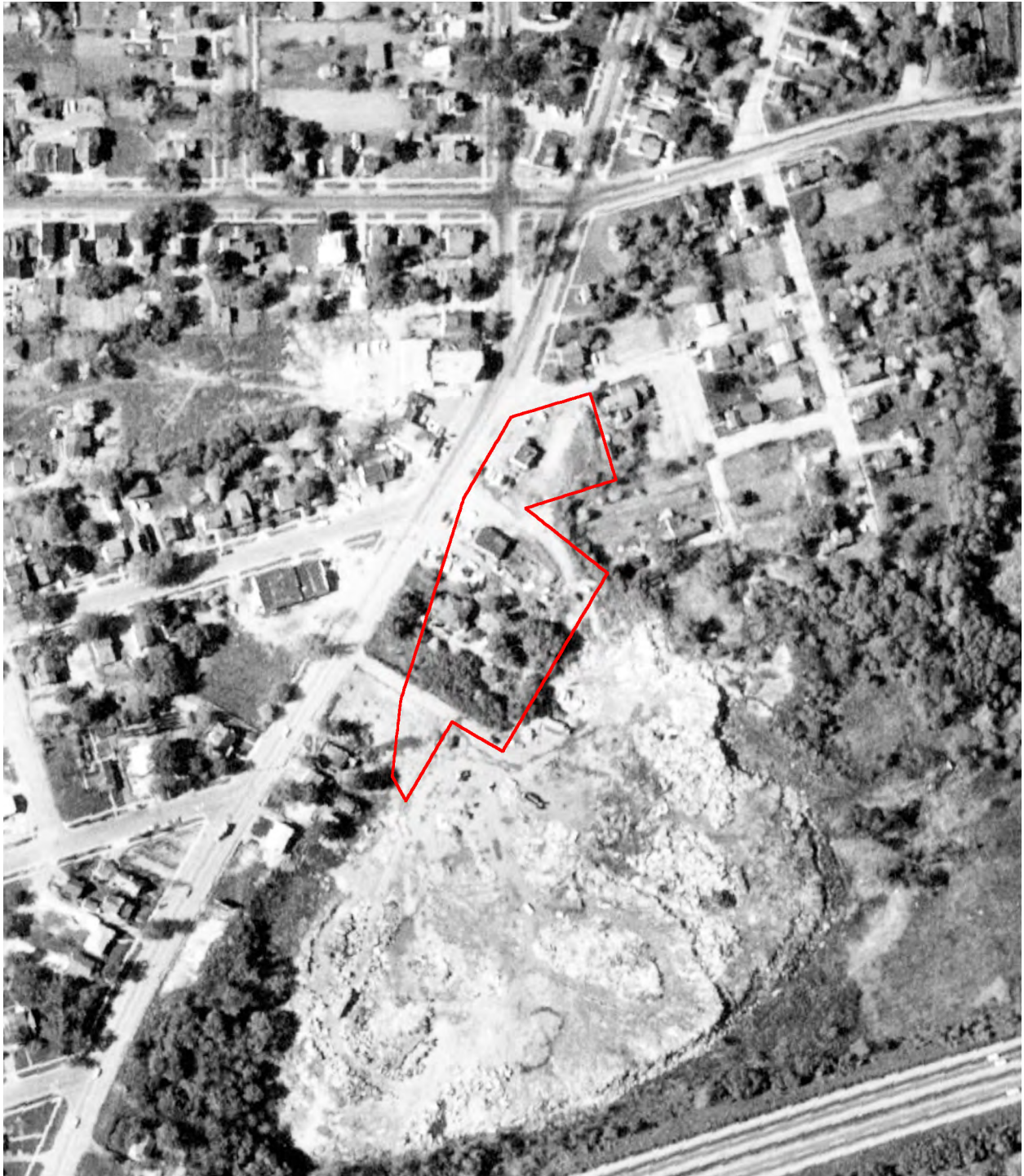
1956 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



1961 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



1969 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



1978 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



1987 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



2000 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



2009 AERIAL PHOTOGRAPH



— APPROXIMATE PROPERTY BOUNDARY



2016 AERIAL PHOTOGRAPH



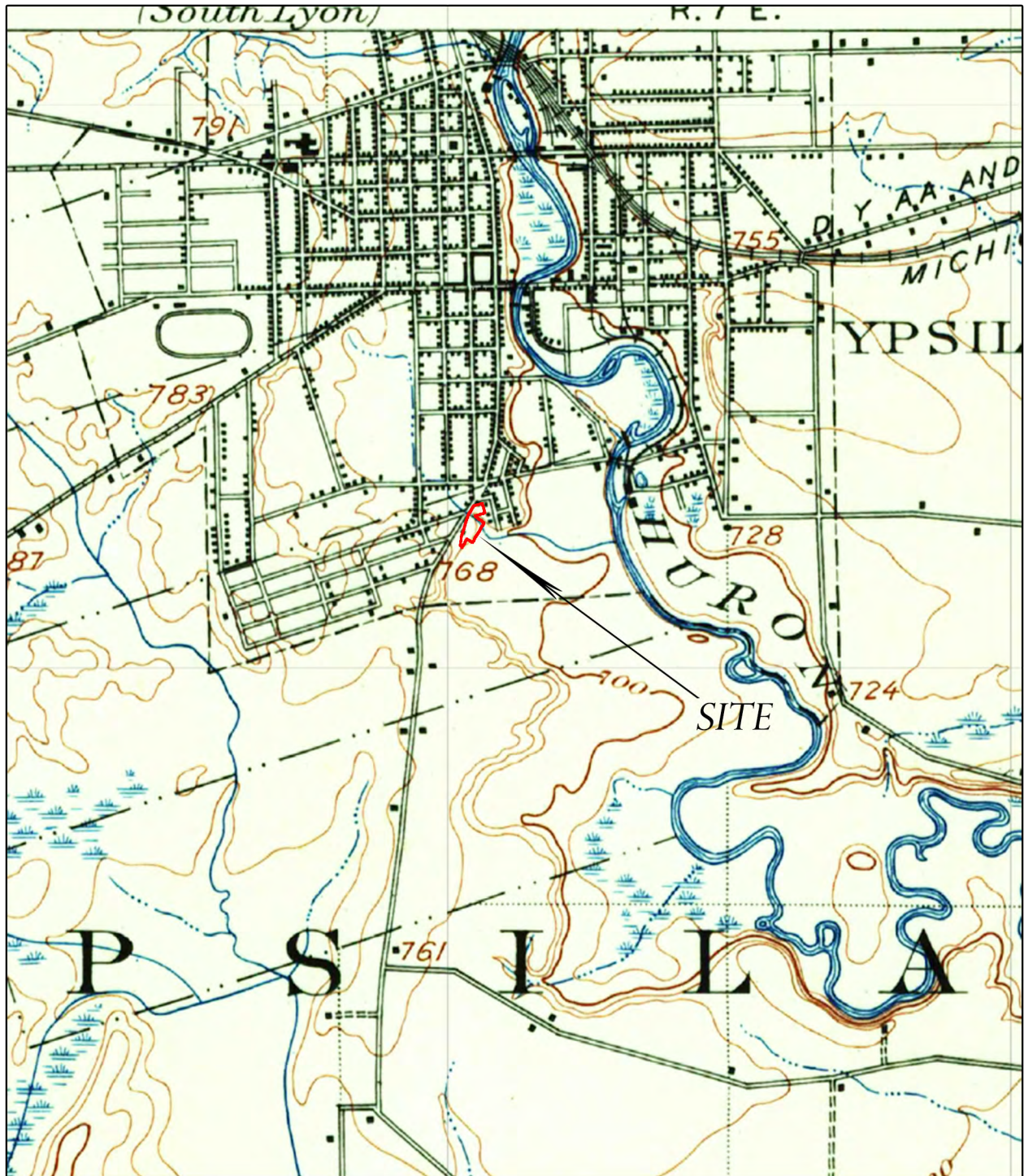
— APPROXIMATE PROPERTY BOUNDARY



9.7

USGS Topographic Maps

1902 USGS TOPOGRAPHIC MAP

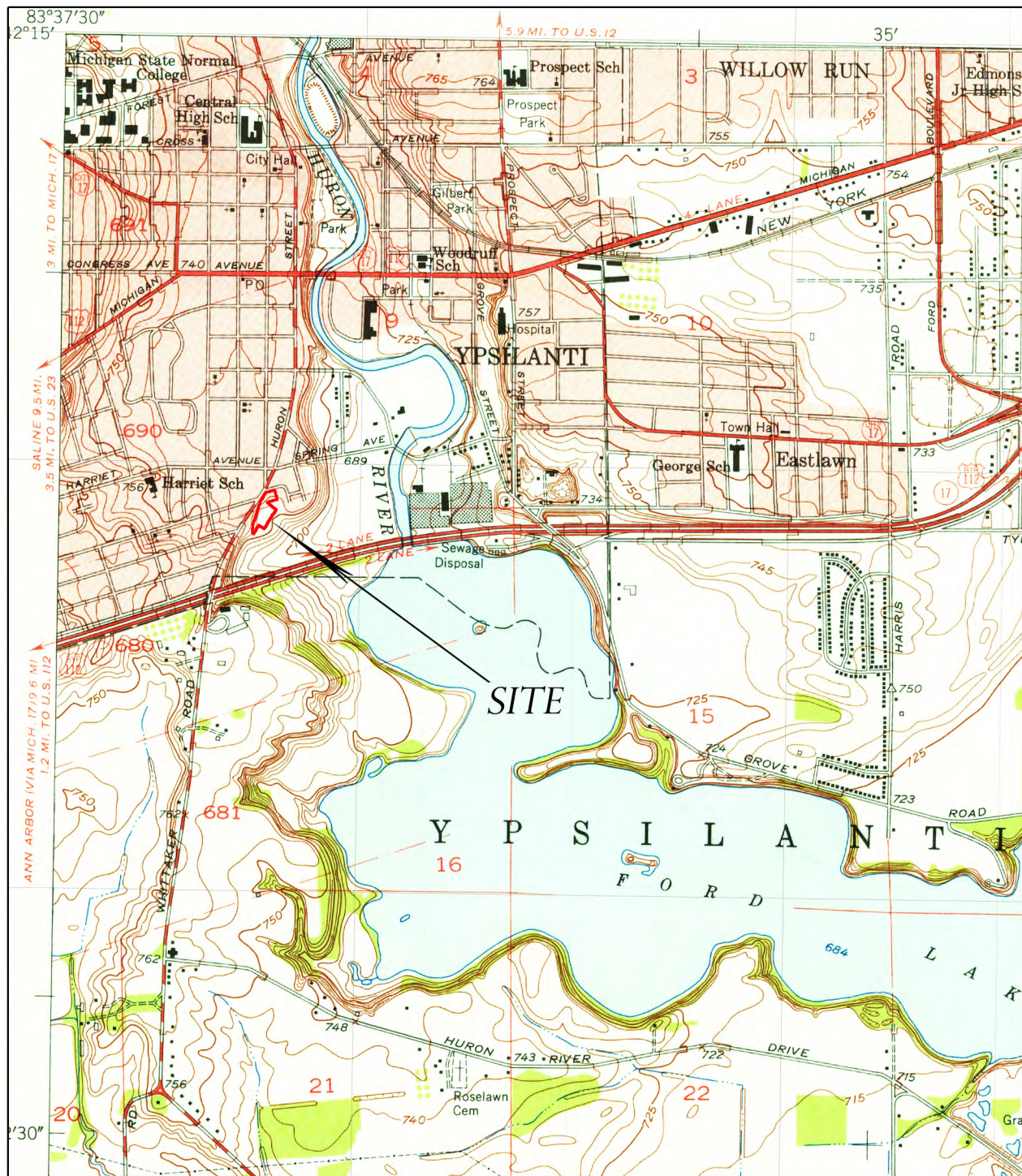


YPSILANTI QUADRANGLE

— APPROXIMATE PROPERTY BOUNDARY



1953 USGS TOPOGRAPHIC MAP

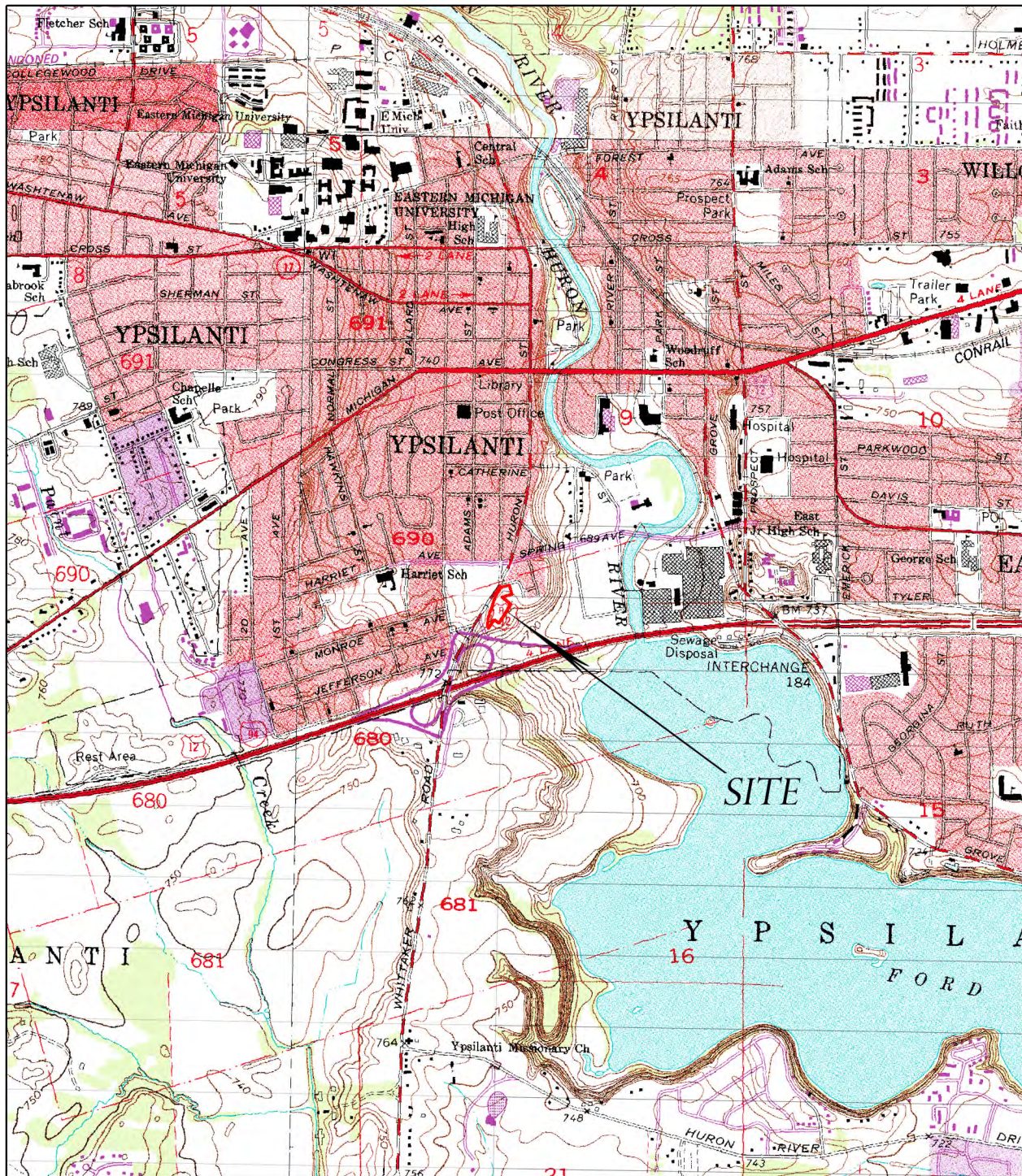


YPSILANTI EAST QUADRANGLE

— APPROXIMATE PROPERTY BOUNDARY



1980-96 USGS TOPOGRAPHIC MAP



YPSILANTI EAST '96 (SE-PORTION)/YPSILANTI WEST '83 (SW-PORTION)/
DENTON '80 (NE-PORTION)/ ANN ARBOR EAST '83 (NW-PORTION) QUADRANGLES
DATED 1965, 1967, 1969 AND 1996, PHOTOREVISED 1973, 1980 AND 1983

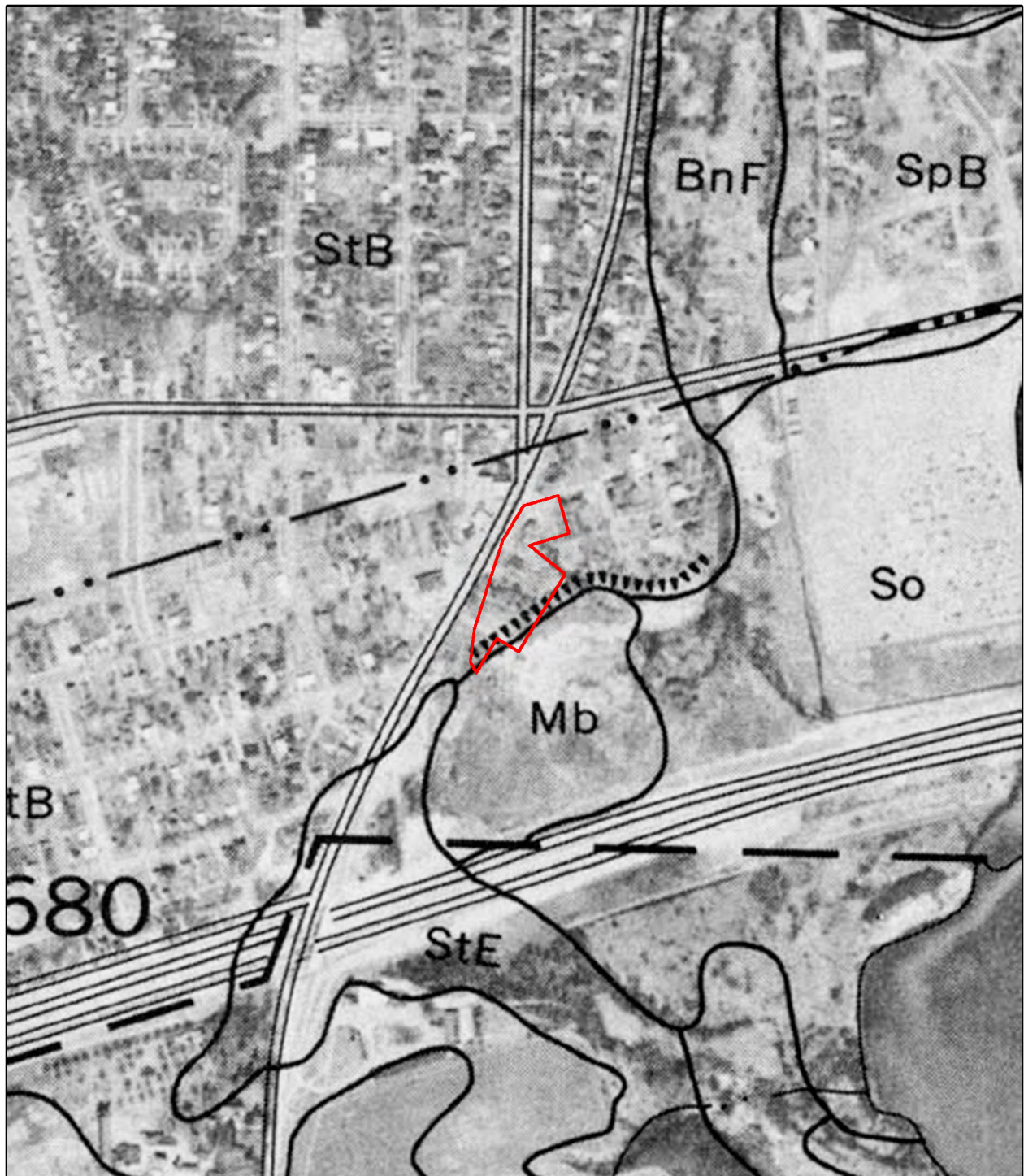
— APPROXIMATE PROPERTY BOUNDARY



9.8

USDA Soil Survey Map

USDA SOIL SURVEY MAP



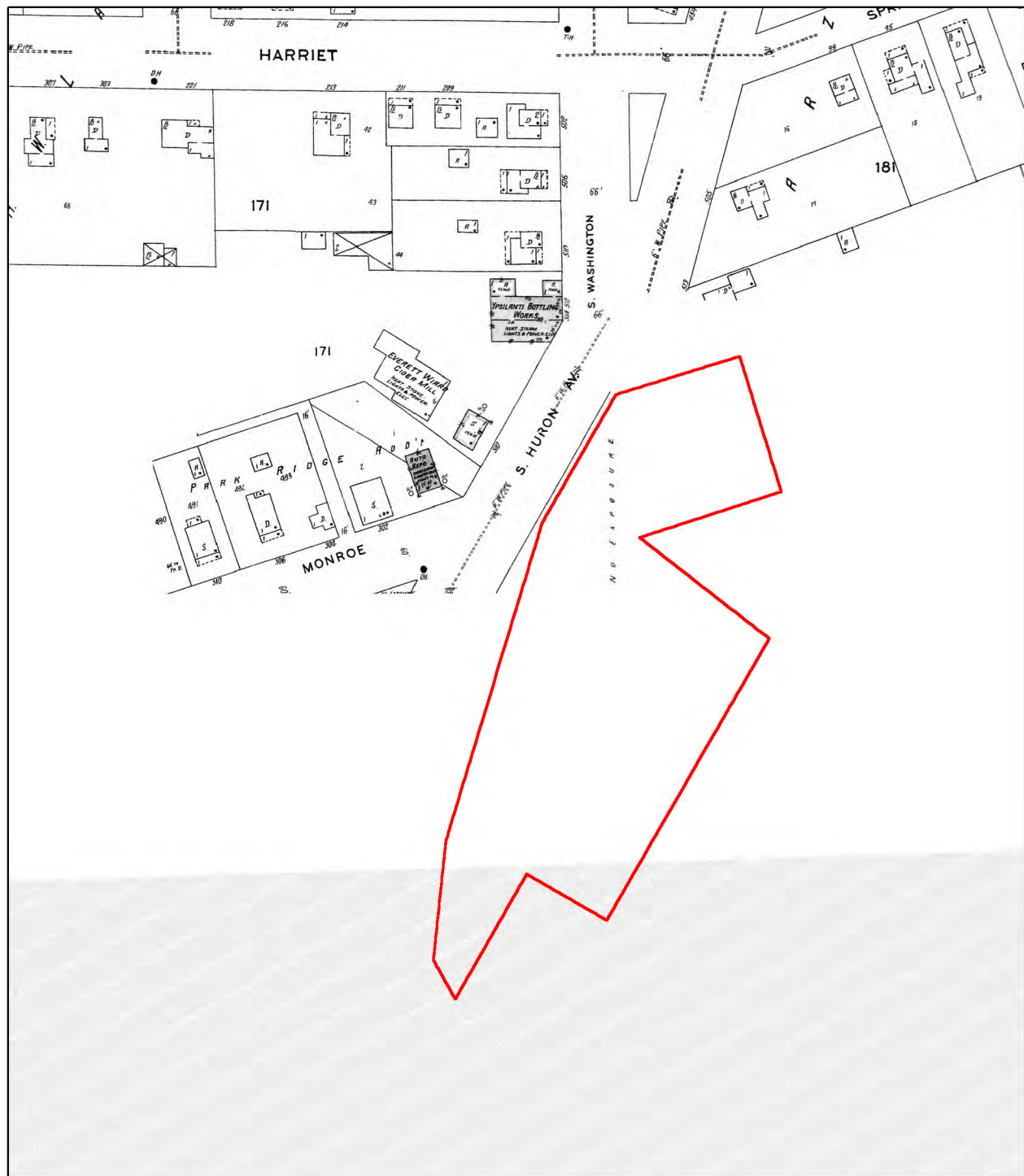
— APPROXIMATE PROPERTY BOUNDARY



9.9

Sanborn Fire Insurance Maps

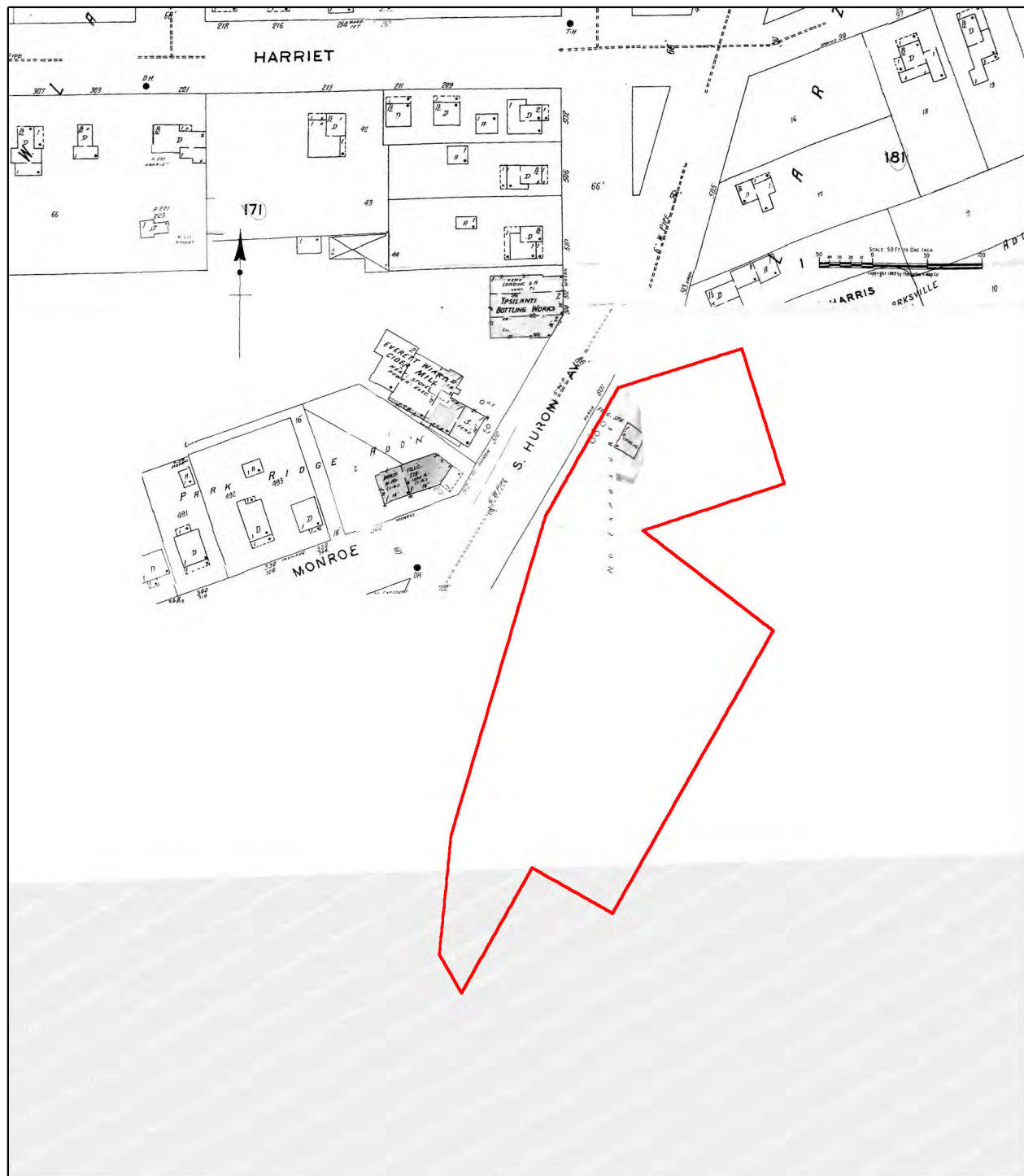
1927 SANBORN MAP



— APPROXIMATE PROPERTY BOUNDARY



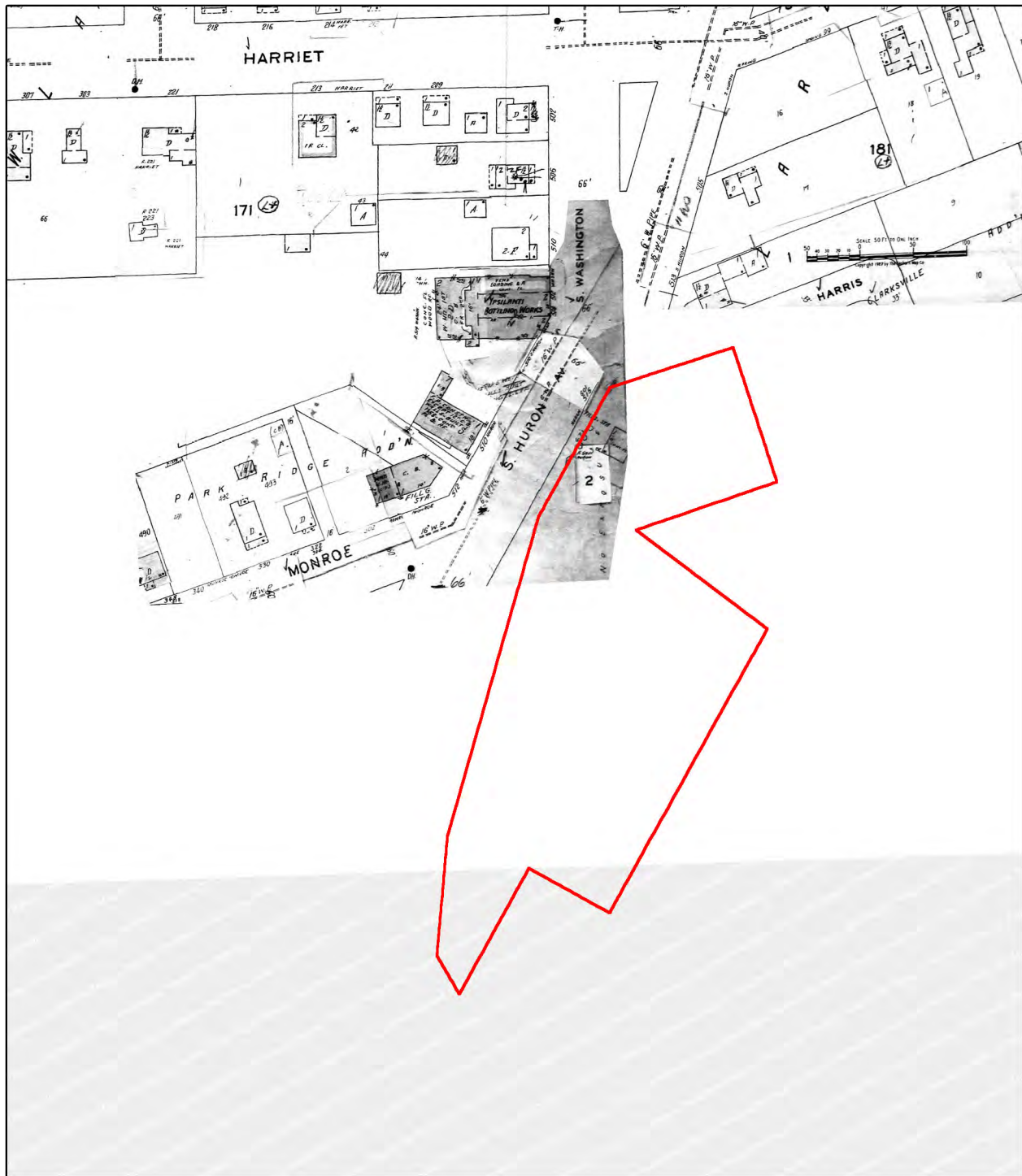
1950 SANBORN MAP



— APPROXIMATE PROPERTY BOUNDARY



1964 SANBORN MAP



— APPROXIMATE PROPERTY BOUNDARY



9.10

Washtenaw County Elevated Arsenic Distribution Map



eWashtenaw.org

Elevated Arsenic Distribution

Legend

- Section where sample of arsenic had a concentration greater than or equal to 0.050 mg/L
- Section where sample of arsenic had a concentration greater than or equal to 0.025 mg/L and less than 0.050 mg/L
- Section where sample of arsenic had a concentration greater than 0.010 mg/L and less than 0.025 mg/L

Notes:

- 8 of 2235 arsenic samples had concentrations greater than or equal to 0.050 mg/L.
- 36 of 2235 arsenic samples had concentrations ranging from greater than or equal to 0.025 mg/L and less than 0.050 mg/L.
- 174 of 2235 arsenic samples had concentrations ranging from greater than 0.010 mg/L to less than 0.025 mg/L.
- 2017 of 2235 arsenic samples had concentrations less than or equal to 0.010 mg/L.

** One (1) part per billion equals 0.001 mg/L.

Plotted: January 5, 2006



Source: Washtenaw County Groundwater Sample Analytical Results from 2001-2005

The map shown here is for illustrative purposes only, is not suitable for site-specific decision making. The data depicted is compiled from a variety of sources, thus this information is provided with the understanding that the conclusions drawn from the data are solely the responsibility of the user. Any assumptions of the legal status of this data is hereby disclaimed.

9.11

Log of Soil Boring Sheets and Location Map



McDOWELL & ASSOCIATES
Geotechnical, Environmental, & Hydrogeologic Services
21355 Hatcher Avenue • Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157

JOB NO. 16-347

LOG OF SOIL
BORING NO. 1

PROJECT Soils Investigation
LOCATION Patient Station Building
South Huron and Kramer Streets

SURFACE ELEV. DATE 10-27-16

Ypsilanti, Michigan

Sample & Type	Depth	Legend	SOIL DESCRIPTION	Penetration Blows for 6"	Moisture %	Natural Wt. P.C.F.	Dry Den Wt. P.C.F.	Unc. Comp. Strength PSF	Str. %
	1		Moist dark brown silty sandy TOPSOIL with trace of bricks and occasional stones, fill						
	2		Moist discolored brown fine SAND with some topsoil seams, fill	5					
A SS	3		Very stiff moist dark brown clayey TOPSOIL with sand and pebbles, fill	7 14	9.6				
	4		CONCRETE SLAB						
B SS	5		Very compact moist discolored brown silty fine SAND with moist dark brown clay seams, occasional stones and trace of concrete, fill	10 8 10	7.1				
	6								
C SS	7		Moist dark brown silty SAND with topsoil, fill	9					
	8		Extremely compact moist brown SAND & GRAVEL with trace of silt	25 --	3.4				
	9								
D SS	10			25 30 --	5.0				
	11		Extremely compact moist brown silty SAND & GRAVEL with occasional stones						
	12								
	13								
	14								
E SS	15			10 16 15					
	16								
	17		Extremely compact wet brown SAND & GRAVEL with stones						
	18								
	19								
F SS	20			13 16 19					
	21								
	22								
	23								
	24								
	25								

TYPE OF SAMPLE
D. - DISTURBED
U.L. - UNDIST. LINER
S.T. - SHELBY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
() - PENETROMETER

REMARKS:

Standard Penetration Test - Driving 2" OD Sampler 1' With
140# Hammer Falling 30": Count Made at 6" Intervals

GROUND WATER OBSERVATIONS

G.W. ENCOUNTERED AT 14 FT. 0 INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. AFTER COMPLETION 14 FT. 3 INS.
G.W. AFTER HRS. FT. INS.
G.W. VOLUMES Heavy



McDOWELL & ASSOCIATES
Geotechnical, Environmental, & Hydrogeologic Services
21355 Hatcher Avenue • Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157

JOB NO. 16-347

LOG OF SOIL
BORING NO. 2

PROJECT Soils Investigation
LOCATION Patient Station Building
South Huron and Kramer Streets

SURFACE ELEV. DATE 10-27-16

Ypsilanti, Michigan

Sample & Type	Depth	Legend	SOIL DESCRIPTION	Penetration Blows for 6"	Moisture %	Natural Wt. P.C.F.	Dry Den Wt. P.C.F.	Unc. Comp. Strength PSF	Str. %
	1		Moist dark brown clayey TOPSOIL with sand and pebbles and vegetation, fill						
			1'3"						
A	2			6					
SS			Very stiff moist discolored brown sandy CLAY with some topsoil and moist brown silty sand seams, fill	10	11.7				
	3			11					
			3'9"						
B	4			33					
SS			Extremely compact moist brown silty fine SAND with trace of gravel and moist brown clayey silty sand seams	--	6.2				
	5								
	6								
C	7			18					
SS				20	3.2				
	8			--					
			Extremely compact moist to wet brown gravelly SAND with trace of silt and silty fine sand seams						
D	9			15					
SS				22					
	10			--					
	11								
	12								
			12'0"						
	13								
			Extremely compact wet brown silty SAND & GRAVEL with stones						
E	14			15					
SS				20					
	15			17					
	16								
			15'6"						
	17								
	18								
	19								
	20								
	21								
	22								
	23								
	24								
	25								

TYPE OF SAMPLE
D. - DISTURBED
U.L. - UNDIST. LINER
S.T. - SHELBY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
() - PENETROMETER

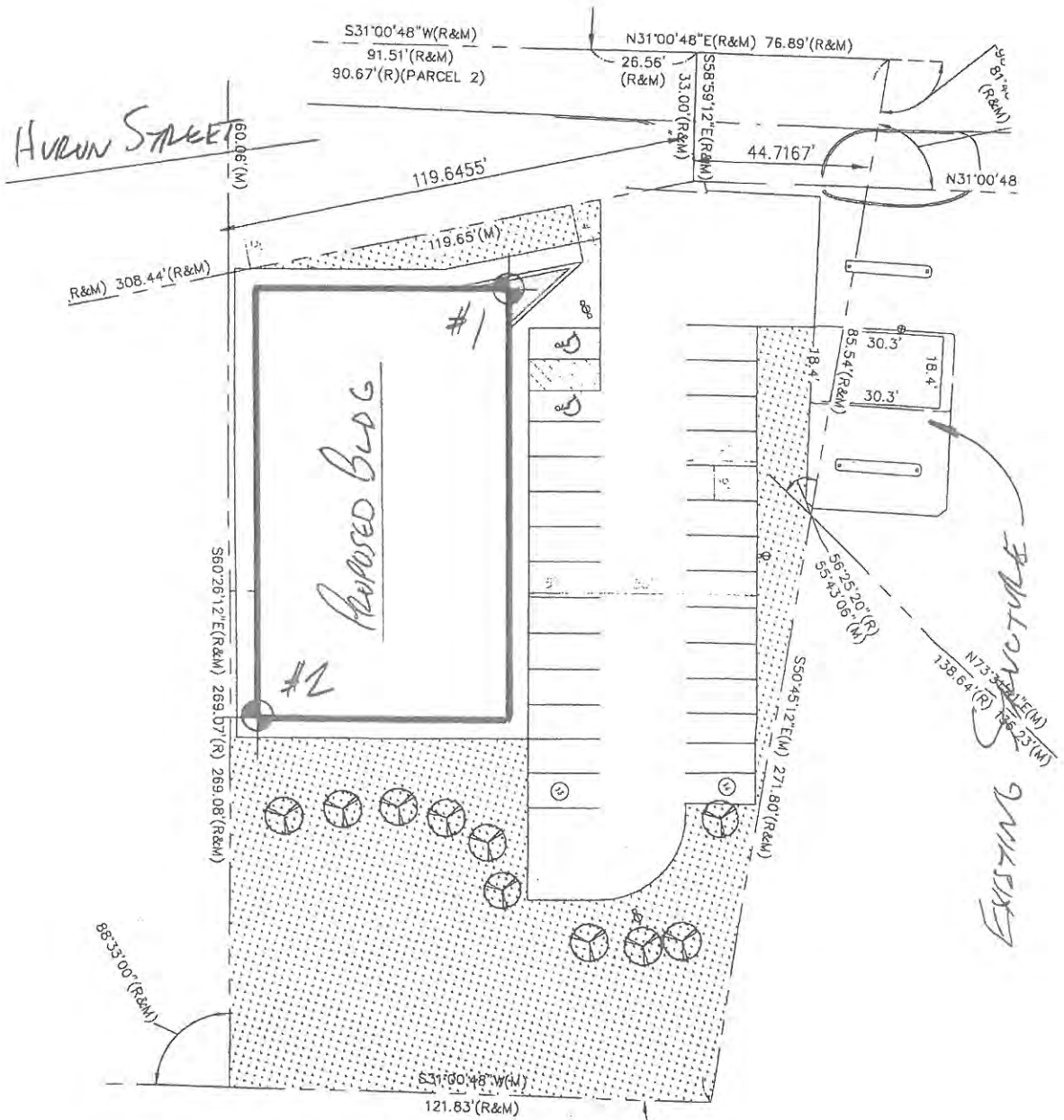
REMARKS:

Standard Penetration Test - Driving 2" OD Sampler 1' With
140# Hammer Falling 30". Count Made at 6" Intervals

GROUND WATER OBSERVATIONS

G.W. ENCOUNTERED AT 9 FT. 6 INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. AFTER COMPLETION 10 FT. 0 INS.
G.W. AFTER HRS. FT. INS.
G.W. VOLUMES heavy

No Scale



Soil Boring Location Plan

#16-347

9.12

Local Government Records

General Property Information**City of Ypsilanti**
[\[Back to Non-Printer Friendly Version\]](#)
[\[Send To Printer\]](#)
Parcel: 11-11-37-101-002 **Unit:** CITY OF YPSILANTI

Property Address	[collapse]
539 S HURON ST YPSILANTI, MI 48197	

Owner Information	[collapse]
KHAILANY ASAD PO BOX 980647 YPSILANTI, MI 48198	
Unit:	11

Taxpayer Information	[collapse]
SEE OWNER INFORMATION	

General Information for Tax Year 2016				[collapse]
Property Class:	201 - COMMERCIAL IMPROVED	Assessed Value:	\$40,200	
School District:	81020 - YPSILANTI SCHOOLS	Taxable Value:	\$27,680	
State Equalized Value:	\$40,200	Map #	K-2 9-3 (B)	
User Number Indx:		Date of Last Name Chg:	N/A	
		Date Filed:		
		Notes:	N/A	
Historical District:	NO	Census Block Group:	N/A	
Principal Residence Exemption	June 1st	Final		
2017	0.0000 %	-		
2016	0.0000 %	0.0000 %		
Previous Year Info	MBOR Assessed	Final S.E.V.	Final Taxable	
2015	\$36,700	\$36,700	\$27,598	
2014	\$36,600	\$36,600	\$27,164	

Land Information				[collapse]
	Frontage		Depth	
Lot 1:	130.00 Ft.		153.00 Ft.	
Lot 2:	105.00 Ft.		210.00 Ft.	
Lot 3:	0.00 Ft.		0.00 Ft.	
Total Frontage:	235.00 Ft.	Average Depth:	178.47 Ft.	
Total Acreage:	0.96			
Zoning Code:	Split			
Total Estimated Land Value:	\$77,000	Mortgage Code:	N/A	
Land Improvements:	N/A	Lot Dimensions/Comments:	AVERAGE LOT SIZE IS	
Renaissance Zone:	NO			

Renaissance Zone Expiration**Date:****ECF Neighborhood Code:** 00068 - 68. GARAGE**Legal Information for 11-11-37-101-002**[\[collapse\]](#)

*OLD SID - 11 11-150-002-00 YP CITY 18W-2 AND 1W-29 BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF MONROE STREET (NOW ABANDONED) AND THE CENTERLINE OF HURON STREET THENCE N 31 DEG 00' 48" E ALONG THE CENTERLINE OF HURON STREET 126.52 FT THENCE N 72 DEG 53' 48" E ALONG THE S RIGHT-OF-WAY OF KRAMER ST 167.67 FT THENCE S17 DEG 06' 12" E 132.00 FT THENCE S 72 DEG 53'48" W 138.61 FT THENCE S 50 DEG 49' 47" E 152.92 FT THENCE S31 DEG 02' 51" W 121.83 FT THENCE N 60 DEG 30' 47" W 269.07 FT THENCE ALONG THE CENTERLINE OF HURON STREET N31 DEG 00' 48" E 90.67 FT TO THE POINT OF BEGINNING EXCEPT THAT PORTION TAKEN DEEDED OR USED FOR HIGHWAY PURPOSES. 539 S HURON

Sales Information**1 sale record(s) found.**

Sale Date	Sale Price	Instrument	Grantor	Grantee	Terms Of Sale	Liber/Page
12/01/1987	\$0.00		AMOCO OIL CO	KHAILANY ASAD	BANK SALE USED	2192-887

Building Information**1 building(s) found.**

Description	Floor Area	Yr Built	Est. TCV
 Commercial/Industrial Building 1 - <i>Garage, Service/Repair</i>	540 Sq. Ft.	0	\$2,643

General Information

Floor Area:	540 Sq. Ft.	Estimated TCV:	\$2,643
Occupancy:	N/A	Class:	C
Stories Above Ground:	1	Average Story Height:	8
Basement Wall Height:	0	Year Remodeled:	0
Year Built:	0	Heat:	N/A
Percent Complete:	N/A	Functional Percent Good:	N/A
Physical Percent Good:	N/A	Effective Age:	N/A
Economic Percent Good:	N/A		

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General Property Information**City of Ypsilanti**
[\[Back to Non-Printer Friendly Version\]](#)
[\[Send To Printer\]](#)
Parcel: 11-11-37-101-006 **Unit:** CITY OF YPSILANTI

Property Address	[collapse]
569 S HURON ST YPSILANTI, MI 48197	

Owner Information	[collapse]
KHAILANY ASAD PO BOX 980647 YPSILANTI, MI 48198	
Unit:	11

Taxpayer Information	[collapse]
SEE OWNER INFORMATION	

General Information for Tax Year 2016				[collapse]
Property Class:	202 - COMMERCIAL VACANT	Assessed Value:	\$47,200	
School District:	81020 - YPSILANTI SCHOOLS	Taxable Value:	\$3,484	
State Equalized Value:	\$47,200	Map #	K-2 9-4 (B)	
User Number Indx:		Date of Last Name Chg:	N/A	
		Date Filed:		
		Notes:	N/A	
Historical District:	NO	Census Block Group:	N/A	
Principal Residence Exemption	June 1st	Final		
2017	0.0000 %	-		
2016	0.0000 %	0.0000 %		
Previous Year Info	MBOR Assessed	Final S.E.V.	Final Taxable	
2015	\$42,300	\$42,300	\$3,474	
2014	\$42,300	\$42,300	\$3,420	

Land Information				[collapse]
	Frontage		Depth	
Lot 1:	185.00 Ft.		210.00 Ft.	
Lot 2:	125.00 Ft.		100.00 Ft.	
Lot 3:	0.00 Ft.		0.00 Ft.	
Total Frontage:	310.00 Ft.	Average Depth:	165.65 Ft.	
Total Acreage:	1.18			
Zoning Code:	Split			
Total Estimated Land Value:	\$94,400	Mortgage Code:	N/A	
Land Improvements:	N/A	Lot Dimensions/Comments:	AVERAGE LOT SIZE IS	
Renaissance Zone:	NO			

Renaissance Zone Expiration**Date:****ECF Neighborhood Code:** 00064 - 64. VACANT COMMERCIAL-64**Legal Information for 11-11-37-101-006**[\[collapse\]](#)

*OLD SID - 11 11-010-048-00 YP CITY 1 W-30 COMM AT THE INTER OF CL OF HURON AND MONROE; TH S 31.00'48" W 91.51'; TH S 60.26'12" E 60' + TO PT OF BEG; TH S 60.26'12" E 210' +; TH S31.00'48" W 179.39'; TH N 58.59'12" W 86.00'; TH S31.00'48" W 138' +; TH N 27.38'50" W 50'+; TH N 07.41'52" E 111.81'; TH N17.57'08" E 190'+ TO PT OF BEG. 41,765 SQ FT

Sales Information**1 sale record(s) found.**

Sale Date	Sale Price	Instrument	Grantor	Grantee	Terms Of Sale	Liber / Page
10/23/1987	\$4,000.00		LEASON	KHAILANY	BANK SALE USED	2192-892

Building Information**0 building(s) found.**

Description	Floor Area	Yr Built	Est. TCV
-------------	------------	----------	----------

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[Privacy Policy](#)

9.13

SERS Report

16-15594/Existing Commercial Building

539 S. Huron Street

Ypsilanti, MI 48197

Inquiry Number: 4755926.2s

October 17, 2016

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.

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EXECUTIVE SUMMARY

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 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

539 S. HURON STREET
YPSILANTI, MI 48197

COORDINATES

Latitude (North):	42.2319860 - 42° 13' 55.14"
Longitude (West):	83.6144400 - 83° 36' 51.98"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	284253.2
UTM Y (Meters):	4678629.5
Elevation:	729 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6068356 YPSILANTI EAST, MI
Version Date:	2014
Southwest Map:	6066348 YPSILANTI WEST, MI
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140705
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
539 S. HURON STREET
YPSILANTI, MI 48197

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	FORMER GAS STATION-	539 S HURON ST	BROWNFIELDS		TP
A2		539 S. HURON ST	SPILLS		TP
A3	YPSILANTI TOWNSHIP L	1S HURON STREET	SEMS-ARCHIVE	Lower	46, 0.009, ESE
A4	30 KRAMER PROPERTY	30 KRAMER	US BROWNFIELDS, FINDS, ECHO	Higher	62, 0.012, ENE
B5	YPSILANTI COMMONS PA	510 S HURON ST	BEA	Higher	135, 0.026, West
B6	YPSILANTI COMMONS	510 SOUTH HURON	INVENTORY, PART 201	Higher	136, 0.026, West
B7	YPSILANTI COMMONS	510 S HURON ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	136, 0.026, West
B8	YPSILANTI COMMONS PA	510 S HURON	LUST, UST, INVENTORY, WDS	Higher	136, 0.026, West
B9	EXEMPLAR MFG CO	506 S HURON ST	BEA, WDS	Higher	151, 0.029, West
B10	EXEMPLAR	506 S HURON ST	LUST, INVENTORY	Higher	151, 0.029, West
B11		506 S HURON ST	INVENTORY	Higher	151, 0.029, West
B12		506 S HURON	INVENTORY	Higher	151, 0.029, West
C13	BARRICK ENTERPRISES	505 S HURON ST	LUST, UST, WDS	Higher	152, 0.029, NNE
14	I-94 AND HURON STREE	1-94 AND WHITAKER ST	INVENTORY, PART 201	Lower	238, 0.045, SE
B15	YPSILANTI COMMONS PA	510 S HURON ST	INVENTORY	Higher	243, 0.046, WNW
C16	YPSILANTI COMMUNITY	55 SPRING ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	324, 0.061, NNE
17	YPSILANTI COMMONS SR	SPRING	INVENTORY, PART 201	Higher	369, 0.070, NW
18		101-113 BELL STREET	INVENTORY	Lower	457, 0.087, NE
D19		445 S HURON	BEA	Higher	458, 0.087, NNE
D20	UNKNOWN	445 SOUTH HURON STRE	INVENTORY	Higher	458, 0.087, NNE
D21	UNKNOWN	445 SOUTH HURON STRE	BEA	Higher	458, 0.087, NNE
D22	HURON PETROLEUM INC	445 S HURON ST	LUST, UST, PART 201, INVENTORY, WDS	Higher	458, 0.087, NNE
D23	MI DEPT/NATURAL RESO	445 S HURON	RCRA NonGen / NLR, FINDS, ECHO	Higher	458, 0.087, NNE
D24		445 SOUTH HURON STRE	INVENTORY	Higher	458, 0.087, NNE
D25		445 S HURON ST	EDR Hist Auto	Higher	458, 0.087, NNE
D26	TOTAL #2542 (FORMER)	445 S HURON ST	BROWNFIELDS	Higher	458, 0.087, NNE
27	300 HARRIET STREET	300 HARRIET STREET	INVENTORY	Higher	725, 0.137, NW
28	VARSITY LINEN SVC	75 CATHERINE ST	LUST, UST, BROWNFIELDS, INVENTORY, RCRA NonGen /...	Lower	1832, 0.347, NNE
E29	YCUA WATER PLANT & S	30 CATHERINE	LUST, UST	Lower	1934, 0.366, NE
E30	GILBERT PARK	GILBERT PARK	US BROWNFIELDS, FINDS, ECHO	Lower	1945, 0.368, NE
F31	JAMES RIVER CORP	1000 NORTH HURON STR	AUL	Higher	1980, 0.375, SSW
F32	JAMES RIVER CORP./YP	1000 N HURON ST	LUST, UST, INVENTORY, AIRS	Higher	1980, 0.375, SSW
F33	MI DEPT/MILITARY & V	1025 S HURON ST	LUST, UST, RCRA NonGen / NLR, FINDS, WDS, ECHO	Higher	1980, 0.375, SSW
F34	EAGLE CREST GOLF COU	1055 WHITAKER RD	LUST, UST	Higher	2007, 0.380, SSW
G35	MASSEY	33 WATER STREET	US BROWNFIELDS, FINDS, ECHO	Lower	2460, 0.466, NNE
G36	HAVRANEK #2	31 WATER STREET	US BROWNFIELDS, FINDS, ECHO	Lower	2491, 0.472, NNE
G37	DUKE	32 WATER STREET	US BROWNFIELDS, FINDS, ECHO	Lower	2515, 0.476, NNE
G38	HAVRANEK #1	14 AND 30 WATER STRE	US BROWNFIELDS, FINDS, ECHO	Lower	2527, 0.479, NNE
H39	FORD MOTOR CO	128 FACTORY ST	SEMS-ARCHIVE	Lower	2560, 0.485, ENE

MAPPED SITES SUMMARY

Target Property Address:
539 S. HURON STREET
YPSILANTI, MI 48197

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
H40	FACTORY ST PUMP STA	128 FACTORY ST	INVENTORY, PART 201	Lower	2560, 0.485, ENE
G41	HIGH SCOPE FOUNDATIO	24 WATER STREET AND	US BROWNFIELDS	Lower	2563, 0.485, NNE
G42		27 WATER ST	INVENTORY	Lower	2569, 0.487, NNE
G43	GRIFFIN	27 WATER STREET	US BROWNFIELDS, FINDS, ECHO	Lower	2569, 0.487, NNE
G44		27 WATER ST	BEA	Lower	2569, 0.487, NNE
45	FORMER YPSILANTI LAN	I-94 AND HURON STREE	US BROWNFIELDS, FINDS, ECHO	Lower	2578, 0.488, North
G46	LOWELL'S TOWING	31, 45, 47 AND VACAN	US BROWNFIELDS, FINDS, ECHO	Lower	2582, 0.489, NNE
47	YPSILANTI WATER STRE	WATER ST	INVENTORY, PART 201	Lower	2713, 0.514, NNE
48	14 E MICHIGAN AVE (M	14 EAST MICHIGAN AVE	PART 201	Lower	3080, 0.583, NNE
49	YPSI, FORMER POTW	GROVE ROAD	INVENTORY, PART 201	Lower	3152, 0.597, East
50	FORD LAKE	BETWEEN GROVE & HURO	INVENTORY, PART 201	Lower	3618, 0.685, ESE
51	300-320 E. MICHIGAN	300-320 E. MICHIGAN	INVENTORY, PART 201	Lower	3698, 0.700, NE
52	517 TYLER RD	517 TYLER RD	PART 201, INVENTORY, BEA	Lower	3722, 0.705, East
53	MARSH PLATING YPSILA	103 N GROVE	DEL PART 201, AIRS, WDS	Lower	4310, 0.816, NE
54	YPSILANTI ECON DEVEL	206 N GROVE ST	BROWNFIELDS, PART 201, INVENTORY, BEA, WDS	Higher	4568, 0.865, NE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
FORMER GAS STATION- 539 S HURON ST YPSILANTI, MI	BROWNFIELDS Database: BROWNFIELDS, Date of Government Version: 01/15/2016 Facility Id: 50002380 Ernie Id Number: 81000527	N/A
539 S. HURON ST 539 S. HURON ST YPSILANTI, MI	SPILLS	N/A

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 list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators

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RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
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 - equivalent CERCLIS

SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

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

SWF/LF..... Solid Waste Facilities Database

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
AST..... Aboveground Tanks
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF..... Inactive Solid Waste Facilities
SWRCY..... Recycling Facilities
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
CDL..... Clandestine Drug Lab Listing
US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS..... Lien List

EXECUTIVE SUMMARY

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

Other Ascertainable Records

FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
FINDS..... Facility Index System/Facility Registry System
DOCKET HWC..... Hazardous Waste Compliance Docket Listing
UXO..... Unexploded Ordnance Sites
AIRS..... Permit and Emissions Inventory Data
COAL ASH..... Coal Ash Disposal Sites
DRYCLEANERS..... Drycleaning Establishments
LEAD..... Lead Safe Housing Registry
NPDES..... List of Active NPDES Permits
UIC..... Underground Injection Wells Database
WDS..... Waste Data System
FUELS PROGRAM..... EPA Fuels Program Registered Listing
ECHO..... Enforcement & Compliance History Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

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

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EDR Hist Cleaner..... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA PART 201..... Recovered Government Archive State Hazardous Waste Facilities List
RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

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

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS 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 the 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. The 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 potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 03/07/2016 has revealed that there are 2 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YPSILANTI TOWNSHIP L	1S HURON STREET	ESE 0 - 1/8 (0.009 mi.)	A3	8
FORD MOTOR CO	128 FACTORY ST	ENE 1/4 - 1/2 (0.485 mi.)	H39	60

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State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's Leaking Underground Storage Tank (LUST) Database.

A review of the LUST list, as provided by EDR, and dated 04/27/2016 has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YPSILANTI COMMONS PA Release Status: Open Substance Release: Gasoline Substance Release: Kerosene Facility Id: 00035225	510 S HURON	W 0 - 1/8 (0.026 mi.)	B8	15
EXEMPLAR Release Status: Open Facility Id: 50005531	506 S HURON ST	W 0 - 1/8 (0.029 mi.)	B10	19
BARRICK ENTERPRISES Release Status: Closed Substance Release: Gasoline Facility Id: 00012860	505 S HURON ST	NNE 0 - 1/8 (0.029 mi.)	C13	21
HURON PETROLEUM INC Release Status: Open Substance Release: Gasoline Substance Release: Gasoline,Used Oil Facility Id: 00016419	445 S HURON ST	NNE 0 - 1/8 (0.087 mi.)	D22	28
JAMES RIVER CORP./YP Release Status: Closed Facility Id: 00018731	1000 N HURON ST	SSW 1/4 - 1/2 (0.375 mi.)	F32	43
MI DEPT/MILITARY & V Release Status: Closed Facility Id: 00009763	1025 S HURON ST	SSW 1/4 - 1/2 (0.375 mi.)	F33	45
EAGLE CREST GOLF COU Release Status: Closed Substance Release: Unknown Facility Id: 00007076	1055 WHITAKER RD	SSW 1/4 - 1/2 (0.380 mi.)	F34	48
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
VARSITY LINEN SVC Release Status: Open Substance Release: Gasoline,Used Oil Facility Id: 00034824	75 CATHERINE ST	NNE 1/4 - 1/2 (0.347 mi.)	28	34
YCUA WATER PLANT & S Release Status: Closed Substance Release: Diesel,Unknown Facility Id: 00010200	30 CATHERINE	NE 1/4 - 1/2 (0.366 mi.)	E29	37

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Michigan UST database.

A review of the UST list, as provided by EDR, has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YPSILANTI COMMONS PA Database: UST, Date of Government Version: 04/13/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00035225	510 S HURON	W 0 - 1/8 (0.026 mi.)	B8	15
BARRICK ENTERPRISES Database: UST, Date of Government Version: 04/13/2016 Tank Status: Removed from Ground Tank Status: Currently In Use Facility Type: ACTIVE Facility Id: 00012860	505 S HURON ST	NNE 0 - 1/8 (0.029 mi.)	C13	21
HURON PETROLEUM INC Database: UST, Date of Government Version: 04/13/2016 Tank Status: Currently In Use Tank Status: Removed from Ground Facility Type: ACTIVE Facility Id: 00016419	445 S HURON ST	NNE 0 - 1/8 (0.087 mi.)	D22	28

State and tribal institutional control / engineering control registries

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

A review of the AUL list, as provided by EDR, and dated 06/09/2016 has revealed that there is 1 AUL site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JAMES RIVER CORP Facility ID: 00018731	1000 NORTH HURON STR	SSW 1/4 - 1/2 (0.375 mi.)	F31	42

State and tribal Brownfields sites

BROWNFIELDs: Brownfields and USTfield Site Database.

A review of the BROWNFIELDs list, as provided by EDR, has revealed that there are 2 BROWNFIELDs sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOTAL #2542 (FORMER) Database: BROWNFIELDs, Date of Government Version: 01/15/2016	445 S HURON ST	NNE 0 - 1/8 (0.087 mi.)	D26	33

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Facility Id: 00016419
Ernie Id Number: 81000330

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
VARSITY LINEN SVC	75 CATHERINE ST	NNE 1/4 - 1/2 (0.347 mi.)	28	34
Database: BROWNFIELDS, Date of Government Version: 01/15/2016				
Facility Id: 00034824				
Ernie Id Number: 81000309				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/21/2016 has revealed that there are 10 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
30 KRAMER PROPERTY	30 KRAMER	ENE 0 - 1/8 (0.012 mi.)	A4	9
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GILBERT PARK	GILBERT PARK	NE 1/4 - 1/2 (0.368 mi.)	E30	39
MASSEY	33 WATER STREET	NNE 1/4 - 1/2 (0.466 mi.)	G35	49
HAVRANEK #2	31 WATER STREET	NNE 1/4 - 1/2 (0.472 mi.)	G36	52
DUKE	32 WATER STREET	NNE 1/4 - 1/2 (0.476 mi.)	G37	55
HAVRANEK #1	14 AND 30 WATER STRE	NNE 1/4 - 1/2 (0.479 mi.)	G38	57
HIGH SCOPE FOUNDATIO	24 WATER STREET AND	NNE 1/4 - 1/2 (0.485 mi.)	G41	61
GRIFFIN	27 WATER STREET	NNE 1/4 - 1/2 (0.487 mi.)	G43	64
FORMER YPSILANTI LAN	I-94 AND HURON STREE	N 1/4 - 1/2 (0.488 mi.)	45	67
LOWELL'S TOWING	31, 45, 47 AND VACAN	NNE 1/4 - 1/2 (0.489 mi.)	G46	72

Local Lists of Hazardous waste / Contaminated Sites

INVENTORY: The Inventory of Facilities has three data sources: Facilities under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) identified through state funded or private party response activities (Projects); Facilities under Part 213, Leaking Underground Storage Tanks of the NREPA; and Facilities identified through submittals of Baseline Environmental Assessments (BEA) submitted pursuant to Part 201 or Part 213 of the NREPA. The Part 201 Projects Inventory does not include all of the facilities that are subject to regulation under Part 201 because owners are not required to inform the Department of Environmental Quality (DEQ) about the facilities and can pursue cleanup independently. Facilities that are not known to DEQ are not on the Inventory, nor are locations with releases that resulted in low environmental impact. Part 213 facilities listed here may have more than one release; a list of releases for which corrective actions have been completed and list of

EXECUTIVE SUMMARY

releases for which corrective action has not been completed is located on the Leaking Underground Storage Tanks Site Search webpage. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

A review of the INVENTORY list, as provided by EDR, and dated 07/26/2016 has revealed that there are 17 INVENTORY sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YPSILANTI COMMONS Facility ID: 81000290	510 SOUTH HURON	W 0 - 1/8 (0.026 mi.)	B6	13
YPSILANTI COMMONS PA Facility ID: 00035225	510 S HURON	W 0 - 1/8 (0.026 mi.)	B8	15
EXEMPLAR Facility ID: 50005531	506 S HURON ST	W 0 - 1/8 (0.029 mi.)	B10	19
Not reported Facility ID: 81000290	506 S HURON ST	W 0 - 1/8 (0.029 mi.)	B11	20
Not reported Facility ID: 81000290	506 S HURON	W 0 - 1/8 (0.029 mi.)	B12	20
YPSILANTI COMMONS PA Facility ID: 81000290	510 S HURON ST	WNW 0 - 1/8 (0.046 mi.)	B15	24
YPSILANTI COMMONS SR Facility ID: 81000484	SPRING	NW 0 - 1/8 (0.070 mi.)	17	26
UNKNOWN	445 SOUTH HURON STRE	NNE 0 - 1/8 (0.087 mi.)	D20	27
HURON PETROLEUM INC Facility ID: 00016419	445 S HURON ST	NNE 0 - 1/8 (0.087 mi.)	D22	28
Not reported Facility ID: 81000330	445 SOUTH HURON STRE	NNE 0 - 1/8 (0.087 mi.)	D24	33
300 HARRIET STREET Facility ID: 81000596	300 HARRIET STREET	NW 1/8 - 1/4 (0.137 mi.)	27	33
JAMES RIVER CORP./YP Facility ID: 00018731	1000 N HURON ST	SSW 1/4 - 1/2 (0.375 mi.)	F32	43
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
I-94 AND HURON STREE Facility ID: 81000050	1-94 AND WHITAKER ST	SE 0 - 1/8 (0.045 mi.)	14	24
Not reported	101-113 BELL STREET	NE 0 - 1/8 (0.087 mi.)	18	27
VARSITY LINEN SVC Facility ID: 00034824	75 CATHERINE ST	NNE 1/4 - 1/2 (0.347 mi.)	28	34
FACTORY ST PUMP STA Facility ID: 81000013	128 FACTORY ST	ENE 1/4 - 1/2 (0.485 mi.)	H40	61
Not reported	27 WATER ST	NNE 1/4 - 1/2 (0.487 mi.)	G42	64

EXECUTIVE SUMMARY

PART 201: A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

A review of the PART 201 list, as provided by EDR, and dated 10/01/2013 has revealed that there are 12 PART 201 sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YPSILANTI COMMONS Facility Status: Inactive - no actions taken to address contamination Facility ID: 81000290	510 SOUTH HURON	W 0 - 1/8 (0.026 mi.)	B6	13
YPSILANTI COMMONS SR Facility Status: Inactive - no actions taken to address contamination Facility ID: 81000484	SPRING	NW 0 - 1/8 (0.070 mi.)	17	26
HURON PETROLEUM INC Facility Status: See Leaking Underground Storage Tank Site Database Facility ID: 81000330	445 S HURON ST	NNE 0 - 1/8 (0.087 mi.)	D22	28
YPSILANTI ECON DEVEL Facility Status: Interim Response conducted - No further activities anticipated Facility ID: 81000483	206 N GROVE ST	NE 1/2 - 1 (0.865 mi.)	54	79
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
I-94 AND HURON STREE Facility Status: Inactive - no actions taken to address contamination Facility ID: 81000050	1-94 AND WHITAKER ST	SE 0 - 1/8 (0.045 mi.)	14	24
FACTORY ST PUMP STA Facility Status: Interim Response in progress Facility ID: 81000013	128 FACTORY ST	ENE 1/4 - 1/2 (0.485 mi.)	H40	61
YPSILANTI WATER STRE Facility Status: Inactive - no actions taken to address contamination Facility ID: 81000495	WATER ST	NNE 1/2 - 1 (0.514 mi.)	47	75
14 E MICHIGAN AVE (M) Facility Status: See Leaking Underground Storage Tank Site Database Facility ID: 81000162	14 EAST MICHIGAN AVE	NNE 1/2 - 1 (0.583 mi.)	48	76
YPSI, FORMER POTW Facility Status: Interim Response in progress Facility ID: 81000245	GROVE ROAD	E 1/2 - 1 (0.597 mi.)	49	76
FORD LAKE Facility Status: Inactive - no actions taken to address contamination Facility ID: 81000015	BETWEEN GROVE & HURO	ESE 1/2 - 1 (0.685 mi.)	50	76
300-320 E. MICHIGAN Facility Status: Evaluation conducted Facility ID: 81000551	300-320 E. MICHIGAN	NE 1/2 - 1 (0.700 mi.)	51	77
517 TYLER RD Facility Status: Evaluation conducted	517 TYLER RD	E 1/2 - 1 (0.705 mi.)	52	77

EXECUTIVE SUMMARY

Facility ID: 81000570

DEL PART 201: A deleted site has been removed from the Part 201 List because information known to the DEQ at the time of the evaluation does not support inclusion on the Part 201 List. This designation is often applied to sites where changes in cleanup criteria resulted in a determination that the site no longer exceeds any applicable cleanup criterion. A delisted site has been removed from the Part 201 List because response actions have reduced the levels of contaminants to concentrations which meet or are below the criteria for unrestricted residential use.

A review of the DEL PART 201 list, as provided by EDR, and dated 08/01/2013 has revealed that there is 1 DEL PART 201 site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARSH PLATING YPSILA Facility Id: 81000023	103 N GROVE	NE 1/2 - 1 (0.816 mi.)	53	78

Other Ascertainable Records

RCRA NonGen / NLR: 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.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/21/2016 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YPSILANTI COMMONS	510 S HURON ST	W 0 - 1/8 (0.026 mi.)	B7	13
YPSILANTI COMMUNITY	55 SPRING ST	NNE 0 - 1/8 (0.061 mi.)	C16	25
MI DEPT/NATURAL RESO	445 S HURON	NNE 0 - 1/8 (0.087 mi.)	D23	31

BEA: A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

A review of the BEA list, as provided by EDR, and dated 08/21/2013 has revealed that there are 5 BEA sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YPSILANTI COMMONS PA	510 S HURON ST	W 0 - 1/8 (0.026 mi.)	B5	12
EXEMPLAR MFG CO	506 S HURON ST	W 0 - 1/8 (0.029 mi.)	B9	18
Not reported	445 S HURON	NNE 0 - 1/8 (0.087 mi.)	D19	27
UNKNOWN	445 SOUTH HURON STRE	NNE 0 - 1/8 (0.087 mi.)	D21	28
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	27 WATER ST	NNE 1/4 - 1/2 (0.487 mi.)	G44	67

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

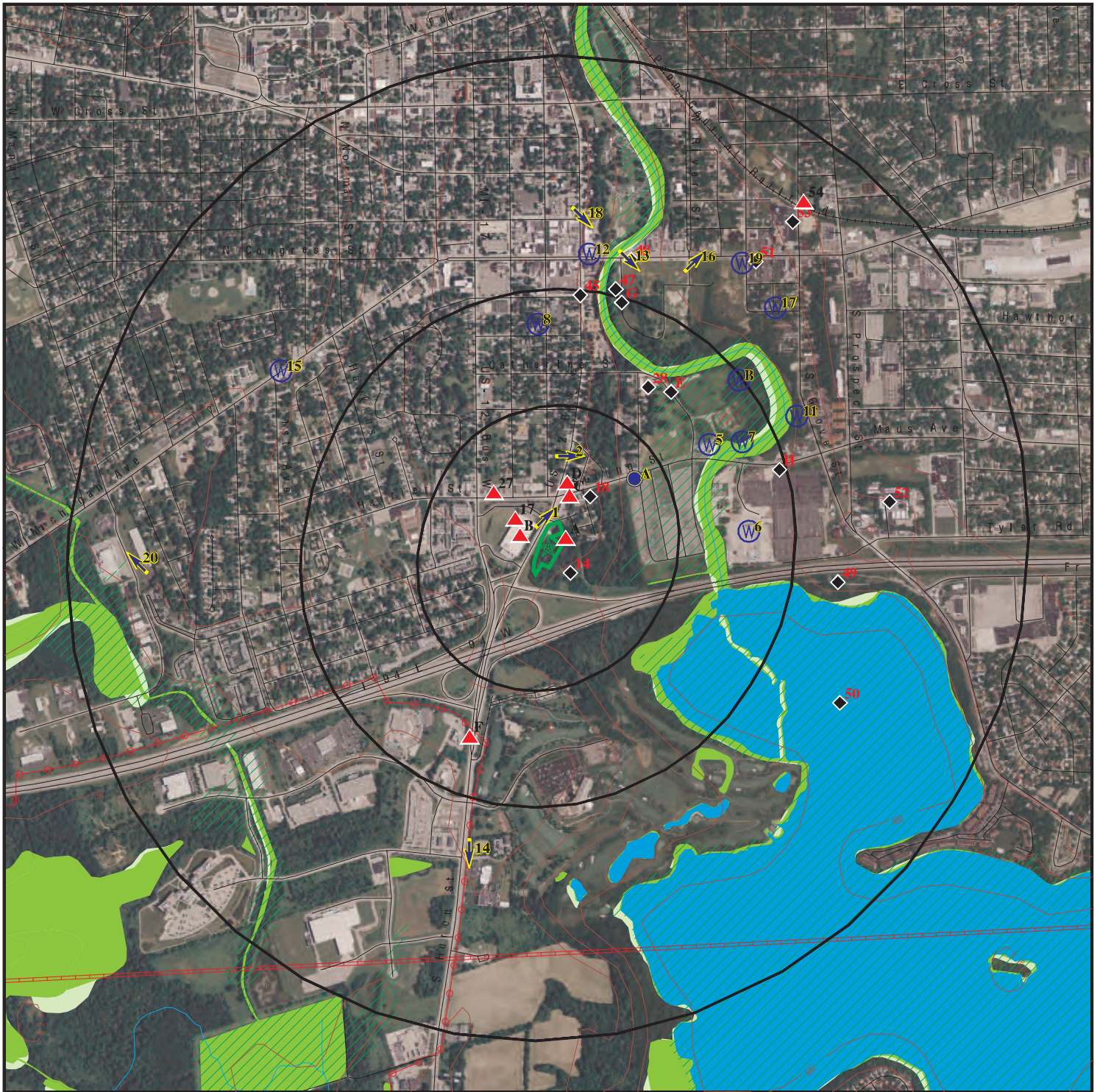
A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	445 S HURON ST	NNE 0 - 1/8 (0.087 mi.)	D25	33

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 4755926.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

0 1/4 1/2 1 Miles



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 16-15594/Existing Commercial Building
ADDRESS: 539 S. Huron Street
Ypsilanti MI 48197
LAT/LONG: 42.231986 / 83.61444

CLIENT: McDowell & Associates
CONTACT: Mark P. Kochanski
INQUIRY #: 4755926.2s
DATE: October 17, 2016 8:18 pm

DETAIL MAP - 4755926.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 16-15594/Existing Commercial Building
ADDRESS: 539 S. Huron Street
Ypsilanti MI 48197
LAT/LONG: 42.231986 / 83.61444

CLIENT: McDowell & Associates
CONTACT: Mark P. Kochanski
INQUIRY #: 4755926.2s
DATE: October 17, 2016 8:20 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		1	0	1	NR	NR	2
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		4	0	5	NR	NR	9
INDIAN LUST	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		3	0	NR	NR	NR	3
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AUL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500	1	1	0	1	NR	NR	3
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		1	0	9	NR	NR	10
Local Lists of Landfill / Solid Waste Disposal Sites								
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
INVENTORY	0.500		12	1	4	NR	NR	17
PART 201	1.000		4	0	1	7	NR	12
CDL	TP		NR	NR	NR	NR	NR	0
DEL PART 201	1.000		0	0	0	1	NR	1
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP	1	NR	NR	NR	NR	NR	1
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		3	0	NR	NR	NR	3
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
BEA	0.500		4	0	1	NR	NR	5
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
LEAD	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA PART 201	TP		NR	NR	NR	NR	NR	0
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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		2	34	1	23	8	0	68

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1
Target
Property
FORMER GAS STATION- HURON ST.
539 S HURON ST
YPSILANTI, MI

BROWNFIELDS **S107135785**
N/A

Site 1 of 4 in cluster A

Actual:
729 ft.

BROWNFIELDS:
Facility ID: 50002380
Region: 1
Status: Not reported
Property Use: Not reported
BEA: Not reported
Ernie Id Number: 81000527

A2
Target
Property
539 S. HURON ST
YPSILANTI, MI

SPILLS **S105979899**
N/A

Site 2 of 4 in cluster A

Actual:
729 ft.

PEAS:
Incident Date: 06/11/2003
Office Status: Not reported
Initials of Incoming Operator: Not reported
Time Received by DNRE Staff: Not reported
Time Occur: Not reported
Date Of PEAS Call: 06/11/2003
Complainant / Company: Perry Thomas Ypsi Comm. Util Authority
Complainant Address: 2777 State Road
Company Involved: Ypsi Comm Utilities Authority
DEQ Division Involved: Surface Water Dept.
Incident Description: leaking sewage out of it. The sewage was flowing through curb of road where there is a storm water catch basin. The time leak was stopped was 7:55 AM. A gravity sewer has developed a clog & a manhole upstream of the clog was
Description: Not reported
Date Discovered: Not reported
Time Discovered: Not reported
Office/After Hours: Not reported
Party Involved - Phone 1: Not reported
Party Involved - Phone 2: Not reported
Ongoing?: Not reported
Release Secured: Not reported
Source: Not reported
Lead Division 2: Not reported

A3
ESE
< 1/8
0.009 mi.
46 ft.
YPSILANTI TOWNSHIP LANDFILL
1S HURON STREET
YPSILANTI, MI 48197
Site 3 of 4 in cluster A

SEMS-ARCHIVE **1003871391**
MID980991087

Relative:
Lower

SEMS-ARCHIVE:
Site ID: 503051
EPA ID: MID980991087
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Actual:
725 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI TOWNSHIP LANDFILL (Continued)

1003871391

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0503051
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: YPSILANTI TWP LDFL
Alias Address: 1S HURON ST
YPSILANTI, MI 48197

Program Priority:

Description: Great Lakes

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: / /
Date Completed: 06/01/84
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: / /
Date Completed: 04/04/91
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 12/16/87
Priority Level: Low priority for further assessment

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 09/24/93
Priority Level: Not reported

**A4
ENE
< 1/8
0.012 mi.
62 ft.**

**30 KRAMER PROPERTY
30 KRAMER
YPSILANTI, MI 48197
Site 4 of 4 in cluster A**

**US BROWNFIELDS 1016358696
FINDS N/A
ECHO**

**Relative:
Higher**

US BROWNFIELDS:

Recipient name: Downriver Community Conference
Grant type: Assessment

**Actual:
729 ft.**

Property name: 30 KRAMER PROPERTY
Property #: 11-11-37-101-003
Parcel size: .67

Property Description: The subject property was initially developed in 1850 with a residential dwelling and detached garage. According to interviews conducted at the fire and planning departments, city officials suspected unpermitted automobile repair was conducted on the eastern portion of the property, near Kramer Street from approximately 2004 until 2010. This dwelling was demolished in 2010 by City of Ypsilanti after ownership of the property was transferred to Washtenaw County through tax reversion.

Latitude: 42.232343

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

30 KRAMER PROPERTY (Continued)

1016358696

Longitude: -83.6137059
HCM label: Address Matching-House Number
Map scale: Not reported
Point of reference: Center of a Facility or Station
Datum: World Geodetic System of 1984
ACRES property ID: 130443
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported
Assessment funding: 2250
Assessment funding source: US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding: Not reported
Redev. funding source: Not reported
Redev. funding entity name: Not reported
Redevelopment start date: Not reported
Assessment funding entity: EPA
Cleanup funding entity: Not reported
Grant type: Hazardous
Accomplishment type: Phase I Environmental Assessment
Accomplishment count: 1
Cooperative agreement #: 00E91601
Ownership entity: Government
Current owner: Washtenaw County
Did owner change: N
Cleanup required: Unknown
Video available: No
Photo available: Yes
Institutional controls required: U
IC Category proprietary controls: Not reported
IC cat. info. devices: Not reported
IC cat. gov. controls: Not reported
IC cat. enforcement permit tools: Not reported
IC in place date: Not reported
IC in place: No
State/tribal program date: Not reported
State/tribal program ID: Not reported
State/tribal NFA date: Not reported
Air contaminated: Not reported
Air cleaned: Not reported
Asbestos found: Not reported
Asbestos cleaned: Not reported
Controlled substance found: Not reported
Controlled substance cleaned: Not reported
Drinking water affected: Not reported
Drinking water cleaned: Not reported
Groundwater affected: Not reported
Groundwater cleaned: Not reported
Lead contaminant found: Not reported
Lead cleaned up: Not reported
No media affected: Not reported
Unknown media affected: Not reported
Other cleaned up: Not reported
Other metals found: Not reported
Other metals cleaned: Not reported
Other contaminants found: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

30 KRAMER PROPERTY (Continued)

1016358696

Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	.67
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

30 KRAMER PROPERTY (Continued)

1016358696

Highlights: Not reported
IC Data Address: Not reported
Redev Completion Date: Not reported
Below Poverty: 567
% Below Poverty: 2.8%
Low Income: 981
% Low Income: 1.6%
Meidan Income: 3048
Unemployed: 134
% Unemployed: 11.9%
Vacant Housing: 200
% Vacant Housing: 8.0%

FINDS:

Registry ID: 110043562588

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

ECHO:

Envid: 1016358696
Registry ID: 110043562588
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110043562588

B5
West
< 1/8
0.026 mi.
135 ft.

YPSILANTI COMMONS PARCEL
510 S HURON ST
YPSILANTI TOWNSHIP, MI

BEA S110142654
N/A

Site 1 of 9 in cluster B

Relative:
Higher

BEA:

Actual:
733 ft.

Secondary Address: Not reported
BEA Number: 77
District: Jackson
Date Received: 06/02/1997
Submitter Name: Exemplar Manufacturing
Petition Determination: Affirmed
Petition Disclosure: 1
Category: Different Hazardous Substance(s)
Determination 20107A: Affirmed
Reviewer: katkov
Division Assigned: RRD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B6
West
< 1/8
0.026 mi.
136 ft.
YPSILANTI COMMONS
510 SOUTH HURON
YPSILANTI, MI 48197
Site 2 of 9 in cluster B

INVENTORY
PART 201
S108632622
N/A

Relative:
Higher

INVENTORY:

Bea Number: Not reported
Township: Ypsilanti Township
District: Jackson
Data Source: Part 201
Latitude: 42.23243
Longitude: -83.61561

Actual:
733 ft.

PART 201:

Facility ID: 81000290
Facility Status: **Inactive - no actions taken to address contamination**
Source: Not reported
SAM Score: 40
SAM Score Date: 06/22/2004
Township: 03S
Range: 07E
Section: 9
Quarter: SW
Quarter/Quarter: SE
Pollutants: Not reported

B7
West
< 1/8
0.026 mi.
136 ft.
YPSILANTI COMMONS
510 S HURON ST
YPSILANTI, MI 48197
Site 3 of 9 in cluster B

RCRA NonGen / NLR
FINDS
ECHO
1000530907
MID985634351

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 02/04/1992
Facility name: YPSILANTI COMMONS
Facility address: 510 S HURON ST
YPSILANTI, MI 48197
EPA ID: MID985634351
Mailing address: 1 S HURON ST
YPSILANTI, MI 48197
Contact: MICHEAL AGER
Contact address: 510 S HURON ST
YPSILANTI, MI 48197
Contact country: US
Contact telephone: (313) 483-9646
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
733 ft.

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI COMMONS (Continued)

1000530907

Owner/Op start date: 04/14/1997
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 04/14/1997
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

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003668273

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.

ECHO:

Envid: 1000530907
Registry ID: 110003668273
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110003668273

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B8
West
< 1/8
0.026 mi.
136 ft.
YPSILANTI COMMONS PARCEL
510 S HURON
YPSILANTI, MI 48197
Site 4 of 9 in cluster B

LUST
UST
INVENTORY
WDS
U003211724
N/A

Relative:
Higher

LUST:

Facility ID: 00035225
Source: STATE OF MICHIGAN
Owner Name: City of Ypsilanti
Owner Address: 1 S Huron St
Owner City,St,Zip: Ypsilanti, MI 48197-5420
Owner Contact: Janice Beckett
Owner Phone: (734) 483-9646
Country: USA
District: Region 2 - Jackson District Office
Site Name: Ypsilanti Commons
Latitude: 42.23278
Longitude: -83.61488
Date of Collection: 01/11/2001
Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-0098-92
Release Date: 01/15/1992
Substance Released: Gasoline
Release Status: Open
Release Closed Date: Not reported

Leak Number: C-0292-92
Release Date: 02/19/1992
Substance Released: Kerosene
Release Status: Open
Release Closed Date: Not reported

UST:

Facility ID: 00035225
Facility Type: CLOSED
Owner Name: CITY OF YPSILANTI
Owner Address: 1 S HURON ST
Owner City,St,Zip: YPSILANTI, MI 48197-5420
Owner Country: USA
Owner Contact: Janice Beckett
Owner Phone: (734) 483-9646
Contact: EDWARD B KORYZNO JR
Contact Phone: (734) 483-1810
Date of Collection: 01/11/2001
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: Address Matching-House Number
Latitude: 42.23278
Longitude: -83.61488

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI COMMONS PARCEL (Continued)

U003211724

Tank ID: 1
Tank Status: Removed from Ground
Capacity: 1800
Product: Gasoline
Install Date: Not reported
Remove Date: 03/01/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Galvanized Steel
Piping Type: Suction: No Valve At Tank
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 2
Tank Status: Removed from Ground
Capacity: 1800
Product: Gasoline
Install Date: 01/01/1958
Remove Date: 03/01/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Galvanized Steel
Piping Type: Suction: No Valve At Tank
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 3
Tank Status: Removed from Ground
Capacity: 500
Product: Diesel
Install Date: Not reported
Remove Date: 03/01/1993
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Suction: No Valve At Tank
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 4
Tank Status: Removed from Ground
Capacity: Not reported
Product: UNK
Install Date: Not reported
Remove Date: 03/18/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel,Unknown
Impressed Device: No

Tank ID: 5

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI COMMONS PARCEL (Continued)

U003211724

Tank Status: Removed from Ground
Capacity: Not reported
Product: UNK
Install Date: Not reported
Remove Date: 03/19/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel,Unknown
Impressed Device: No

Tank ID: 6
Tank Status: Removed from Ground
Capacity: Not reported
Product: Gasoline
Install Date: Not reported
Remove Date: 03/18/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Galvanized Steel
Piping Type: Suction: No Valve At Tank
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 7
Tank Status: Removed from Ground
Capacity: 1000
Product: UNK
Install Date: Not reported
Remove Date: 11/04/1997
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 8
Tank Status: Removed from Ground
Capacity: 1000
Product: UNK
Install Date: Not reported
Remove Date: 11/04/1997
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 9
Tank Status: Removed from Ground

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI COMMONS PARCEL (Continued)

U003211724

Capacity: 1000
Product: UNK
Install Date: Not reported
Remove Date: 11/04/1997
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 10
Tank Status: Removed from Ground
Capacity: 2000
Product: UNK
Install Date: Not reported
Remove Date: 11/04/1997
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

INVENTORY:

Bea Number: Not reported
Township: Not reported
District: Jackson
Data Source: Part 213
Latitude: 42.23278
Longitude: -83.61489

WDS:

Site Id: MID985634351
WMD Id: 406784
Site Specific Name: YPSILANTI COMMONS
Mailing Address: 1 S HURON ST
Mailing City/State/Zip: 48197
Mailing County: WASHTENAW

B9
West
< 1/8
0.029 mi.
151 ft.

EXEMPLAR MFG CO
506 S HURON ST
YPSILANTI, MI 48197

Site 5 of 9 in cluster B

BEA S108084216
WDS N/A

Relative:
Higher

BEA:

Secondary Address: Not reported
BEA Number: 757
District: Jackson
Date Received: 07/14/2006
Submitter Name: Post Effective Date Committee of EMC
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request

Actual:
733 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EXEMPLAR MFG CO (Continued)

S108084216

Reviewer: katkov
Division Assigned: RRD

Secondary Address: Not reported
BEA Number: 771
District: Jackson
Date Received: 10/04/2006
Submitter Name: G W Kent Inc
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: katkov
Division Assigned: RRD

Secondary Address: Not reported
BEA Number: 772
District: Jackson
Date Received: 10/04/2006
Submitter Name: Reichuang LLC
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: katkov
Division Assigned: RRD

WDS:
Site Id: MIG000052046
WMD Id: 437564
Site Specific Name: EXEMPLAR MFG CO
Mailing Address: 506 S HURON ST
Mailing City/State/Zip: 48197
Mailing County: WASHTENAW

B10
West
< 1/8
0.029 mi.
151 ft.

EXEMPLAR
506 S HURON ST
YPSILANTI, MI 99999
Site 6 of 9 in cluster B

LUST **S108084534**
INVENTORY **N/A**

Relative:
Higher

LUST:
Facility ID: 50005531
Source: STATE OF MICHIGAN
Owner Name: Nrt Owner
Owner Address: Unknown
Owner City,St,Zip: Unknown, MI 99999
Owner Contact: Not reported
Owner Phone: Not reported
Country: USA
District: Region 2 - Jackson District Office
Site Name: Exemplar
Latitude: 42.23250
Longitude: -83.61583
Date of Collection: 11/01/2006
Method of Collection: Interpolation-Map
Accuracy: 40

Actual:
733 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EXEMPLAR (Continued)

S108084534

Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Not reported

Leak Number: C-0165-06
Release Date: 07/25/2006
Substance Released: Not reported
Release Status: Open
Release Closed Date: Not reported

INVENTORY:

Bea Number: Not reported
Township: Not reported
District: Jackson
Data Source: Part 213
Latitude: 42.2325
Longitude: -83.61583

B11
West
< 1/8
0.029 mi.
151 ft.

506 S HURON ST
WASHTENAW (County), MI 48197
Site 7 of 9 in cluster B

INVENTORY S114030692
N/A

Relative:
Higher

INVENTORY:

Bea Number: 200600771JK
Township: Ypsilanti City
District: Jackson
Data Source: BEA
Latitude: 42.23243
Longitude: -83.61561

Actual:
733 ft.

Bea Number: 200600772JK
Township: Ypsilanti City
District: Jackson
Data Source: BEA
Latitude: 42.23243
Longitude: -83.61561

B12
West
< 1/8
0.029 mi.
151 ft.

506 S HURON
WASHTENAW (County), MI 48197
Site 8 of 9 in cluster B

INVENTORY S114030691
N/A

Relative:
Higher

INVENTORY:

Bea Number: 200600757JK
Township: Ypsilanti City
District: Jackson
Data Source: BEA
Latitude: 42.23243
Longitude: -83.61561

Actual:
733 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

C13
NNE
< 1/8
0.029 mi.
152 ft.

BARRICK ENTERPRISES #40 LLC
505 S HURON ST
YPSILANTI, MI 48197
Site 1 of 2 in cluster C

LUST
UST
WDS

U000266437
N/A

Relative:
Higher

LUST:

Facility ID: 00012860
Source: STATE OF MICHIGAN
Owner Name: Barrick Enterprises #40 LLC
Owner Address: 4338 Delemere Ct
Owner City,St,Zip: Royal Oak, MI 48073
Owner Contact: Robert Barrick
Owner Phone: (313) 883-8001
Country: USA
District: Region 2 - Jackson District Office
Site Name: Kaas Bookkeeping
Latitude: 42.23295
Longitude: -83.61405
Date of Collection: 10/28/2002
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off
Accuracy: 40
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-2572-91
Release Date: 12/03/1991
Substance Released: Gasoline
Release Status: Closed
Release Closed Date: 10/09/1995

UST:

Facility ID: 00012860
Facility Type: ACTIVE
Owner Name: BARRICK ENTERPRISES #40 LLC
Owner Address: 4338 DELEMERE CT
Owner City,St,Zip: ROYAL OAK, MI 48073
Owner Country: USA
Owner Contact: Robert Barrick
Owner Phone: (313) 883-8001
Contact: Joe Oudeif
Contact Phone: (602) 710-6887
Date of Collection: 10/28/2002
Accuracy: 40
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off
Latitude: 42.23295
Longitude: -83.61405

Tank ID: 1
Tank Status: **Removed from Ground**
Capacity: 8000
Product: Gasoline
Install Date: 05/06/1972

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BARRICK ENTERPRISES #40 LLC (Continued)

U000266437

Remove Date: 02/01/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Fiberglass Reinforced plastic
Impressed Device: No

Tank ID: 2
Tank Status: Removed from Ground
Capacity: 8000
Product: Gasoline
Install Date: 05/06/1972
Remove Date: 02/01/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Fiberglass Reinforced plastic
Impressed Device: No

Tank ID: 3
Tank Status: Removed from Ground
Capacity: 8000
Product: Gasoline
Install Date: 05/06/1972
Remove Date: 02/01/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Fiberglass Reinforced plastic,Unknown
Impressed Device: No

Tank ID: 4
Tank Status: Removed from Ground
Capacity: 1000
Product: Used Oil
Install Date: 05/06/1972
Remove Date: 02/01/1992
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Unknown
Impressed Device: No

Tank ID: 5
Tank Status: Currently In Use
Capacity: 10000
Product: Gasoline
Install Date: 05/01/1998
Remove Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BARRICK ENTERPRISES #40 LLC (Continued)

U000266437

Tank Release Detection: Automatic Tank Gauging,Inter Monitoring Double Walled Tank,Inventory Control

Pipe Realease Detection: Automatic Line Leak Detectors,Interstitial Monitoring Double Walled Piping

Piping Material: Double Walled,ENVIRON

Piping Type: Pressure

Construction Material: Double Walled,Fiberglass Reinforced plastic

Impressed Device: No

Tank ID: 6

Tank Status: Currently In Use

Capacity: 8000

Product: Gasoline

Install Date: 05/01/1998

Remove Date: Not reported

Tank Release Detection: Automatic Tank Gauging,Inter Monitoring Double Walled Tank,Inventory Control

Pipe Realease Detection: Automatic Line Leak Detectors,Interstitial Monitoring Double Walled Piping

Piping Material: Double Walled,ENVIRON

Piping Type: Pressure

Construction Material: Double Walled,Fiberglass Reinforced plastic

Impressed Device: No

Tank ID: 7

Tank Status: Currently In Use

Capacity: 8000

Product: Gasoline

Install Date: 05/01/1998

Remove Date: Not reported

Tank Release Detection: Automatic Tank Gauging,Inter Monitoring Double Walled Tank,Inventory Control

Pipe Realease Detection: Automatic Line Leak Detectors,Interstitial Monitoring Double Walled Piping

Piping Material: Double Walled,ENVIRON

Piping Type: Pressure

Construction Material: Double Walled,Fiberglass Reinforced plastic

Impressed Device: No

Tank ID: 8

Tank Status: Currently In Use

Capacity: 4000

Product: Diesel

Install Date: 05/01/1998

Remove Date: Not reported

Tank Release Detection: Automatic Tank Gauging,Inter Monitoring Double Walled Tank,Inventory Control

Pipe Realease Detection: Automatic Line Leak Detectors,Interstitial Monitoring Double Walled Piping

Piping Material: Double Walled,ENVIRON

Piping Type: Pressure

Construction Material: Double Walled,Fiberglass Reinforced plastic

Impressed Device: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BARRICK ENTERPRISES #40 LLC (Continued)

U000266437

WDS:

Site Id: MIG000029496
WMD Id: 448017
Site Specific Name: KAAS BOOKKEEPING
Mailing Address: 505 S HURON ST
Mailing City/State/Zip: 48197
Mailing County: WASHTENAW

14
SE
< 1/8
0.045 mi.
238 ft.

**I-94 AND HURON STREET DUMP
1-94 AND WHITAKER STREET EXIT
YPSILANTI, MI 48197**

**INVENTORY S103086302
PART 201 N/A**

**Relative:
Lower**

INVENTORY:

Bea Number: Not reported
Township: temptownship
District: Jackson
Data Source: Part 201
Latitude: 42.23125
Longitude: -83.61351

**Actual:
715 ft.**

PART 201:

Facility ID: 81000050
Facility Status: Inactive - no actions taken to address contamination
Source: Not reported
SAM Score: 24
SAM Score Date: 06/16/2004
Township: 03S
Range: 07E
Section: 16
Quarter: NW
Quarter/Quarter: NE
Pollutants: Domestic comm; Heavy mfg

B15
WNW
< 1/8
0.046 mi.
243 ft.

**YPSILANTI COMMONS PARCEL
510 S HURON ST
WASHTENAW (County), MI
Site 9 of 9 in cluster B**

**INVENTORY S114030693
N/A**

**Relative:
Higher**

INVENTORY:

Bea Number: 199700077JK
Township: Ypsilanti Township
District: Jackson
Data Source: BEA
Latitude: 42.23243
Longitude: -83.61561

**Actual:
733 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

C16
NNE
< 1/8
0.061 mi.
324 ft.

YPSILANTI COMMUNITY UTILITY AUTHORITY
55 SPRING ST
YPSILANTI, MI 48197
Site 2 of 2 in cluster C

RCRA NonGen / NLR
FINDS
ECHO

1001202279
MIR000024547

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 12/31/1997

Facility name: YPSILANTI COMMUNITY UTILITY AUTHORITY

Facility address: 55 SPRING ST

YPSILANTI, MI 48197

EPA ID: MIR000024547

Mailing address: 2777 STATE ST

YPSILANTI, MI 48198

Contact: ROLLAND SIZEMORE

Contact address: 55 SPRING ST

YPSILANTI, MI 48197

Contact country: US

Contact telephone: (313) 484-4600

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: NO ACTIVE O/OP AS NOT GENERATING WASTE

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 01/01/1998

Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: 01/01/1998

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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI COMMUNITY UTILITY AUTHORITY (Continued)

1001202279

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 06/05/1997
Site name: YPSILANTI COMMUNITY UTILITY AUTHORITY
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003701691

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.

ECHO:

Envid: 1001202279
Registry ID: 110003701691
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110003701691

**17
NW
< 1/8
0.070 mi.
369 ft.**

**YPSILANTI COMMONS SR
SPRING
YPSILANTI, MI**

**INVENTORY S108632624
PART 201 N/A**

**Relative:
Higher**

INVENTORY:
Bea Number: Not reported
Township: Ypsilanti Township
District: Jackson
Data Source: Part 201
Latitude: 42.23294
Longitude: -83.61581

**Actual:
733 ft.**

PART 201:
Facility ID: 81000484
Facility Status: Inactive - no actions taken to address contamination
Source: Not reported
SAM Score: 40
SAM Score Date: 07/01/2004
Township: 03S
Range: 07E

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI COMMONS SR (Continued)

S108632624

Section: 9
Quarter: SW
Quarter/Quarter: SE
Pollutants: Not reported

18
NE
< 1/8
0.087 mi.
457 ft.

**101-113 BELL STREET
WASHTENAW (County), MI 48197**

**INVENTORY S117731691
N/A**

**Relative:
Lower**

INVENTORY:
Bea Number: 201501393JK
Township: Ypsilanti City
District: Jackson
Data Source: BEA
Latitude: Not reported
Longitude: Not reported

**Actual:
728 ft.**

D19
NNE
< 1/8
0.087 mi.
458 ft.

**445 S HURON
YPSILANTI CITY, MI**

**BEA S105768109
N/A**

Site 1 of 8 in cluster D

**Relative:
Higher**

BEA:
Secondary Address: Not reported
BEA Number: 406
District: Jackson
Date Received: 09/30/2002
Submitter Name: Armada Oil and Gas Co
Petition Determination: No Request
Petition Disclosure: 0
Category: Same Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: massonp
Division Assigned: Storage Tank Division

**Actual:
730 ft.**

D20
NNE
< 1/8
0.087 mi.
458 ft.

**UNKNOWN
445 SOUTH HURON STREET
WASHTENAW (County), MI 48197**

**INVENTORY S114039389
N/A**

Site 2 of 8 in cluster D

**Relative:
Higher**

INVENTORY:
Bea Number: 201301216JK
Township: Ypsilanti Township
District: Jackson
Data Source: BEA
Latitude: Not reported
Longitude: Not reported

**Actual:
730 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

D21
NNE
< 1/8
0.087 mi.
458 ft.

UNKNOWN
445 SOUTH HURON STREET
YPSILANTI TOWNSHIP, MI 48197
Site 3 of 8 in cluster D

BEA **S113193137**
N/A

Relative: BEA:
Higher Secondary Address: Not reported
BEA Number: 1216
District: Jackson
Actual: Date Received: 01/10/2013
730 ft. Submitter Name: South Huron Real Estate LLC
Petition Determination: No Request
Petition Disclosure: 0
Category: Not reported
Determination 20107A: No Request
Reviewer: hisket
Division Assigned: RRD

D22
NNE
< 1/8
0.087 mi.
458 ft.

HURON PETROLEUM INC
445 S HURON ST
YPSILANTI, MI 48197
Site 4 of 8 in cluster D

LUST **U000266414**
UST **N/A**
PART 201
INVENTORY
WDS

Relative: LUST:
Higher Facility ID: 00016419
Source: STATE OF MICHIGAN
Actual: Owner Name: Abdel Berry
730 ft. Owner Address: 14611 Lanson Ave
Owner City,St,Zip: Dearborn, MI 48126
Owner Contact: Not reported
Owner Phone: (313) 468-5202
Country: USA
District: Region 2 - Jackson District Office
Site Name: Total #2542 (huron Mini-mart)
Latitude: 42.23359
Longitude: -83.61335
Date of Collection: 02/03/2005
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off
Accuracy: 40
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-0921-98
Release Date: 09/26/1998
Substance Released: Gasoline
Release Status: Open
Release Closed Date: Not reported

Leak Number: C-1129-92
Release Date: 07/08/1992
Substance Released: Gasoline,Used Oil
Release Status: Open
Release Closed Date: Not reported

UST:
Facility ID: 00016419

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HURON PETROLEUM INC (Continued)

U000266414

Facility Type: ACTIVE
Owner Name: ABDEL BERRY
Owner Address: 14611 LANSON AVE
Owner City,St,Zip: DEARBORN, MI 48126
Owner Country: USA
Owner Contact: Not reported
Owner Phone: (313) 468-5202
Contact: Not reported
Contact Phone: Not reported
Date of Collection: 02/03/2005
Accuracy: 40
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off
Latitude: 42.23359
Longitude: -83.61335

Tank ID: 1
Tank Status: Currently In Use
Capacity: 8000
Product: Kerosene
Install Date: 04/21/1968
Remove Date: Not reported
Tank Release Detection: Automatic Tank Gauging
Pipe Release Detection: Automatic Line Leak Detectors
Piping Material: Geoflex, Flexible Piping
Piping Type: Pressure
Construction Material: Cathodically Protected Steel, Double Walled
Impressed Device: No

Tank ID: 2
Tank Status: Currently In Use
Capacity: 8000
Product: Gasoline
Install Date: 04/21/1968
Remove Date: Not reported
Tank Release Detection: Automatic Tank Gauging
Pipe Release Detection: Automatic Line Leak Detectors
Piping Material: Geoflex
Piping Type: Pressure
Construction Material: Cathodically Protected Steel
Impressed Device: No

Tank ID: 3
Tank Status: Currently In Use
Capacity: 8000
Product: Gasoline
Install Date: 04/21/1968
Remove Date: Not reported
Tank Release Detection: Automatic Tank Gauging
Pipe Release Detection: Automatic Line Leak Detectors
Piping Material: Geoflex

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HURON PETROLEUM INC (Continued)

U000266414

Piping Type: Pressure
Construction Material: Cathodically Protected Steel
Impressed Device: No

Tank ID: 4
Tank Status: Currently In Use
Capacity: 8000
Product: Gasoline
Install Date: 04/21/1968
Remove Date: Not reported
Tank Release Detection: Automatic Tank Gauging
Pipe Realease Detection: Automatic Line Leak Detectors
Piping Material: Geoflex, Flexible Piping
Piping Type: Pressure
Construction Material: Cathodically Protected Steel
Impressed Device: No

Tank ID: 5
Tank Status: Removed from Ground
Capacity: 4000
Product: Diesel
Install Date: 04/21/1968
Remove Date: 02/04/2000
Tank Release Detection: Automatic Tank Gauging, Inventory Control
Pipe Realease Detection: Automatic Line Leak Detectors
Piping Material: Geoflex
Piping Type: Pressure
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: Yes

Tank ID: 6
Tank Status: Removed from Ground
Capacity: 550
Product: Used Oil
Install Date: 04/21/1968
Remove Date: 09/01/2001
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Not reported
Piping Type: Suction: No Valve At Tank
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

PART 201:

Facility ID: 81000330
Facility Status: See Leaking Underground Storage Tank Site Database
Source: Not reported
SAM Score: 48
SAM Score Date: 08/09/2006
Township: 03S
Range: 07E
Section: 9
Quarter: Not reported
Quarter/Quarter: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HURON PETROLEUM INC (Continued)

U000266414

Pollutants: Not reported

INVENTORY:

Bea Number: Not reported
Township: Not reported
District: Jackson
Data Source: Part 213
Latitude: 42.23359
Longitude: -83.61335

WDS:

Site Id: MIR000038729
WMD Id: 413023
Site Specific Name: REMEDIATION & REDEVELOPMENT DIV/TOTAL # 2542
Mailing Address: 301 E LOUIS GLICK HWY
Mailing City/State/Zip: 49201
Mailing County: JACKSON

D23
NNE
< 1/8
0.087 mi.
458 ft.

MI DEPT/NATURAL RESOURCES AND ENVIRONMENT
445 S HURON
YPSILANTI, MI 48197

RCRA NonGen / NLR
FINDS
ECHO

1001485371
MIR000038729

Site 5 of 8 in cluster D

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 03/17/2004
Facility name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT
Facility address: 445 S HURON
YPSILANTI, MI 48197
EPA ID: MIR000038729
Mailing address: 301 E LOUIS GLICK HWY
JACKSON, MI 49201
Contact: TERRY HISKE
Contact address: 445 S HURON
YPSILANTI, MI 48197
Contact country: US
Contact telephone: (517) 780-7690
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
730 ft.

Owner/Operator Summary:

Owner/operator name: ALI FAWAZ
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Owner/operator name: ALI FAWAZ
Owner/operator address: Not reported
Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MI DEPT/NATURAL RESOURCES AND ENVIRONMENT (Continued)

1001485371

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

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/16/1999
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003709602

Environmental Interest/Information System

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ECHO:

Envid: 1001485371
Registry ID: 110003709602
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110003709602

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

	Site	Database(s)	
D24 NNE < 1/8 0.087 mi. 458 ft.	445 SOUTH HURON STREET WASHTENAW (County), MI 48197 Site 6 of 8 in cluster D	INVENTORY	S118693556 N/A
Relative: Higher	INVENTORY: Bea Number: 201601494JK Township: Ypsilanti Township District: Jackson Data Source: BEA Latitude: 42.23466 Longitude: -83.61356		
Actual: 730 ft.			
D25 NNE < 1/8 0.087 mi. 458 ft.	445 S HURON ST YPSILANTI, MI 48197 Site 7 of 8 in cluster D	EDR Hist Auto	1015499843 N/A
Relative: Higher	EDR Historical Auto Stations: Name: HURON PETROLEUM INC Year: 2010 Address: 445 S HURON ST		
Actual: 730 ft.			
D26 NNE < 1/8 0.087 mi. 458 ft.	TOTAL #2542 (FORMER) 445 S HURON ST YPSILANTI, MI Site 8 of 8 in cluster D	BROWNFIELDS	S107136003 N/A
Relative: Higher	BROWNFIELDS: Facility ID: 00016419 Region: 1 Status: Not reported Property Use: Not reported BEA: Not reported Ernie Id Number: 81000330		
Actual: 730 ft.			
27 NW 1/8-1/4 0.137 mi. 725 ft.	300 HARRIET STREET 300 HARRIET STREET YPSILANTI, MI 48197	INVENTORY	S114024871 N/A
Relative: Higher	INVENTORY: Bea Number: Not reported Township: Ypsilanti City District: Jackson Data Source: Part 201 Latitude: 42.23382 Longitude: -83.6167		
Actual: 734 ft.	Bea Number: 201301259JK Township: Ypsilanti City District: Jackson Data Source: BEA		

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

300 HARRIET STREET (Continued)

S114024871

Latitude: 42.23382
Longitude: -83.6167

28
NNE
1/4-1/2
0.347 mi.
1832 ft.

VARSITY LINEN SVC
75 CATHERINE ST
YPSILANTI, MI 48197

Relative:
Lower

LUST **1000691441**
UST **MID985642099**
BROWNFIELDS
INVENTORY
RCRA NonGen / NLR
FINDS
WDS
ECHO

Actual:
692 ft.

LUST:
Facility ID: 00034824
Source: STATE OF MICHIGAN
Owner Name: General Linen Supply Co
Owner Address: 1016 E Palmer St
Owner City,St,Zip: Detroit, MI 48211-2522
Owner Contact: Not reported
Owner Phone: (313) 873-5980
Country: USA
District: Region 2 - Jackson District Office
Site Name: Varsity Linen Service
Latitude: 42.23726
Longitude: -83.61004
Date of Collection: 01/11/2001
Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-0517-92
Release Date: 04/02/1992
Substance Released: Gasoline,Used Oil
Release Status: Open
Release Closed Date: Not reported

UST:
Facility ID: 00034824
Facility Type: CLOSED
Owner Name: GENERAL LINEN SUPPLY CO
Owner Address: 1016 E PALMER ST
Owner City,St,Zip: DETROIT, MI 48211-2522
Owner Country: USA
Owner Contact: Not reported
Owner Phone: (313) 873-5980
Contact: LANCE WILLIAMS
Contact Phone: (734) 483-6200
Date of Collection: 01/11/2001
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: Address Matching-House Number

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

Varsity Linen SVC (Continued)

1000691441

Latitude: 42.23726
Longitude: -83.61004

Tank ID: 1
Tank Status: **Removed from Ground**
Capacity: 2000
Product: Gasoline
Install Date: Not reported
Remove Date: 06/16/1992
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Galvanized Steel
Piping Type: Suction: Valve at Tank
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 2
Tank Status: **Removed from Ground**
Capacity: 15000
Product: Heating Oil
Install Date: Not reported
Remove Date: 06/16/1992
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Galvanized Steel
Piping Type: Suction: Valve at Tank
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 3
Tank Status: **Removed from Ground**
Capacity: 2000
Product: Used Oil
Install Date: Not reported
Remove Date: 06/16/1992
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Galvanized Steel
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

BROWNFIELDS:

Facility ID: 00034824
Region: 1
Status: Not reported
Property Use: Not reported
BEA: Not reported
Ernie Id Number: 81000309

INVENTORY:

Bea Number: Not reported
Township: Not reported
District: Jackson

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

Varsity Linen SVC (Continued)

1000691441

Data Source: Part 213
Latitude: 42.23727
Longitude: -83.61005

RCRA NonGen / NLR:

Date form received by agency: 08/26/2001
Facility name: VARSITY LINEN SVC
Facility address: 75 CATHERINE ST
YPSILANTI, MI 48197
EPA ID: MID985642099
Contact: LANCE WILLIAMS
Contact address: 75 CATHERINE ST
YPSILANTI, MI 48197
Contact country: US
Contact telephone: (313) 483-6200
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: NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 08/27/2001
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 08/27/2001
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
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

Varsity Linen SVC (Continued)

1000691441

Used oil transporter: No
Waste code: D001
Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 05/08/1992
Site name: VARSITY LINEN SVC
Classification: Small Quantity Generator
Waste code: D001
Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003671072

Environmental Interest/Information System

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WDS:

Site Id: MID985642099
WMD Id: 407166
Site Specific Name: VARSITY LINEN SVC
Mailing Address: 75 CATHERINE ST
Mailing City/State/Zip: 48197
Mailing County: WASHTENAW

ECHO:

Envid: 1000691441
Registry ID: 110003671072
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110003671072

**E29
NE
1/4-1/2
0.366 mi.
1934 ft.**

**YCUA WATER PLANT & SHOP
30 CATHERINE
YPSILANTI, MI 48198**

Site 1 of 2 in cluster E

**LUST U002303302
UST N/A**

**Relative:
Lower**

LUST:

**Actual:
687 ft.**

Facility ID: 00010200
Source: STATE OF MICHIGAN
Owner Name: Ypsilanti Community Utilities Authority (YCUA)
Owner Address: 2777 State St
Owner City, St, Zip: Ypsilanti, MI 48198
Owner Contact: Scott E Robinson (H & S Supervisor)
Owner Phone: (734) 484-4600
Country: USA
District: Region 2 - Jackson District Office

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YCUA WATER PLANT & SHOP (Continued)

U002303302

Site Name: Ypsilanti Community Utilities Au
Latitude: 42.23555
Longitude: -83.60845
Date of Collection: 01/11/2001
Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-1496-94
Release Date: 12/15/1994
Substance Released: Diesel,Unknown
Release Status: Closed
Release Closed Date: 09/19/1995

UST:

Facility ID: 00010200
Facility Type: CLOSED
Owner Name: YPSILANTI COMMUNITY UTILITIES AUTHORITY (YCUA)
Owner Address: 2777 STATE ST
Owner City,St,Zip: YPSILANTI, MI 48198
Owner Country: USA
Owner Contact: Scott E Robinson (H & S Supervisor)
Owner Phone: (734) 484-4600
Contact: MR LARRY R THOMAS
Contact Phone: (734) 484-4600
Date of Collection: 01/11/2001
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: Address Matching-House Number
Latitude: 42.23555
Longitude: -83.60845

Tank ID: 1
Tank Status: **Removed from Ground**
Capacity: 500
Product: Diesel
Install Date: 04/16/1957
Remove Date: 12/02/1994
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 2
Tank Status: **Removed from Ground**
Capacity: 250
Product: Diesel
Install Date: 04/16/1956

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YCUA WATER PLANT & SHOP (Continued)

U002303302

Remove Date: 03/01/1990
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Galvanized Steel,Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 3
Tank Status: Removed from Ground
Capacity: 250
Product: Gasoline
Install Date: 04/16/1946
Remove Date: 03/01/1990
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

E30
NE
1/4-1/2
0.368 mi.
1945 ft.

GILBERT PARK
GILBERT PARK
YPSILANTI, MI 48198
Site 2 of 2 in cluster E

US BROWNFIELDS **1012234129**
FINDS **N/A**
ECHO

Relative:
Lower

US BROWNFIELDS:

Actual:
688 ft.

Recipient name: Ypsilanti, City of
Grant type: Assessment
Property name: GILBERT PARK
Property #: Not reported
Parcel size: Not reported
Property Description: park
Latitude: 42.236858
Longitude: -83.609261
HCM label: Not reported
Map scale: Not reported
Point of reference: Not reported
Datum: Not reported
ACRES property ID: 12560
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported
Assessment funding: Not reported
Assessment funding source: Not reported
Redevelopment funding: Not reported
Redev. funding source: Not reported
Redev. funding entity name: Not reported
Redevelopment start date: Not reported
Assessment funding entity: Not reported
Cleanup funding entity: Not reported
Grant type: N/A
Accomplishment type: Phase I Environmental Assessment
Accomplishment count: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GILBERT PARK (Continued)

1012234129

Cooperative agreement #:	98546001
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	No
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	Not reported
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Unknown
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contaminants found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GILBERT PARK (Continued)

1012234129

Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	677
% Below Poverty:	2.8%
# Low Income:	1126
% Low Income:	1.7%
Meidan Income:	2005
# Unemployed:	92
% Unemployed:	20.6%
# Vacant Housing:	223
% Vacant Housing:	8.5%

FINDS:

Registry ID: 110039543036

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GILBERT PARK (Continued)

1012234129

ECHO:

Envid: 1012234129
Registry ID: 110039543036
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110039543036

F31
SSW
1/4-1/2
0.375 mi.
1980 ft.

JAMES RIVER CORP
1000 NORTH HURON STREET
YPSILANTI CITY, MI 48197

AUL **S109846316**
N/A

Site 1 of 4 in cluster F

Relative:
Higher

AUL:

Actual:
770 ft.

Status: Recorded
Site Name: Not reported
Property: James River corp
Land Use Restriction Type: RC
Program Type: Part 213
Program Support Assigned User: Nicholas Ekel
Program Support Assigned Date: 02/24/2010
Legal Description Of Property: Migrated
Based On The Deq Ref #: 11121304545
MDEQ Reference Number: RC-RRD-213-04-545
Property Or Description Restricted Area: Migrated
Lead Division: STD
File Name Of Hyperlinked Legal Doc: U:\KERMIT\11121304545.PDF
Mapped Polygons Area In Acres: 4.6369999999999996
Mapped Polygons Area In Square Miles: 7.1999999999999998E-3
Date Data Entry Started: 02/24/2010
Date Data Entry Finished: 02/24/2010
Individual Or Staff Assoc With The Mapping: Nicholas Ekel
Program Used To Map Restricted Features: ArcInfo 9.3 & IcoMap 4.0
Date Legal Paperwork Stamped/Filed/Register Of Deeds: 02/08/2001
Commercial I Land Use Restriction: 0
Commercial Ii Land Use Restriction: 0
Commercial Iii Land Use Restriction: 0
Commercial Iv Land Use Restriction: 0
Industrial Land Use Restriction: 0
Residential Land Use Restriction: 0
Recreational Land Use Restriction: 0
Multiple Land-Use Restrictions: 0
Site Specific Restrictions: 0
Groundwater Consumption Restrictions: 1
Groundwater Contact Restrictions: 0
Special Well Construction Requirements: 0
Special Building Restrictions: 0
Excavation And Soil Movement Restrictions: 0
Soil Movement Requirements: 0
There Is A Restriction On All Construction: 0
Monitoring Well Protected, No Tampering Or Removal: 0
There Is An Exposure Barrier In Place: 0
There Is A Health And Safety Plan: 0
There Is A Permanent Marker On The Site: 0
Map Comments: 20100223 - LRUR is NOT mapped in KERMIT - Nick Ekel
20100224 - LRUR is mapped in KERMIT - Nick Ekel
Comment: Request received on 7/16/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F32 **JAMES RIVER CORP./YPSILANTI MILL**
SSW **1000 N HURON ST**
1/4-1/2 **YPSILANTI, MI 48197**
0.375 mi.
1980 ft. **Site 2 of 4 in cluster F**

LUST **U000266118**
UST **N/A**
INVENTORY
AIRS

Relative:
Higher

LUST:

Facility ID: 00018731
Source: STATE OF MICHIGAN
Owner Name: James River Corp./Ypsilanti Mill
Owner Address: 1000 N HURON ST
Owner City,St,Zip: YPSILANTI, MI 48197
Owner Contact: Not reported
Owner Phone: (734) 482-2600
Country: USA
District: Region 2 - Jackson District Office
Site Name: James River Corp.
Latitude: 42.22830
Longitude: -83.61759
Date of Collection: 01/11/2001
Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-1592-90
Release Date: 08/22/1990
Substance Released: Not reported
Release Status: Closed
Release Closed Date: 04/10/2001

UST:

Facility ID: 00018731
Facility Type: CLOSED
Owner Name: JAMES RIVER CORP./YPSILANTI MILL
Owner Address: 1000 N HURON ST
Owner City,St,Zip: YPSILANTI, MI 48197
Owner Country: USA
Owner Contact: Not reported
Owner Phone: (734) 482-2600
Contact: GERALD W LINZMEYER
Contact Phone: (734) 482-2600
Date of Collection: 01/11/2001
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: Address Matching-House Number
Latitude: 42.22830
Longitude: -83.61759

Tank ID: 1
Tank Status: **Removed from Ground**
Capacity: 2000
Product: Gasoline
Install Date: 04/25/1981

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JAMES RIVER CORP./YPSILANTI MILL (Continued)

U000266118

Remove Date: 06/11/1991
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Galvanized Steel
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

INVENTORY:

Bea Number: Not reported
Township: Not reported
District: Jackson
Data Source: Part 213
Latitude: 42.2283
Longitude: -83.6176

AIRS:

State Registration Number: A6641
Naics Code: Not reported
Contact Email: Not reported
Contact Name: Not reported
Contact Phone: Not reported
Contact Address: (same as site address)
Contact City,St,Zip: Not reported
Permit Number: 72-70I
Date Received: 04/22/1970
Application Reason: Not reported
Record Type: Not reported
State County FIPS: Not reported
Facility Category: Not reported
SIC Primary: Not reported
Tribal Code: Not reported
Facility Status: Not reported
Supplemental Location Text: Not reported
Business Name: Not reported
Principal Product: Not reported
Principal Product Description: Not reported
UTM Zone (Geo Coordinates Universal Transverse Mercator System): Not reported
UTM Horizontal Coord: Not reported
UTM Vertical Coord: Not reported
Mailing Name: Not reported
Mailing Contact Person: Not reported
Mailing Street: Not reported
Mailing City: Not reported
Mailing State: Not reported
Mailing Zip: Not reported
Mailing Zip 4 Extension: Not reported
Compliance Person: Not reported
Compliance Area Code: Not reported
Compliance Phone Number: Not reported
Emission Inventory Contact Person: Not reported
EI Contact Area Code: Not reported
EI Contact Phone Number: Not reported
Permit Contact Person: Not reported
Permit Contact Person Area Code: Not reported
Permit Contact Person Phone Number: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JAMES RIVER CORP./YPSILANTI MILL (Continued)

U000266118

Federal Employer Id Number: Not reported
Of Employees: Not reported
Reporting Year: Not reported
Date Record Was Created: Not reported

F33
SSW
1/4-1/2
0.375 mi.
1980 ft.

MI DEPT/MILITARY & VETERANS AFFAIRS
1025 S HURON ST
YPSILANTI, MI 48197

Site 3 of 4 in cluster F

LUST
UST
RCRA NonGen / NLR
FINDS
WDS
ECHO

1000254104
MID981948979

Relative:
Higher

LUST:

Actual:
770 ft.

Facility ID: 00009763
Source: STATE OF MICHIGAN
Owner Name: MDMVA - Dept of Military & Veterans Affairs
Owner Address: 3423 N Martin Luther King Blvd
Owner City,St,Zip: Lansing, MI 48906
Owner Contact: Gary Hoffmaster
Owner Phone: (517) 481-7632
Country: USA
District: Region 2 - Jackson District Office
Site Name: Washtenaw County Armory
Latitude: 42.22817
Longitude: -83.61725
Date of Collection: 01/11/2001
Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-0422-85
Release Date: 02/06/1990
Substance Released: Not reported
Release Status: Closed
Release Closed Date: 11/23/1992

UST:

Facility ID: 00009763
Facility Type: CLOSED
Owner Name: MDMVA - DEPT OF MILITARY & VETERANS AFFAIRS
Owner Address: 3423 N MARTIN LUTHER KING BLVD
Owner City,St,Zip: LANSING, MI 48906
Owner Country: USA
Owner Contact: Gary Hoffmaster
Owner Phone: (517) 481-7632
Contact: CPT. PHILLIP LENNERT
Contact Phone: (734) 483-0595
Date of Collection: 01/11/2001
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: Address Matching-House Number

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MI DEPT/MILITARY & VETERANS AFFAIRS (Continued)

1000254104

Latitude: 42.22817
Longitude: -83.61725

Tank ID: DMA137
Tank Status: **Removed from Ground**
Capacity: 5000
Product: Gasoline
Install Date: 04/07/1945
Remove Date: 07/01/1989
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: DMA227
Tank Status: **Removed from Ground**
Capacity: 10000
Product: Diesel
Install Date: 04/08/1975
Remove Date: 07/01/1989
Tank Release Detection: Not reported
Pipe Release Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

RCRA NonGen / NLR:

Date form received by agency: 12/17/1986
Facility name: MI DEPT/MILITARY & VETERANS AFFAIRS
Facility address: 1025 S HURON ST
YPSILANTI, MI 48197
EPA ID: MID981948979
Mailing address: 2500 S WASHINGTON AVE
LANSING, MI 48913
Contact: JEAN LINDERMAN
Contact address: 1025 S HURON ST
YPSILANTI, MI 48197
Contact country: US
Contact telephone: (517) 483-5576
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: NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MI DEPT/MILITARY & VETERANS AFFAIRS (Continued)

1000254104

Owner/Op start date: 03/02/1989
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 03/02/1989
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

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003625131

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.

WDS:

Site Id: MID981948979
WMD Id: 400454
Site Specific Name: WASHTENAW ARMORY/OMS 17
Mailing Address: 2500 S WASHINGTON AVE
Mailing City/State/Zip: 48913
Mailing County: INGHAM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MI DEPT/MILITARY & VETERANS AFFAIRS (Continued)

1000254104

ECHO:

Envid: 1000254104
Registry ID: 110003625131
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110003625131

F34
SSW
1/4-1/2
0.380 mi.
2007 ft.

EAGLE CREST GOLF COURSE
1055 WHITAKER RD
YPSILANTI, MI 48197
Site 4 of 4 in cluster F

LUST
UST U000266135
N/A

Relative:
Higher

LUST:

Facility ID: 00007076
Source: STATE OF MICHIGAN
Owner Name: Eastern Michigan Univ
Owner Address: 1215 N Huron River Dr
Owner City,St,Zip: Ypsilanti, MI 48197-2351
Owner Contact: Not reported
Owner Phone: (734) 487-2339
Country: USA
District: Region 2 - Jackson District Office
Site Name: Eagle Crest Golf Course
Latitude: 42.22452
Longitude: -83.61741
Date of Collection: 10/05/2004
Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-0495-99
Release Date: 05/24/1999
Substance Released: Unknown
Release Status: Closed
Release Closed Date: 08/25/1999

UST:

Facility ID: 00007076
Facility Type: CLOSED
Owner Name: EASTERN MICHIGAN UNIV
Owner Address: 1215 N HURON RIVER DR
Owner City,St,Zip: YPSILANTI, MI 48197-2351
Owner Country: USA
Owner Contact: Not reported
Owner Phone: (734) 487-2339
Contact: TIM SMITH
Contact Phone: (734) 487-2339
Date of Collection: 10/05/2004
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: Address Matching-House Number
Latitude: 42.22452

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EAGLE CREST GOLF COURSE (Continued)

U000266135

Longitude: -83.61741

Tank ID: 1
Tank Status: **Removed from Ground**
Capacity: 1000
Product: Gasoline
Install Date: 12/20/1989
Remove Date: 05/12/1999
Tank Release Detection: Manual Tank Gauging
Pipe Release Detection: Not reported
Piping Material: Fiberglass reinforced plastic
Piping Type: Not reported
Construction Material: Fiberglass Reinforced plastic
Impressed Device: No

Tank ID: 2
Tank Status: **Removed from Ground**
Capacity: 1000
Product: Diesel
Install Date: 12/20/1988
Remove Date: 05/12/1999
Tank Release Detection: Manual Tank Gauging
Pipe Release Detection: Not reported
Piping Material: Fiberglass reinforced plastic
Piping Type: Not reported
Construction Material: Fiberglass Reinforced plastic
Impressed Device: No

G35
NNE
1/4-1/2
0.466 mi.
2460 ft.

MASSEY
33 WATER STREET
YPSILANTI, MI 48198

Site 1 of 9 in cluster G

US BROWNFIELDS **1012234207**
FINDS **N/A**
ECHO

Relative:
Lower

US BROWNFIELDS:

Actual:
690 ft.

Recipient name: Ypsilanti, City of
Grant type: Assessment
Property name: MASSEY
Property #: Not reported
Parcel size: .1
Property Description: residential
Latitude: 42.24062
Longitude: -83.61121
HCM label: Address Matching-House Number
Map scale: 100000
Point of reference: Entrance Point of a Facility or Station
Datum: North American Datum of 1983
ACRES property ID: 12563
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported
Assessment funding: Not reported
Assessment funding source: Not reported
Redevelopment funding: Not reported
Redev. funding source: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASSEY (Continued)

1012234207

Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	98546001
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	No
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	Not reported
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Unknown
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASSEY (Continued)

1012234207

Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	1233
% Below Poverty:	3.0%
# Low Income:	2242
% Low Income:	1.7%
Meidan Income:	3240
# Unemployed:	195
% Unemployed:	19.0%
# Vacant Housing:	378
% Vacant Housing:	9.8%

FINDS:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASSEY (Continued)

1012234207

Registry ID: 110039543134

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

ECHO:

Envid: 1012234207
Registry ID: 110039543134
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110039543134

G36
NNE
1/4-1/2
0.472 mi.
2491 ft.

HAVRANEK #2
31 WATER STREET
YPSILANTI, MI
Site 2 of 9 in cluster G

US BROWNFIELDS
FINDS
ECHO

1012234135
N/A

Relative:
Lower

US BROWNFIELDS:

Actual:
690 ft.

Recipient name: Ypsilanti, City of
Grant type: Assessment
Property name: HAVRANEK #2
Property #: Not reported
Parcel size: Not reported
Property Description: Not reported
Latitude: 42.240639
Longitude: -83.61121
HCM label: Address Matching-House Number
Map scale: 100000
Point of reference: Entrance Point of a Facility or Station
Datum: North American Datum of 1983
ACRES property ID: 12567
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported
Assessment funding: Not reported
Assessment funding source: Not reported
Redevelopment funding: Not reported
Redev. funding source: Not reported
Redev. funding entity name: Not reported
Redevelopment start date: Not reported
Assessment funding entity: Not reported
Cleanup funding entity: Not reported
Grant type: N/A
Accomplishment type: Phase I Environmental Assessment
Accomplishment count: 0
Cooperative agreement #: 98546001
Ownership entity: Not reported
Current owner: Not reported
Did owner change: Not reported
Cleanup required: No
Video available: Not reported
Photo available: Not reported
Institutional controls required: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HAVRANEK #2 (Continued)

1012234135

IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Unknown
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contaminants found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HAVRANEK #2 (Continued)

1012234135

Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	1233
% Below Poverty:	3.0%
# Low Income:	2242
% Low Income:	1.7%
Meidan Income:	3240
# Unemployed:	195
% Unemployed:	19.0%
# Vacant Housing:	378
% Vacant Housing:	9.8%

FINDS:

Registry ID: 110039532477

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

ECHO:

Envid: 1012234135
Registry ID: 110039532477
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110039532477

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

G37
NNE
1/4-1/2
0.476 mi.
2515 ft.

DUKE
32 WATER STREET
YPSILANTI, MI 48198

Site 3 of 9 in cluster G

US BROWNFIELDS
FINDS
ECHO

1012234188
N/A

Relative:
Lower

US BROWNFIELDS:

Actual:
690 ft.

Recipient name: Ypsilanti, City of
Grant type: Assessment
Property name: DUKE
Property #: Not reported
Parcel size: .5
Property Description: residential since 1916
Latitude: 42.24063
Longitude: -83.611581
HCM label: Address Matching-House Number
Map scale: 100000
Point of reference: Entrance Point of a Facility or Station
Datum: North American Datum of 1983
ACRES property ID: 12562
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported
Assessment funding: Not reported
Assessment funding source: Not reported
Redevelopment funding: Not reported
Redev. funding source: Not reported
Redev. funding entity name: Not reported
Redevelopment start date: Not reported
Assessment funding entity: Not reported
Cleanup funding entity: Not reported
Grant type: N/A
Accomplishment type: Phase I Environmental Assessment
Accomplishment count: 0
Cooperative agreement #: 98546001
Ownership entity: Not reported
Current owner: Not reported
Did owner change: Not reported
Cleanup required: No
Video available: Not reported
Photo available: Not reported
Institutional controls required: Not reported
IC Category proprietary controls: Not reported
IC cat. info. devices: Not reported
IC cat. gov. controls: Not reported
IC cat. enforcement permit tools: Not reported
IC in place date: Not reported
IC in place: Unknown
State/tribal program date: Not reported
State/tribal program ID: Not reported
State/tribal NFA date: Not reported
Air contaminated: Not reported
Air cleaned: Not reported
Asbestos found: Not reported
Asbestos cleaned: Not reported
Controlled substance found: Not reported
Controlled substance cleaned: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUKE (Continued)

1012234188

Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUKE (Continued)

1012234188

No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	1346
% Below Poverty:	3.0%
# Low Income:	2445
% Low Income:	1.6%
Meidan Income:	3620
# Unemployed:	217
% Unemployed:	18.3%
# Vacant Housing:	403
% Vacant Housing:	9.9%

FINDS:

Registry ID: 110039543090

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

ECHO:

Envid: 1012234188
Registry ID: 110039543090
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110039543090

G38
NNE
1/4-1/2
0.479 mi.
2527 ft.

HAVRANEK #1
14 AND 30 WATER STREET
YPSILANTI, MI 48198

Site 4 of 9 in cluster G

US BROWNFIELDS
FINDS
ECHO

1012232994
N/A

Relative:
Lower

US BROWNFIELDS:
Recipient name: Ypsilanti, City of
Grant type: Assessment
Property name: HAVRANEK #1
Property #: Not reported
Parcel size: .8
Property Description: Flour Mill and Warehouse
Latitude: 42.240551
Longitude: -83.611557
HCM label: Not reported
Map scale: Not reported

Actual:
690 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HAVRANEK #1 (Continued)

1012232994

Point of reference:	Not reported
Datum:	Not reported
ACRES property ID:	12547
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	98546001
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Yes
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	Not reported
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Unknown
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HAVRANEK #1 (Continued)

1012232994

PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HAVRANEK #1 (Continued)

1012232994

Below Poverty: 1346
% Below Poverty: 3.0%
Low Income: 2445
% Low Income: 1.6%
Median Income: 3620
Unemployed: 217
% Unemployed: 18.3%
Vacant Housing: 403
% Vacant Housing: 9.9%

FINDS:

Registry ID: 110039540360

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

ECHO:

Envid: 1012232994
Registry ID: 110039540360
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110039540360

**H39
ENE
1/4-1/2
0.485 mi.
2560 ft.**

**FORD MOTOR CO
128 FACTORY ST
YPSILANTI, MI 48197**

**SEMS-ARCHIVE 1015734483
MID005379847**

Site 1 of 2 in cluster H

**Relative:
Lower**

SEMS-ARCHIVE:

Site ID: 502297
EPA ID: MID005379847
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

**Actual:
696 ft.**

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0502297
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Program Priority:

Description: Great Lakes

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: / /
Date Completed: 06/01/80
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: / /
Date Completed: 06/10/87

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD MOTOR CO (Continued)

1015734483

Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE

Date Started: / /

Date Completed: 09/24/93

Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT

Date Started: / /

Date Completed: 03/26/85

Priority Level: Low priority for further assessment

**H40
ENE
1/4-1/2
0.485 mi.
2560 ft.**

**FACTORY ST PUMP STA YPSILANTI
128 FACTORY ST
YPSILANTI, MI 48197**

**INVENTORY
PART 201**

**S103095422
N/A**

Site 2 of 2 in cluster H

**Relative:
Lower**

INVENTORY:

Bea Number: Not reported
Township: Ypsilanti Township
District: Jackson
Data Source: Part 201
Latitude: 42.23525
Longitude: -83.60412

**Actual:
696 ft.**

PART 201:

Facility ID: 81000013
Facility Status: Interim Response in progress
Source: Unknown
SAM Score: 34
SAM Score Date: 06/07/2004
Township: 03S
Range: 07E
Section: 9
Quarter: SE
Quarter/Quarter: SE
Pollutants: Not reported

**G41
NNE
1/4-1/2
0.485 mi.
2563 ft.**

**HIGH SCOPE FOUNDATION
24 WATER STREET AND VACANT RIVER STREET
YPSAILANTI, MI 48198**

US BROWNFIELDS

**1016679797
N/A**

Site 5 of 9 in cluster G

**Relative:
Lower**

US BROWNFIELDS:

Recipient name: Ypsilanti, City of
Grant type: Assessment
Property name: HIGH SCOPE FOUNDATION
Property #: Not reported
Parcel size: .6
Property Description: Industrial bulk gasoline storage & railroad siding
Latitude: 42.240495
Longitude: -83.611567
HCM label: Not reported
Map scale: Not reported

**Actual:
690 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HIGH SCOPE FOUNDATION (Continued)

1016679797

Point of reference:	Not reported
Datum:	Not reported
ACRES property ID:	12548
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	98546001
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Yes
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	Not reported
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Unknown
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HIGH SCOPE FOUNDATION (Continued)

1016679797

PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HIGH SCOPE FOUNDATION (Continued)

1016679797

# Below Poverty:	1335
% Below Poverty:	3.0%
# Low Income:	2425
% Low Income:	1.6%
Median Income:	3620
# Unemployed:	215
% Unemployed:	18.3%
# Vacant Housing:	396
% Vacant Housing:	9.9%

G42
NNE
1/4-1/2
0.487 mi.
2569 ft.

27 WATER ST
WASHTENAW (County), MI 48197
Site 6 of 9 in cluster G

INVENTORY **S114024511**
N/A

Relative:
Lower

INVENTORY:

Bea Number:	200300493JK
Township:	Ypsilanti City
District:	Jackson
Data Source:	BEA
Latitude:	Not reported
Longitude:	Not reported

Actual:
690 ft.

G43
NNE
1/4-1/2
0.487 mi.
2569 ft.

GRIFFIN
27 WATER STREET
YPSILANTI, MI 48198
Site 7 of 9 in cluster G

US BROWNFIELDS **1012232928**
FINDS **N/A**
ECHO

Relative:
Lower

US BROWNFIELDS:

Recipient name:	Ypsilanti, City of
Grant type:	Assessment
Property name:	GRIFFIN
Property #:	Not reported
Parcel size:	.3
Property Description:	Not reported
Latitude:	42.240676
Longitude:	-83.61121
HCM label:	Address Matching-House Number
Map scale:	100000
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	12550
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported

Actual:
690 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GRIFFIN (Continued)

1012232928

Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	98546001
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Yes
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	Not reported
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Unknown
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contaminants found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GRIFFIN (Continued)

1012232928

Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	1233
% Below Poverty:	3.0%
# Low Income:	2242
% Low Income:	1.7%
Meidan Income:	3240
# Unemployed:	195
% Unemployed:	19.0%
# Vacant Housing:	378
% Vacant Housing:	9.8%

FINDS:

Registry ID: 110039540397

Environmental Interest/Information System

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GRIFFIN (Continued)

1012232928

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

ECHO:

Envid: 1012232928
Registry ID: 110039540397
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110039540397

G44
NNE
1/4-1/2
0.487 mi.
2569 ft.

27 WATER ST
YPSILANTI CITY, MI 48197

BEA S106096543
N/A

Site 8 of 9 in cluster G

Relative:
Lower

BEA:

Secondary Address: Not reported
BEA Number: 493
District: Jackson
Date Received: 10/06/2003
Submitter Name: City of Ypsilanti
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: massonp
Division Assigned: Environmental Response Division

Actual:
690 ft.

45
North
1/4-1/2
0.488 mi.
2578 ft.

FORMER YPSILANTI LANDFILL
I-94 AND HURON STREET
YPSILANTI, MI 48197

US BROWNFIELDS 1016392640
FINDS N/A
ECHO

Relative:
Lower

US BROWNFIELDS:

Recipient name: Downriver Community Conference
Grant type: Assessment
Property name: FORMER YPSILANTI LANDFILL
Property #: Not reported
Parcel size: 6.2
Property Description: The Property was comprised of grass-covered land until the mid 1940s, and was used as a landfill from the mid 1940s until the 1960s. The Property has been grass- and tree-covered land since the mid 1960s.
Latitude: 42.2398727
Longitude: -83.61308819999999
HCM label: Address Matching-House Number
Map scale: Not reported
Point of reference: Entrance Point of a Facility or Station
Datum: North American Datum of 1983
ACRES property ID: 160341
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported

Actual:
722 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER YPSILANTI LANDFILL (Continued)

1016392640

Assessment funding:	15922
Assessment funding source:	US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	Hazardous
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	00E01038
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Y
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER YPSILANTI LANDFILL (Continued)

1016392640

Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Y
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Y
Copper contaminant found:	Y
Iron contaminant found:	Not reported
Mercury contaminant found:	Y
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	1251
% Below Poverty:	3.1%
# Low Income:	2351
% Low Income:	1.6%
Meidan Income:	3631
# Unemployed:	226
% Unemployed:	17.0%
# Vacant Housing:	366

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER YPSILANTI LANDFILL (Continued)

1016392640

% Vacant Housing: 10.5%

Recipient name: Downriver Community Conference
Grant type: Assessment
Property name: FORMER YPSILANTI LANDFILL
Property #: Not reported
Parcel size: 6.2
Property Description: The Property was comprised of grass-covered land until the mid 1940s, and was used as a landfill from the mid 1940s until the 1960s. The Property has been grass- and tree-covered land since the mid 1960s.

Latitude: 42.2398727
Longitude: -83.61308819999999
HCM label: Address Matching-House Number
Map scale: Not reported
Point of reference: Entrance Point of a Facility or Station
Datum: North American Datum of 1983
ACRES property ID: 160341
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported
Assessment funding: 2250
Assessment funding source: US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding: Not reported
Redev. funding source: Not reported
Redev. funding entity name: Not reported
Redevelopment start date: Not reported
Assessment funding entity: EPA
Cleanup funding entity: Not reported
Grant type: Hazardous
Accomplishment type: Phase I Environmental Assessment
Accomplishment count: 1
Cooperative agreement #: 00E01038
Ownership entity: Government
Current owner: Not reported
Did owner change: Not reported
Cleanup required: No
Video available: No
Photo available: Yes
Institutional controls required: N
IC Category proprietary controls: Not reported
IC cat. info. devices: Not reported
IC cat. gov. controls: Not reported
IC cat. enforcement permit tools: Not reported
IC in place date: Not reported
IC in place: No
State/tribal program date: Not reported
State/tribal program ID: Not reported
State/tribal NFA date: Not reported
Air contaminated: Not reported
Air cleaned: Not reported
Asbestos found: Not reported
Asbestos cleaned: Not reported
Controlled substance found: Not reported
Controlled substance cleaned: Not reported
Drinking water affected: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER YPSILANTI LANDFILL (Continued)

1016392640

Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Y
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Y
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Y
Copper contaminant found:	Y
Iron contaminant found:	Not reported
Mercury contaminant found:	Y
Nickel contaminant found:	Not reported
No contaminant found:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER YPSILANTI LANDFILL (Continued)

1016392640

Pesticides contaminant found: Not reported
Selenium contaminant found: Not reported
SVOCs contaminant found: Not reported
Unknown contaminant found: Not reported
Future Use: Multistory Not reported
Media affected Bluiding Material: Not reported
Media affected indoor air: Not reported
Building material media cleaned up: Not reported
Indoor air media cleaned up: Not reported
Unknown media cleaned up: Not reported
Past Use: Multistory Not reported
Highlights: Not reported
IC Data Address: Not reported
Redev Completion Date: Not reported
Below Poverty: 1251
% Below Poverty: 3.1%
Low Income: 2351
% Low Income: 1.6%
Meidan Income: 3631
Unemployed: 226
% Unemployed: 17.0%
Vacant Housing: 366
% Vacant Housing: 10.5%

FINDS:

Registry ID: 110055264137

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

ECHO:

Envid: 1016392640
Registry ID: 110055264137
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110055264137

G46
NNE
1/4-1/2
0.489 mi.
2582 ft.

LOWELL'S TOWING
31, 45, 47 AND VACANT WATER STREET
YPSILANTI, MI 48198
Site 9 of 9 in cluster G

US BROWNFIELDS **1012232847**
FINDS **N/A**
ECHO

Relative:
Lower

US BROWNFIELDS:
Recipient name: Ypsilanti, City of
Grant type: Assessment
Property name: LOWELL'S TOWING
Property #: Not reported
Parcel size: .7
Property Description: Junk Yard
Latitude: 42.239639
Longitude: -83.611366
HCM label: Not reported
Map scale: Not reported
Point of reference: Not reported

Actual:
690 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOWELL'S TOWING (Continued)

1012232847

Datum:	Not reported
ACRES property ID:	12549
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	98546001
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	No
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	Not reported
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Unknown
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOWELL'S TOWING (Continued)

1012232847

PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	1127

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOWELL'S TOWING (Continued)

1012232847

% Below Poverty: 2.9%
Low Income: 2029
% Low Income: 1.6%
Median Income: 3168
Unemployed: 173
% Unemployed: 19.1%
Vacant Housing: 338
% Vacant Housing: 9.8%

FINDS:

Registry ID: 110039540388

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

ECHO:

Envid: 1012232847
Registry ID: 110039540388
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110039540388

47
NNE
1/2-1
0.514 mi.
2713 ft.

YPSILANTI WATER STREET WATERFRONT DEV.
WATER ST
YPSILANTI, MI

INVENTORY
PART 201

S108632626
N/A

Relative:
Lower

INVENTORY:

Bea Number: Not reported
Township: Ypsilanti City
District: Jackson
Data Source: Part 201
Latitude: 42.24006
Longitude: -83.61161

Actual:
689 ft.

PART 201:

Facility ID: 81000495
Facility Status: **Inactive - no actions taken to address contamination**
Source: Not reported
SAM Score: 44
SAM Score Date: 03/21/2007
Township: 03S
Range: 07E
Section: 9
Quarter: Not reported
Quarter/Quarter: Not reported
Pollutants: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

48
NNE
1/2-1
0.583 mi.
3080 ft.

14 E MICHIGAN AVE (MIDTOWN AUTO)
14 EAST MICHIGAN AVENUE
YPSILANTI, MI 48198

PART 201
S109029761
N/A

Relative:
Lower

PART 201:

Facility ID: 81000162
Facility Status: See Leaking Underground Storage Tank Site Database
Source: Auto Repair Services & Garage
SAM Score: 20
SAM Score Date: 09/03/1990
Township: 03S
Range: 07E
Section: 9
Quarter: NE
Quarter/Quarter: SW
Pollutants: Oil; Paint waste; Solvents

Actual:
695 ft.

49
East
1/2-1
0.597 mi.
3152 ft.

YPSI, FORMER POTW
GROVE ROAD
YPSILANTI, MI 49094

INVENTORY
PART 201
S103095435
N/A

Relative:
Lower

INVENTORY:

Bea Number: Not reported
Township: temptownship
District: Jackson
Data Source: Part 201
Latitude: 42.23096
Longitude: -83.60233

Actual:
708 ft.

PART 201:

Facility ID: 81000245
Facility Status: Interim Response in progress
Source: Air Water & Solid Waste Mgt
SAM Score: 33
SAM Score Date: 06/21/2004
Township: 03S
Range: 07E
Section: 15
Quarter: NW
Quarter/Quarter: NW
Pollutants: TCE; Metals

50
ESE
1/2-1
0.685 mi.
3618 ft.

FORD LAKE
BETWEEN GROVE & HURON RIVER DR
YPSILANTI, MI 48197

INVENTORY
PART 201
1002946413
N/A

Relative:
Lower

INVENTORY:

Bea Number: Not reported
Township: temptownship
District: Jackson
Data Source: Part 201
Latitude: 42.22721

Actual:
680 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD LAKE (Continued)

1002946413

Longitude: -83.60224

PART 201:

Facility ID: 81000015
Facility Status: Inactive - no actions taken to address contamination
Source: Not reported
SAM Score: 30
SAM Score Date: 06/07/2004
Township: 03S
Range: 07E
Section: 16
Quarter: Not reported
Quarter/Quarter: Not reported
Pollutants: Heavy metals; Oil

51
NE
1/2-1
0.700 mi.
3698 ft.

300-320 E. MICHIGAN
300-320 E. MICHIGAN AVE
YPSILANTI, MI 48198

INVENTORY **S110126801**
PART 201 **N/A**

Relative:
Lower

INVENTORY:
Bea Number: Not reported
Township: Ypsilanti City
District: Jackson
Data Source: Part 201
Latitude: 42.24095
Longitude: -83.6058

Actual:
712 ft.

PART 201:

Facility ID: 81000551
Facility Status: Evaluation conducted
Source: Not reported
SAM Score: 27
SAM Score Date: 05/26/2005
Township: 03S
Range: 07E
Section: 9
Quarter: Not reported
Quarter/Quarter: Not reported
Pollutants: Not reported

52
East
1/2-1
0.705 mi.
3722 ft.

517 TYLER RD
517 TYLER RD
YPSILANTI, MI 48198

PART 201 **S108414374**
INVENTORY **N/A**
BEA

Relative:
Lower

PART 201:
Facility ID: 81000570
Facility Status: Evaluation conducted
Source: Not reported
SAM Score: 24
SAM Score Date: 03/26/2007
Township: 03S

Actual:
716 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

517 TYLER RD (Continued)

S108414374

Range: 07E
Section: 10
Quarter: Not reported
Quarter/Quarter: Not reported
Pollutants: Not reported

INVENTORY:

Bea Number: Not reported
Township: Ypsilanti City
District: Jackson
Data Source: Part 201
Latitude: 42.23335
Longitude: -83.59989

BEA:

Secondary Address: Not reported
BEA Number: 805
District: Jackson
Date Received: 03/21/2007
Submitter Name: NSC V Limited Partnership
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: katkov
Division Assigned: Environmental Response Division

**53
NE
1/2-1
0.816 mi.
4310 ft.**

**MARSH PLATING YPSILANTI
103 N GROVE
YPSILANTI, MI 48197**

**DEL PART 201
AIRS
WDS**

**S107697307
N/A**

**Relative:
Lower**

DEL_PART201:
Facility ID: 81000023
Status: Delisted - no longer meets criteria specified in rules

**Actual:
725 ft.**

AIRS:

State Registration Number: B2576
Naics Code: Not reported
Contact Email: Not reported
Contact Name: DAVID WEST
Contact Phone: Not reported
Contact Address: (same as site address)
Contact City,St,Zip: Not reported
Permit Number: 1138-89
Date Received: 12/26/1989
Application Reason: PLATING EXHAUST SYST
Record Type: Not reported
State County FIPS: Not reported
Facility Category: Not reported
SIC Primary: Not reported
Tribal Code: Not reported
Facility Status: Not reported
Supplemental Location Text: Not reported
Business Name: MARSH PLATING CORPORATION

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARSH PLATING YPSILANTI (Continued)

S107697307

Principal Product: Not reported
Principal Product Description: Not reported
UTM Zone (Geo Coordinates Universal Transverse Mercator System): Not reported
UTM Horizontal Coord: Not reported
UTM Vertical Coord: Not reported
Mailing Name: MARSH PLATING CORPORATION
Mailing Contact Person: GARY S SALYER
Mailing Street: 103 N GROVE
Mailing City: YPSILANTI
Mailing State: MI
Mailing Zip: 48197
Mailing Zip 4 Extension: Not reported
Compliance Person: GARY S SALYER
Compliance Area Code: 313
Compliance Phone Number: 4835767
Emission Inventory Contact Person: GARY S SALYER
EI Contact Area Code: 313
EI Contact Phone Number: 4835767
Permit Contact Person: GARY S SALYER
Permit Contact Person Area Code: 313
Permit Contact Person Phone Number: 4835767
Federal Employer Id Number: Not reported
Of Employees: 0
Reporting Year: 1997
Date Record Was Created: 08/10/1997

WDS:

Site Id: MID005371661
WMD Id: 393571
Site Specific Name: MARSH PLATING CORP
Mailing Address: 103 N GROVE ST
Mailing City/State/Zip: 48198
Mailing County: WASHTENAW

54
NE
1/2-1
0.865 mi.
4568 ft.

YPSILANTI ECON DEVEL AUTHORITY
206 N GROVE ST
YPSILANTI, MI 48198

BROWNFIELDS **S105144776**
PART 201 **N/A**
INVENTORY
BEA
WDS

Relative:
Higher

BROWNFIELDS:
Facility ID: 00040998
Region: 1
Status: proposed
Property Use: vacant
BEA: No
Ernie Id Number: 81000483

Actual:
734 ft.

PART 201:

Facility ID: 81000483
Facility Status: **Interim Response conducted - No further activities anticipated**
Source: Not reported
SAM Score: 26
SAM Score Date: 07/01/2004
Township: 3S
Range: 7E
Section: 9

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YPSILANTI ECON DEVEL AUTHORITY (Continued)

S105144776

Quarter: Not reported
Quarter/Quarter: Not reported
Pollutants: Benzene; Ethylbenzene; Toluene; Xylenes

INVENTORY:

Bea Number: Not reported
Township: Ypsilanti City
District: Jackson
Data Source: Part 201
Latitude: 42.24178
Longitude: -83.60279

BEA:

Secondary Address: Not reported
BEA Number: 548
District: Jackson
Date Received: 05/28/2004
Submitter Name: 206 Grove LLC
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: massonp
Division Assigned: Environmental Response Division

WDS:

Site Id: MIK162121883
WMD Id: 464286
Site Specific Name: ABANDONED GROVE STREET SITE
Mailing Address: 30 N WASHINGTON ST
Mailing City/State/Zip: 48197
Mailing County: WASHTENAW

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
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: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	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.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

Federal CERCLIS list

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 EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/06/2016	Telephone: 703-603-8704
Date Made Active in Reports: 05/20/2016	Last EDR Contact: 10/04/2016
Number of Days to Update: 135	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list 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). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 07/22/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 10/31/2016
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS 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 the 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. The 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 potential NPL site.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 07/22/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 10/31/2016
	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: 06/27/2016	Source: EPA
Date Data Arrived at EDR: 06/30/2016	Telephone: 800-424-9346
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	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: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	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: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	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: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

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: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 10/14/2016
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Varies

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: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 12/12/2016
	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: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Date of Government Version: N/A
Date Data Arrived at EDR: 10/31/2013
Date Made Active in Reports: 11/20/2013
Number of Days to Update: 20

Source: Dept of Environmental Quality
Telephone: 517-284-5103
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: No Update Planned

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: 06/27/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 63

Source: Dept of Environmental Quality
Telephone: 517-335-4035
Last EDR Contact: 09/27/2016
Next Scheduled EDR Contact: 01/09/2017
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: 04/27/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 07/05/2016
Number of Days to Update: 48

Source: Dept of Environmental Quality
Telephone: 517-373-9837
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

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: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

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: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

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

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
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: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

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

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

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: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

State and tribal registered storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/11/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Varies

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: 04/13/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 07/05/2016
Number of Days to Update: 48

Source: Dept of Environmental Quality
Telephone: 517-241-8847
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Annually

UST 2: Underground Storage Tank Listing

A listing of underground storage tank site locations that have unknown owner information.

Date of Government Version: 07/19/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 38

Source: Dept of Environmental Quality
Telephone: 517-241-8847
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Annually

AST: Aboveground Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 07/05/2016
Number of Days to Update: 48

Source: Dept of Environmental Quality
Telephone: 517-241-8847
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

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: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

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: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 07/27/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Varies

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: 12/03/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/04/2016	Telephone: 214-665-7591
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 07/27/2016
Number of Days to Update: 120	Next Scheduled EDR Contact: 11/07/2016
	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: 11/05/2015	Source: EPA Region 5
Date Data Arrived at EDR: 11/13/2015	Telephone: 312-886-6136
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 07/27/2016
Number of Days to Update: 52	Next Scheduled EDR Contact: 11/07/2016
	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: 02/25/2016	Source: EPA Region 9
Date Data Arrived at EDR: 04/27/2016	Telephone: 415-972-3368
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 07/27/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Quarterly

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: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 07/27/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/07/2016
	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: 02/05/2016	Source: EPA Region 4
Date Data Arrived at EDR: 04/29/2016	Telephone: 404-562-9424
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 07/26/2016
Number of Days to Update: 35	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/09/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 06/13/2016	Telephone: 517-373-4828
Date Made Active in Reports: 09/01/2016	Last EDR Contact: 08/26/2016
Number of Days to Update: 80	Next Scheduled EDR Contact: 11/14/2016
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Listing

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

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

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: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/26/2016
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/09/2017
	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: 01/15/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 02/02/2016	Telephone: 517-373-4805
Date Made Active in Reports: 04/04/2016	Last EDR Contact: 07/22/2016
Number of Days to Update: 62	Next Scheduled EDR Contact: 11/07/2016
	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, Detroit Edison, Detroit Area Commercial Board of Realtors

Date of Government Version: 04/09/2007	Source: Economic Development Corporation
Date Data Arrived at EDR: 04/10/2007	Telephone: 888-522-0103
Date Made Active in Reports: 05/01/2007	Last EDR Contact: 08/26/2016
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/22/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/21/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facilities

A listing of recycling center locations.

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/11/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 52

Source: Dept of Environmental Quality
Telephone: 517-241-5719
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
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: Dept of Environmental Quality
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: 08/05/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

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: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/31/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: No Update Planned

INVENTORY: Inventory of Facilities

The Inventory of Facilities has three data sources: Facilities under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) identified through state funded or private party response activities (Projects); Facilities under Part 213, Leaking Underground Storage Tanks of the NREPA; and Facilities identified through submittals of Baseline Environmental Assessments (BEA) submitted pursuant to Part 201 or Part 213 of the NREPA. The Part 201 Projects Inventory does not include all of the facilities that are subject to regulation under Part 201 because owners are not required to inform the Department of Environmental Quality (DEQ) about the facilities and can pursue cleanup independently. Facilities that are not known to DEQ are not on the Inventory, nor are locations with releases that resulted in low environmental impact. Part 213 facilities listed here may have more than one release; a list of releases for which corrective actions have been completed and list of releases for which corrective action has not been completed is located on the Leaking Underground Storage Tanks Site Search webpage. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

Date of Government Version: 07/26/2016
Date Data Arrived at EDR: 07/27/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 36

Source: Department of Environmental Quality
Telephone: 517-284-5136
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

PART 201: Part 201 Site List

A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

Date of Government Version: 10/01/2013
Date Data Arrived at EDR: 10/03/2014
Date Made Active in Reports: 10/03/2014
Number of Days to Update: 0

Source: Department of Environmental Quality
Telephone: 517-284-5103
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab locations.

Date of Government Version: 05/11/2016
Date Data Arrived at EDR: 05/24/2016
Date Made Active in Reports: 07/05/2016
Number of Days to Update: 42

Source: Department of Community Health
Telephone: 517-373-3740
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

DEL PART 201: Delisted List of Contaminated Sites

A deleted site has been removed from the Part 201 List because information known to the DEQ at the time of the evaluation does not support inclusion on the Part 201 List. This designation is often applied to sites where changes in cleanup criteria resulted in a determination that the site no longer exceeds any applicable cleanup criterion. A delisted site has been removed from the Part 201 List because response actions have reduced the levels of contaminants to concentrations which meet or are below the criteria for unrestricted residential use.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 09/11/2013
Number of Days to Update: 41

Source: Dept of Environmental Quality
Telephone: 517-373-9541
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

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: 08/30/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Quarterly

Local Land Records

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: 07/07/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/05/2015
Number of Days to Update: 12

Source: Dept of Environmental Quality
Telephone: 517-241-7603
Last EDR Contact: 04/22/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

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: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
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: 06/27/2016
Date Data Arrived at EDR: 06/28/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 87

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/27/2016
Next Scheduled EDR Contact: 01/09/2017
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2016
Date Data Arrived at EDR: 07/29/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 34

Source: Dept of Environmental Quality
Telephone: 517-373-8427
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

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: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

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: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
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: 888-275-8747
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

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: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: N/A

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/15/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/08/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 107

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

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: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/23/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Every 4 Years

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

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: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Annually

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: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 08/12/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 11/21/2016
	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: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 127	Next Scheduled EDR Contact: 01/23/2017
	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: 01/23/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/06/2015	Telephone: 202-564-5088
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 10/11/2016
Number of Days to Update: 31	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Quarterly

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	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/05/2016
	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	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

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: 03/07/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 03/18/2016	Telephone: 301-415-7169
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 09/05/2016
Number of Days to Update: 28	Next Scheduled EDR Contact: 11/21/2016
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

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

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 09/09/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/19/2016
	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: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/06/2016
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/19/2016
	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: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 07/29/2016
Number of Days to Update: 83	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Varies

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: 07/07/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2015	Telephone: 202-343-9775
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 10/05/2016
Number of Days to Update: 69	Next Scheduled EDR Contact: 01/16/2017
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

DOT OPS: Incident and Accident Data

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

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
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: 03/31/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

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: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Biennially

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: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016
Date Data Arrived at EDR: 07/26/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 59

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/07/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 148

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US 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: 08/05/2016
Date Data Arrived at EDR: 09/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

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: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Varies

AIRS: Permit and Emissions Inventory Data

Permit and emissions inventory data.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 69

Source: Dept of Environmental Quality
Telephone: 517-373-7074
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Varies

BEA: Baseline Environmental Assessment Database

A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/21/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 09/12/2013
Number of Days to Update: 20

Source: Dept of Environmental Quality
Telephone: 517-373-9541
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

COAL ASH: Coal Ash Disposal Sites

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

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/18/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 45

Source: Dept of Environmental Quality
Telephone: 586-753-3754
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Establishments

A listing of drycleaning facilities in Michigan.

Date of Government Version: 07/20/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 38

Source: Dept of Environmental Quality
Telephone: 517-335-4586
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Annually

LEAD CERT: Lead Safe Housing Registry

A listing of Michigan properties included in the Lead Safe Housing Registry.

Date of Government Version: 09/15/2015
Date Data Arrived at EDR: 09/16/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 14

Source: Department of Community Health
Telephone: 517-335-9699
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

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: 05/04/2016
Date Data Arrived at EDR: 07/07/2016
Date Made Active in Reports: 09/01/2016
Number of Days to Update: 56

Source: Dept of Environmental Quality
Telephone: 517-241-1300
Last EDR Contact: 10/07/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

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: 05/09/2016
Date Data Arrived at EDR: 05/11/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 83

Source: Dept of Environmental Quality
Telephone: 517-241-1515
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

WDS: Waste Data System

The Waste Data System (WDS) tracks activities at facilities regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/27/2016
Date Made Active in Reports: 07/05/2016
Number of Days to Update: 39

Source: Dept of Environmental Quality
Telephone: 517-284-6562
Last EDR Contact: 08/19/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/24/2016	Source: EPA
Date Data Arrived at EDR: 05/25/2016	Telephone: 800-385-6164
Date Made Active in Reports: 07/13/2016	Last EDR Contact: 08/23/2016
Number of Days to Update: 49	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/23/2015	Telephone: 202-564-2280
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 09/20/2016
Number of Days to Update: 103	Next Scheduled EDR Contact: 01/02/2017
	Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: 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	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA PART 201: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

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: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/12/2016
Next Scheduled EDR Contact: 01/23/2017
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: 08/01/2016
Date Data Arrived at EDR: 08/03/2016
Date Made Active in Reports: 09/09/2016
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 09/20/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Department of Natural Resources

Telephone: 517-241-2254

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

16-15594/EXISTING COMMERCIAL BUILDING
539 S. HURON STREET
YPSILANTI, MI 48197

TARGET PROPERTY COORDINATES

Latitude (North):	42.231986 - 42° 13' 55.15"
Longitude (West):	83.61444 - 83° 36' 51.98"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	284253.2
UTM Y (Meters):	4678629.5
Elevation:	729 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	6068356 YPSILANTI EAST, MI
Version Date:	2014
Southwest Map:	6066348 YPSILANTI WEST, MI
Version Date:	2014

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 principal 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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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).

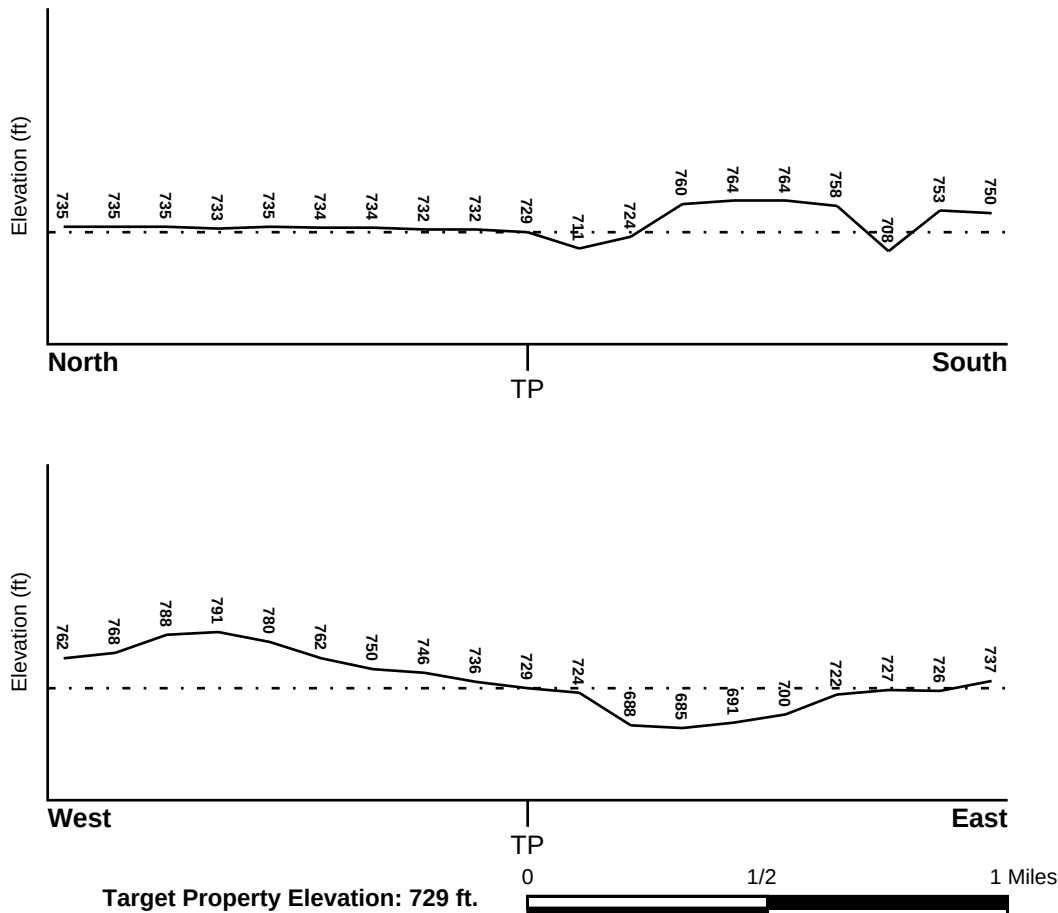
TOPOGRAPHIC INFORMATION

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 East

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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
26161C0426E	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
26161C0430E	FEMA FIRM Flood data
26161C0407E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
YPSILANTI EAST	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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
1	0 - 1/8 Mile North	NE
2	1/8 - 1/4 Mile NNE	E
13	1/2 - 1 Mile NNE	SE
14	1/2 - 1 Mile SSW	S
16	1/2 - 1 Mile NNE	NE
18	1/2 - 1 Mile North	SE
20	1/2 - 1 Mile West	NW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

Era: Paleozoic
System: Devonian
Series: Upper Devonian
Code: D3 (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

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

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
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

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A4	USGS40000481615	1/4 - 1/2 Mile NE
6	USGS40000481612	1/4 - 1/2 Mile East
7	USGS40000481616	1/4 - 1/2 Mile ENE
12	USGS40000481623	1/2 - 1 Mile North
17	USGS40000481618	1/2 - 1 Mile NE
19	USGS40000481621	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

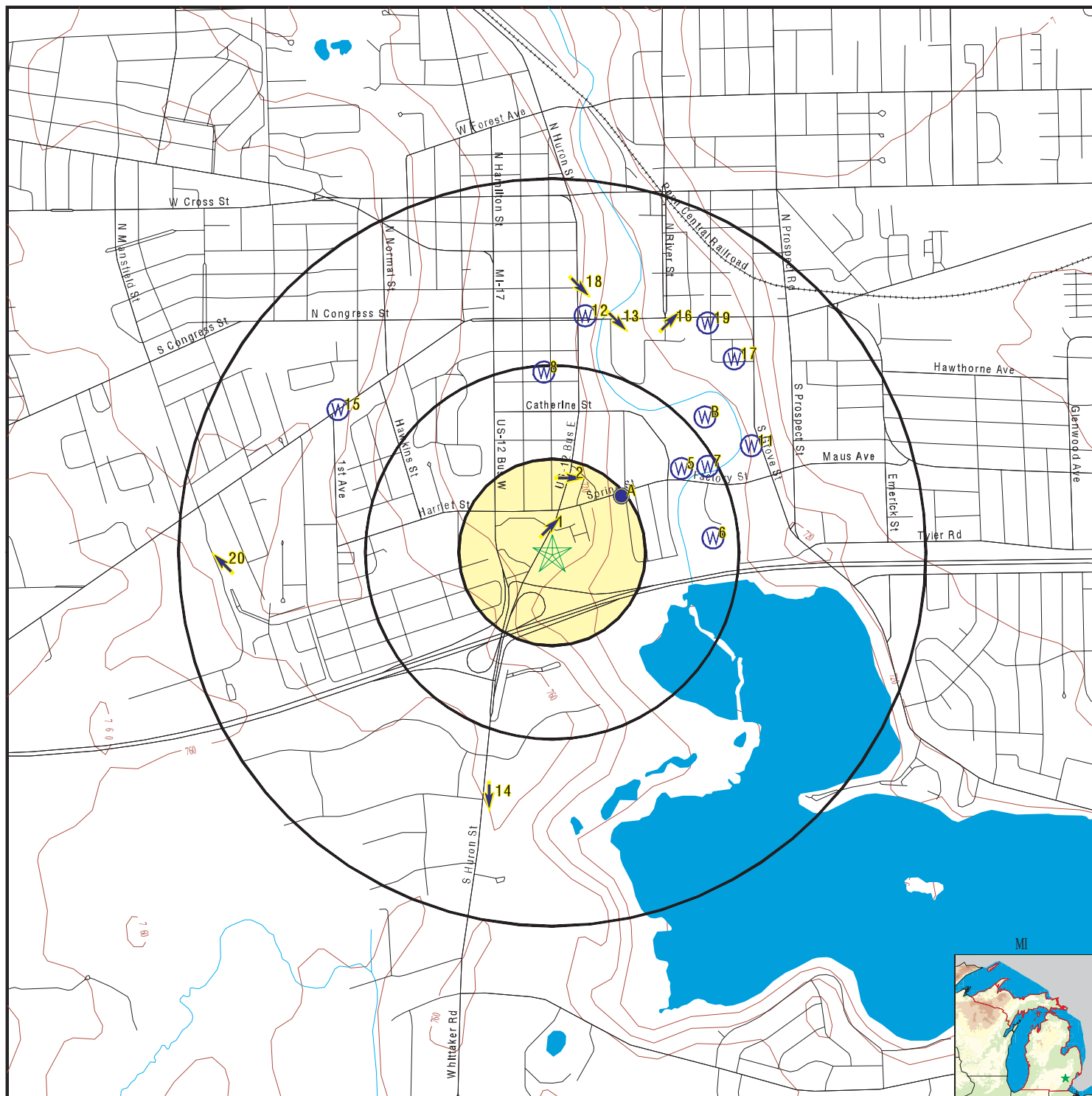
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

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

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A3	MI3000000047188	1/8 - 1/4 Mile NE
5	MI3000000047327	1/4 - 1/2 Mile ENE
8	MI3000000047697	1/4 - 1/2 Mile North
B9	MI3000000047529	1/2 - 1 Mile NE
B10	MI3000000047512	1/2 - 1 Mile NE
11	MI3000000047423	1/2 - 1 Mile ENE
15	MI3000000047540	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 4755926.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: 16-15594/Existing Commercial Building
 ADDRESS: 539 S. Huron Street
 Ypsilanti MI 48197
 LAT/LONG: 42.231986 / 83.61444

CLIENT: McDowell & Associates
 CONTACT: Mark P. Kochanski
 INQUIRY #: 4755926.2s
 DATE: October 17, 2016 8:21 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1	Site ID:	810290		
North	Groundwater Flow:	NE	AQUIFLOW	45928
0 - 1/8 Mile	Shallowest Water Table Depth:	9		
Higher	Deepest Water Table Depth:	13		
	Average Water Table Depth:	Not Reported		
	Date:	07/09/1992		

2	Site ID:	810330		
NNE	Groundwater Flow:	E	AQUIFLOW	45890
1/8 - 1/4 Mile	Shallowest Water Table Depth:	12		
Higher	Deepest Water Table Depth:	14		
	Average Water Table Depth:	Not Reported		
	Date:	03/20/1994		

A3			MI WELLS	MI3000000047188
NE				
1/8 - 1/4 Mile				
Lower				

Wellid:	81000007394	Import id:	81737709302
County:	Washtenaw	Township:	Ypsilanti
Town range:	03S 07E	Section:	9
Owner name:	YPSILANTI COMMUNITY UTILITIES		
Well addr:	YPSILANTI CITY WELL #4		
Well depth:	105		
Well type:	Type I public		
Wssn:	7260		
Well num:	YPSILANTI CITY WELL #4	Driller id:	0
Const date:	Not Reported	Case type:	Unknown
Case dia:	16		
Case depth:	0		
Screen frm:	0		
Screen to:	0		
Swl:	999.99		
Test depth:	0		
Test hours:	0		
Test rate:	1000	Test methd:	Unknown
Grouted:	1	Pmp cpcity:	0
Latitude:	42.2338678748		
Longitude:	-83.6111492335		
Methd coll:	Interpolation-Map		
Elevation:	690		
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported
Elev flag:	Not Reported		
Swl flag:	SWL > Well Depth		
Elev dem:	689	Elev dif:	1
Elev miv:	690	Aq code:	Unknown Lithology
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:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pct cm d:	0	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:	-3
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 lmod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc lmod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	0
Pct pcm 1:	0	Pct na 1:	100
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	0	Pct pcm 2:	0
Pct na 2:	100	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	100
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	100	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	100
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:	Y
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A4
NE
1/4 - 1/2 Mile
Lower

FED USGS USGS40000481615

Org. Identifier:	USGS-MI		
Formal name:	USGS Michigan Water Science Center		
Monloc Identifier:	USGS-421404083363801		
Monloc name:	03S07E09DCBB01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	04090005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.2344835
Longitude:	-83.6104937	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	698
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Reported		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	109
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

5
ENE
1/4 - 1/2 Mile
Lower

MI WELLS MI3000000047327

Wellid:	81000007393	Import id:	81737709301
County:	Washtenaw	Township:	Ypsilanti
Town range:	03S 07E	Section:	9
Owner name:	YPSILANTI COMMUNITY UTILITIES		
Well addr:	YPSILANTI CITY WELL #3		
Well depth:	105		
Well type:	Type I public		
Wssn:	7260		
Well num:	YPSILANTI CITY WELL #3	Driller id:	0
Const date:	Not Reported	Case type:	Unknown
Case dia:	16		
Case depth:	0		
Screen frm:	0		
Screen to:	0		
Swl:	999.99		
Test depth:	0		
Test hours:	0		
Test rate:	900	Test methd:	Unknown
Grouted:	1	Pmp cpcity:	0
Latitude:	42.2352340805		
Longitude:	-83.6076892071		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Methd coll:	Interpolation-Map		
Elevation:	686		
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported
Elev flag:	Not Reported		
Swl flag:	SWL > Well Depth		
Elev dem:	682	Elev dif:	4
Elev miv:	686	Aq code:	Unknown Lithology
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:	0
Pct cm d:	0	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:	-3
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 lmod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc lmod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	0
Pct pcm 1:	0	Pct na 1:	100
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	0	Pct pcm 2:	0
Pct na 2:	100	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	100
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	100	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	100
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

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Within sec:	Y	Loc match:	Y
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

6
East
1/4 - 1/2 Mile
Lower

FED USGS USGS40000481612

Org. Identifier:	USGS-MI		
Formal name:	USGS Michigan Water Science Center		
Monloc Identifier:	USGS-421357083362201		
Monloc name:	03S 07E 09DDCB 01 WASHTENAW CO (CORNWALL)		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.2325391
Longitude:	-83.6060492	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	680
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Reported		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Silurian-Devonian aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

7
ENE
1/4 - 1/2 Mile
Lower

FED USGS USGS40000481616

Org. Identifier:	USGS-MI		
Formal name:	USGS Michigan Water Science Center		
Monloc Identifier:	USGS-421407083362301		
Monloc name:	03S07E09DCAA01		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	04090005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.2353168
Longitude:	-83.606327	Sourcemap scale:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	683
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Reported		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	92
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

8
North
1/4 - 1/2 Mile
Higher

MI WELLS MI3000000047697

Wellid:	81000015581	Import id:	Not Reported
County:	Washtenaw	Township:	Ypsilanti
Town range:	03S 07E	Section:	11
Owner name:	STEVE PIERCE		
Well addr:	118 S WASHINGTON		
Well depth:	34		
Well type:	Irrigation		
Wssn:	0		
Well num:	Not Reported	Driller id:	2014
Const date:	2005-02-01 00:00:00.000	Case type:	PVC Plastic
Case dia:	5		
Case depth:	29		
Screen frm:	29		
Screen to:	34		
Swl:	10		
Test depth:	10		
Test hours:	2		
Test rate:	12	Test methd:	Air
Grouted:	1	Pmp cpcity:	0
Latitude:	42.23897		
Longitude:	-83.61486		
Methd coll:	GPS Code Meas. Std. Positioning Svc. SA Off		
Elevation:	0		
Elev methd:	DEM30M	Depth flag:	Not Reported
Elev flag:	Elevation < DEMmin or Elevation > DEMmax		
Swl flag:	Not Reported		
Elev dem:	731	Elev dif:	731
Elev miv:	731	Aq code:	Not Reported
Aq flag:	Lithology Problem (Drift under Rock)		
Pct aq:	0		
Pct aq d:	0	Pct aq r:	0
Pct maq:	0	Pct maq d:	0
Pct maq r:	0	Pct cm:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pct cm d:	0	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:	-9
D r type:	Not Reported	Spc cpcity:	0
A thicknes:	24	A pct aq:	71
A pct maq:	25	A pct pcm:	0
A pct cm:	4	A pct na:	0
A thickns2:	24	A pct aq2:	71
A pct maq2:	25	A pct pcm2:	0
A pct cm2:	4	A pct na2:	0
A hit swl:	T	A hit top:	F
A hit rock:	F	A sc lith1:	Not Reported
A sc lmod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc lmod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	0
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	0	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 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:	N	Loc match:	Y
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database

EDR ID Number

B9
NE
1/2 - 1 Mile
Lower

MI WELLS

MI3000000047529

Wellid:	81000007392	Import id:	81737709001
County:	Washtenaw	Township:	Ypsilanti
Town range:	03S 07E	Section:	9
Owner name:	CITY OF YPSILANTI		
Well addr:	Not Reported		
Well depth:	108		
Well type:	Public		
Wssn:	0		
Well num:	Not Reported	Driller id:	550
Const date:	1970-09-18 00:00:00.000	Case type:	Unknown
Case dia:	36		
Case depth:	67		
Screen frm:	87		
Screen to:	107		
Swl:	999.99		
Test depth:	70		
Test hours:	1		
Test rate:	40	Test methd:	Unknown
Grouted:	1	Pmp cpcity:	0
Latitude:	42.2373390485		
Longitude:	-83.6068188028		
Methd coll:	Interpolation-Map		
Elevation:	688		
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported
Elev flag:	Not Reported		
Swl flag:	SWL > Well Depth		
Elev dem:	686	Elev dif:	2
Elev miv:	688	Aq code:	Drift Well
Aq flag:	Not Reported		
Pct aq:	32		
Pct aq d:	32	Pct aq r:	0
Pct maq:	12	Pct maq d:	12
Pct maq r:	0	Pct cm:	49
Pct cm d:	49	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 & Gravel
A sc lmod1:	W/Stones	A sc lmaq1:	AQ
A sc lpct1:	65	A sc lith2:	Sand & Gravel
A sc lmod2:	W/Stones	A sc lmaq2:	AQ
A sc lpct2:	35	Pct aq 1:	10
Pct maq 1:	25	Pct cm 1:	30
Pct pcm 1:	0	Pct na 1:	35

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

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:	30	Pct maq 4:	40
Pct cm 4:	30	Pct pcm 4:	0
Pct na 4:	0	Pct aq 5:	100
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:	Y	Loc match:	Y
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

B10
NE
1/2 - 1 Mile
Lower

MI WELLS MI3000000047512

Wellid:	81000007396	Import id:	81737709304
County:	Washtenaw	Township:	Ypsilanti
Town range:	03S 07E	Section:	9
Owner name:	YPSILANTI COMMUNITY UTILITIES		
Well addr:	YPSILANTI CITY WELL #1		
Well depth:	105		
Well type:	Type I public		
Wssn:	7260		
Well num:	YPSILANTI CITY WELL #1	Driller id:	0
Const date:	Not Reported	Case type:	Unknown
Case dia:	16		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Case depth:	0		
Screen frm:	0		
Screen to:	0		
Swl:	999.99		
Test depth:	0		
Test hours:	0		
Test rate:	2100	Test methd:	Unknown
Grouted:	1	Pmp cpcity:	0
Latitude:	42.2371190155		
Longitude:	-83.6061033209		
Methd coll:	Interpolation-Map		
Elevation:	686		
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported
Elev flag:	Not Reported		
Swl flag:	SWL > Well Depth		
Elev dem:	686	Elev dif:	0
Elev miv:	686	Aq code:	Unknown Lithology
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:	0
Pct cm d:	0	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:	-3
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 lmod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc lmod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	0
Pct pcm 1:	0	Pct na 1:	100
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	0	Pct pcm 2:	0
Pct na 2:	100	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	100
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	100	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	100
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

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

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:	Y
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

11
ENE
1/2 - 1 Mile
Lower

MI WELLS MI3000000047423

Wellid:	81000007395	Import id:	81737709303
County:	Washtenaw	Township:	Ypsilanti
Town range:	03S 07E	Section:	9
Owner name:	YPSILANTI COMMUNITY UTILITIES		
Well addr:	YPSILANTI CITY WELL #7		
Well depth:	105		
Well type:	Type I public		
Wssn:	7260		
Well num:	YPSILANTI CITY WELL #7	Driller id:	0
Const date:	1972-01-01 00:00:00.000	Case type:	Unknown
Case dia:	16		
Case depth:	0		
Screen frm:	0		
Screen to:	0		
Swl:	999.99		
Test depth:	0		
Test hours:	0		
Test rate:	1000	Test methd:	Unknown
Grouted:	1	Pmp cpcity:	0
Latitude:	42.2361158382		
Longitude:	-83.6040412556		
Methd coll:	Interpolation-Map		
Elevation:	700		
Elev methd:	Topographoc Map Interpolation	Depth flag:	Not Reported
Elev flag:	Not Reported		
Swl flag:	SWL > Well Depth		
Elev dem:	692	Elev dif:	8
Elev miv:	700	Aq code:	Unknown Lithology
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:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pct cm d:	0	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:	-3
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 lmod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc lmod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	0
Pct pcm 1:	0	Pct na 1:	100
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	0	Pct pcm 2:	0
Pct na 2:	100	Pct aq 3:	0
Pct maq 3:	0	Pct cm 3:	0
Pct pcm 3:	0	Pct na 3:	100
Pct aq 4:	0	Pct maq 4:	0
Pct cm 4:	0	Pct pcm 4:	0
Pct na 4:	100	Pct aq 5:	0
Pct maq 5:	0	Pct cm 5:	0
Pct pcm 5:	0	Pct na 5:	100
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:	Y
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

12
North
1/2 - 1 Mile
Lower

FED USGS USGS40000481623

Org. Identifier:	USGS-MI		
Formal name:	USGS Michigan Water Science Center		
Monloc Identifier:	USGS-421428083364601		
Monloc name:	03S 07E 09ACBB 01 WASHTENAW CO (MOORMAN)		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.24115
Longitude:	-83.612716	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	703
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Reported		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Silurian-Devonian aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

13
NNE
1/2 - 1 Mile
Lower

Site ID:	810360
Groundwater Flow:	SE
Shallowest Water Table Depth:	Not Reported
Deepest Water Table Depth:	Not Reported
Average Water Table Depth:	20
Date:	03/28/1995

AQUIFLOW 45960

14
SSW
1/2 - 1 Mile
Higher

Site ID:	Not Reported
Groundwater Flow:	S
Shallowest Water Table Depth:	Not Reported
Deepest Water Table Depth:	Not Reported
Average Water Table Depth:	4
Date:	12/29/1995

AQUIFLOW 45974

15
WNW
1/2 - 1 Mile
Higher

MI WELLS MI3000000047540

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wellid:	81000013241	Import id:	Not Reported
County:	Washtenaw	Township:	Ypsilanti
Town range:	03S 07E	Section:	8
Owner name:	CHRISTIAN FAITH CHURCH		
Well addr:	907 WEST MICHIGAN AVE		
Well depth:	0		
Well type:	Type II public		
Wssn:	2046981		
Well num:	001	Driller id:	0
Const date:	Not Reported	Case type:	Unknown
Case dia:	-1		
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:	42.23751964		
Longitude:	-83.62560119		
Methd coll:	Address Matching-House Number		
Elevation:	758		
Elev methd:	Topographoc Map Interpolation	Depth flag:	Well Depth = 0
Elev flag:	Not Reported		
Swl flag:	SWL = 0		
Elev dem:	777	Elev dif:	19
Elev miv:	758	Aq code:	Unknown Lithology
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:	0
Pct cm d:	0	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:	-3
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:	F
A hit rock:	F	A sc lith1:	Not Reported
A sc lmod1:	Not Reported	A sc lmaq1:	Not Reported
A sc lpct1:	0	A sc lith2:	Not Reported
A sc lmod2:	Not Reported	A sc lmaq2:	Not Reported
A sc lpct2:	0	Pct aq 1:	0
Pct maq 1:	0	Pct cm 1:	0
Pct pcm 1:	0	Pct na 1:	0
Pct aq 2:	0	Pct maq 2:	0
Pct cm 2:	0	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

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

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:	Y
Aq code 1:	Not Reported		
Hit swl:	Not Reported		
Athk2:	0		
Horiz Conduct:	0		
Vert Conduct:	0		
T2:	0		
D50plek:	0		

16	Site ID:	810452		
NNE	Groundwater Flow:	NE	AQUIFLOW	45855
1/2 - 1 Mile	Shallowest Water Table Depth:	Not Reported		
Lower	Deepest Water Table Depth:	Not Reported		
	Average Water Table Depth:	6		
	Date:	10/01/1996		

17			FED USGS	USGS40000481618
NE				
1/2 - 1 Mile				
Lower				
Org. Identifier:	USGS-MI			
Formal name:	USGS Michigan Water Science Center			
Monloc Identifier:	USGS-421422083361801			
Monloc name:	03S07E09ADB 01 FWA-14			
Monloc type:	Well			
Monloc desc:	Not Reported			
Huc code:	04090005	Drainagearea value:	Not Reported	
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported	
Contrib drainagearea units:	Not Reported	Latitude:	42.2394833	
Longitude:	-83.6049381	Sourcemap scale:	Not Reported	
Horiz Acc measure:	1	Horiz Acc measure units:	minutes	
Horiz Collection method:	Interpolated from map			
Horiz coord refs:	NAD83	Vert measure val:	710	
Vert measure units:	feet	Vertacc measure val:	10	
Vert accmeasure units:	feet			
Vertcollection method:	Reported			
Vert coord refs:	NGVD29	Countrycode:	US	
Aquifername:	Sand and gravel aquifers (glaciated regions)			
Formation type:	Outwash			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	Not Reported	Wellholeddepth:	Not Reported
Welldepth units:	Not Reported		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

18 North 1/2 - 1 Mile Higher	Site ID: 810360 Groundwater Flow: SE Shallowest Water Table Depth: Not Reported Deepest Water Table Depth: Not Reported Average Water Table Depth: 20 Date: 03/28/1995	AQUIFLOW	63213
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19 NE 1/2 - 1 Mile Lower		FED USGS	USGS40000481621
Org. Identifier: USGS-MI Formal name: USGS Michigan Water Science Center Monloc Identifier: USGS-421427083362301 Monloc name: 03S 07E 09ADBC 01 WASHTENAW CO. (GILBERT) Monloc type: Well Monloc desc: Not Reported Huc code: 04090005 Drainagearea Units: Not Reported Contrib drainagearea units: Not Reported Longitude: -83.606327 Horiz Acc measure: 1 Horiz Collection method: Interpolated from map Horiz coord refs: NAD83 Vert measure units: feet Vert accmeasure units: feet Vertcollection method: Reported Vert coord refs: NGVD29 Aquifername: Sand and gravel aquifers (glaciated regions) Formation type: Glacial Deposits, Undifferentiated Aquifer type: Not Reported Construction date: Not Reported Welldepth units: ft Wellholeddepth units: Not Reported			
Drainagearea value: Not Reported Contrib drainagearea: Not Reported Latitude: 42.2408722 Sourcemap scale: Not Reported Horiz Acc measure units: minutes Vert measure val: 710 Vertacc measure val: 10 Countrycode: US Welldepth: 94 Wellholeddepth: Not Reported			

Ground-water levels, Number of Measurements: 0

20 West 1/2 - 1 Mile Higher	Site ID: Not Reported Groundwater Flow: NW Shallowest Water Table Depth: 8.01 Deepest Water Table Depth: 9.44 Average Water Table Depth: Not Reported Date: 03/28/1989	AQUIFLOW	45941
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

State Database: MI Radon

Radon Test Results

Zipcode	Test Date	LT Sign	Result
48197	8/20/2009		1.6
48197	2/3/2009		1.6
48197	2/27/2006		1.6
48197	3/6/1995		1.6
48197	4/17/2006		1.5
48197	2/23/2006		1.5
48197	12/14/2007		1.5
48197	5/15/2000		1.5
48197	12/17/2001		1.5
48197	1/25/2003		1.5
48197	1/21/2002		1.5
48197	1/26/2004		1.5
48197	2/7/2005		1.4
48197	11/20/2004		1.4
48197	11/18/2009		1.5
48197	2/2/2009		1.5
48197	2/6/2009		1.5
48197	1/11/1999		1.4
48197	3/20/2001		1.4
48197	1/20/2009		1.4
48197	6/1/1998		1.3
48197	7/24/2006		1.4
48197	2/13/2006		1.4
48197	2/10/2007		1.4
48197	2/10/2007		1.4
48197	3/14/2006		1.3
48197	2/13/2006		1.3
48197	2/9/2007		1.3
48197	4/19/1997		1.3
48197	2/24/2004		1.3
48197	5/12/2005		1.3
48197	6/1/2006		1.3
48197	10/5/2009		1.3
48197	6/30/1997		1.2
48197	3/8/2002		1.2
48197	3/31/2000		1.3
48197	3/18/2008		1.2
48197	4/15/2005		1.2
48197	5/27/2004		1.2
48197	11/8/2004		1.2
48197	2/10/2007		1.2
48197	11/21/2009		1.2
48197	2/9/2009		1.2
48197	8/20/2009		1.1
48197	2/13/2006		1.1
48197	2/20/2006		1.1
48197			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	2/20/2006		1.1
48197	10/30/2006		1.1
48197	5/21/2009		1.1
48197	7/26/2007		1.1
48197	4/22/2002		1.0
48197	7/19/2004		1.0
48197	6/6/2009		1.1
48197	10/26/2009		1.1
48197	2/5/2009		1.1
48197	1/6/2010		1.1
48197	3/16/1995		1.0
48197	2/6/2006		1.0
48197	6/21/2008		1.0
48197	4/3/2006		1.9
48197	8/28/2006		1.9
48197	4/8/1997		1.9
48197	1/21/2003		1.9
48197	10/17/2005		1.9
48197	4/24/1998		1.8
48197	3/13/1999		1.8
48197	2/21/1998		1.8
48197	2/11/1999		1.8
48197	8/24/2002		1.8
48197	11/21/2002		1.8
48197	2/8/2002		1.8
48197	2/2/2008		1.9
48197	1/31/2008		1.9
48197	6/7/2001		1.9
48197	11/17/2009		1.9
48197	6/30/2008		1.8
48197	5/12/1995		1.8
48197	1/27/2009		1.8
48197	3/27/2009		1.8
48197	5/7/1997		1.7
48197	11/25/1998		1.7
48197	2/20/2004		1.8
48197	5/8/2006		1.8
48197	5/8/2006		1.8
48197	9/27/2007		1.7
48197	4/4/1995		1.7
48197	10/21/1997		1.7
48197	8/1/1998		1.7
48197	8/16/2004		1.7
48197	10/22/2004		1.7
48197	3/28/2006		1.7
48197	4/19/2004		1.6
48197	11/13/2009		1.7
48197	4/7/2006	<	0.3
48197	3/6/2008	<	0.3
48197	11/12/2005	<	0.3
48197	2/20/2006	<	0.3
48197	3/24/1999	<	0.3
48197	3/20/1999	<	0.3
48197	1/19/2004	<	0.3
48197	1/19/2004	<	0.3
48197	1/19/2004	<	0.3
48197			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	1/19/2004	<	0.3
48197	1/19/2004	<	0.3
48197	2/4/2005	<	0.3
48197	5/1/2006	<	0.3
48197	1/26/2007	<	0.3
48197	1/27/2006		0.5
48197	6/26/2004	<	0.3
48197	3/23/2007		0.5
48197	12/3/2007		0.5
48197	12/13/2002	<	0.3
48197	3/16/2001		0.5
48197	12/6/1994		0.5
48197	3/11/2008	<	0.3
48197	4/11/2005	<	0.3
48197	9/19/2008	<	0.3
48197	10/11/2008	<	0.3
48197	3/9/2007	<	0.3
48197	1/15/2003	<	0.3
48197	5/24/2008	<	0.3
48197	6/8/1998	<	0.3
48197	1/5/2002	<	0.3
48197	12/11/2007	<	0.3
48197	4/23/2007	<	0.3
48197	4/23/2007	<	0.3
48197	1/8/1998	<	0.3
48197	6/18/2003	<	0.3
48197	4/3/2006	<	0.3
48197	3/13/2006	<	0.3
48197	1/21/2003		0.8
48197	5/20/2002		0.7
48197	4/11/2005		0.6
48197	2/13/2004		0.8
48197	3/20/2006		0.7
48197	2/28/2003		0.9
48197	11/12/2005		0.6
48197	2/13/2006		0.8
48197	1/30/2006		0.8
48197	3/4/2006		0.8
48197	2/9/2007		0.6
48197	4/22/2006		0.8
48197	8/9/2008		0.7
48197	7/26/2007		0.8
48197	12/19/2007		0.8
48197	2/29/2008		0.8
48197	9/19/2008		0.6
48197	3/20/2007		0.8
48197	8/25/2008		0.8
48197	3/16/1995		0.7
48197	2/5/2007		0.9
48197	6/6/2000		0.6
48197	5/5/1999		0.8
48197	11/21/2005		0.9
48197	8/25/2008		0.9
48197	1/3/2008		0.9
48197	10/24/2009		0.7
48197	12/11/2009		0.6
48197			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	2/5/2009	0.8
48197	10/16/2009	0.8
48197	6/12/1995	0.6
48197	11/20/2009	0.8
48197	5/29/1999	0.9
48197	6/26/2009	0.9
48197	9/21/1995	0.5
48197	1/28/2002	0.6
48197	10/24/2009	0.9
48197	6/6/2009	0.9
48197	1/16/2007	2.9
48197	12/1/2007	2.9
48197	3/1/1996	2.6
48197	6/28/1996	2.6
48197	3/8/1999	2.7
48197	4/16/1996	2.7
48197	4/20/2006	2.5
48197	2/20/2006	2.5
48197	1/8/1996	2.5
48197	1/16/2003	2.5
48197	12/23/2002	2.5
48197	2/26/2007	2.5
48197	3/16/2001	2.5
48197	6/29/1995	2.4
48197	2/17/2006	2.4
48197	7/20/2001	2.4
48197	11/16/2007	2.3
48197	8/6/1999	2.4
48197	9/16/1999	2.3
48197	6/2/2007	2.2
48197	4/14/2009	2.3
48197	2/2/2009	2.3
48197	4/10/2009	2.3
48197	12/13/2007	2.2
48197	4/24/1999	2.2
48197	11/10/2003	2.3
48197	1/26/1998	2.2
48197	2/13/1998	2.2
48197	12/9/1994	2.2
48197	9/24/2009	2.2
48197	11/20/2009	2.2
48197	10/2/2003	2.3
48197	6/21/2003	2.3
48197	1/9/2009	2.2
48197	2/18/2004	2.3
48197	3/20/2004	2.3
48197	4/3/2006	2.3
48197	6/26/2004	2.2
48197	11/12/1998	2.1
48197	1/12/2004	2.2
48197	2/9/2006	2.2
48197	4/3/1995	2.9
48197	6/22/1995	2.7
48197	1/21/2003	2.7
48197	3/19/2002	2.6
48197	11/2/2001	2.8
48197		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	2/16/1999		2.8
48197	11/5/2001		2.7
48197	12/26/2009		3.0
48197	11/14/2002		2.8
48197	11/1/2002		2.8
48197	2/21/2006		2.6
48197	3/13/2006		2.6
48197	2/6/2006		2.6
48197	11/7/2005		2.8
48197	10/8/2001		2.9
48197	1/26/2006		2.8
48197	2/15/2006		2.8
48197	7/20/2001		2.7
48197	2/3/2000		2.6
48197	10/18/1994		2.6
48197	4/2/2005		2.9
48197	1/8/2007		2.9
48197	4/23/2007		2.8
48197	6/4/2007		2.8
48197	11/20/2009		2.7
48197	2/12/2009		2.7
48197	5/29/2006		3.8
48197	5/22/2008		3.8
48197	5/13/2004		3.6
48197	2/7/2006		3.6
48197	2/27/1999		3.5
48197	11/7/2003		3.5
48197	9/18/2002		3.5
48197	11/16/2006		3.5
48197	3/16/1995	<	0.3
48197	12/4/2008		3.5
48197	2/3/2007		3.4
48197	2/20/2006		3.4
48197	2/10/2006		3.4
48197	12/16/2006		3.4
48197	3/24/2000	<	0.3
48197	11/20/2009		3.4
48197	10/23/2002		3.2
48197	1/31/2003		3.2
48197	11/26/2004		3.2
48197	3/6/2006		3.2
48197	3/16/2001		3.1
48197	2/6/2009		3.1
48197	11/1/2002		3.3
48197	11/20/2003		3.3
48197	4/25/2006		3.3
48197	2/8/2007		3.3
48197	2/2/2009		3.1
48197	2/2/2009		3.2
48197	4/13/2009		3.2
48197	4/30/1996		3.9
48197	10/8/2001		3.7
48197	2/15/1999		3.1
48197	12/10/2002		3.7
48197	9/24/2001		3.7
48197	9/29/2004		3.7
48197			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	6/11/2009	<	0.3
48197	6/11/2009	<	0.3
48197	2/21/2006		3.9
48197	2/16/2006		3.7
48197	3/27/2006		3.7
48197	4/15/2006		3.7
48197	11/20/2009		3.9
48197	10/8/2001		3.1
48197	4/2/2005		3.1
48197	11/28/1997		3.8
48197	10/29/2001		3.8
48197	6/19/2009		3.7
48197	11/20/2009		3.7
48197	10/21/1998		3.6
48197	2/22/2007		3.4
48197	12/13/2007		3.4
48197	6/5/2009	<	0.3
48197	1/14/2002		3.6
48197	2/27/1999		3.2
48197	3/7/2009	<	0.3
48197	1/28/2002		7.2
48197	10/19/2006		7.2
48197	12/23/2009		6.9
48197	11/15/2002		6.8
48197	3/16/2000		6.6
48197	2/3/2000		6.6
48197	4/11/1998		7.5
48197	1/22/2004		7.5
48197	2/13/2006		6.8
48197	3/29/2008		6.8
48197	7/6/2000		6.8
48197	2/27/1999		6.7
48197	11/2/2002		6.5
48197	12/22/1999		6.4
48197	11/5/2004		6.3
48197	9/15/2007		6.2
48197	11/4/2002		6.1
48197	10/20/2006		4.9
48197	2/20/2006		4.9
48197	12/8/2001		6.0
48197	2/10/2004		4.6
48197	3/8/2005		4.6
48197	1/11/1996		5.5
48197	10/23/2001		5.5
48197	2/21/2009		5.2
48197	12/22/2009		5.2
48197	3/31/1997		5.1
48197	3/22/2001		4.9
48197	2/26/2000		4.9
48197	12/18/1997		4.8
48197	8/23/2003		5.9
48197	7/13/1998		5.1
48197	9/2/1997		4.7
48197	1/27/1995		5.9
48197	11/16/2009		5.9
48197	1/11/1996		5.4
48197			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	1/23/2003	5.4
48197	5/22/2006	5.1
48197	3/31/1995	5.1
48197	11/4/2006	5.4
48197	2/7/2009	5.1
48197	3/1/1999	4.8
48197	12/1/2003	4.8
48197	12/20/2004	4.8
48197	11/4/2006	5.8
48197	2/2/2009	5.8
48197	2/1/2000	5.4
48197	4/3/1997	5.3
48197	2/28/2005	5.0
48197	12/1/2001	4.6
48197	1/23/1998	5.7
48197	12/20/2004	5.7
48197	11/1/2002	5.3
48197	4/13/2002	5.3
48197	4/10/2000	5.7
48197	3/1/1999	4.9
48197	2/8/1999	4.9
48197	12/23/2002	4.9
48197	4/30/2003	4.9
48197	10/27/2001	4.9
48197	6/22/2004	4.9
48197	2/16/2004	4.9
48197	2/16/1998	5.6
48197	6/27/1997	7.9
48197	1/16/2003	7.9
48197	5/22/2003	7.9
48197	10/31/2005	7.9
48197	2/6/2006	7.1
48197	8/6/2008	7.1
48197	3/9/1995	7.1
48197	2/3/2000	7.1
48197	11/21/2002	6.7
48197	1/13/1996	7.8
48197	11/1/2004	7.8
48197	3/13/2006	7.4
48197	1/7/1995	7.4
48197	2/10/2007	7.0
48197	8/20/2009	6.7
48197	4/1/1998	6.6
48197	3/17/1998	6.6
48197	11/22/2002	7.7
48197	11/8/2002	7.3
48197	2/7/2003	7.3
48197	2/7/2000	7.3
48197	4/9/1997	2.0
48197	2/2/2009	2.0
48197	1/20/2009	2.0
48197	11/12/2009	24.3
48197	11/27/2001	2.0
48197	8/7/2008	17.3
48197	3/21/2006	15.6
48197	6/10/2002	14.1
48197		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	3/4/2006	14.0
48197	2/8/1999	15.2
48197	10/28/1996	14.1
48197	9/3/1996	13.6
48197	6/8/2002	13.6
48197	10/1/2002	13.6
48197	2/8/1999	13.0
48197	3/4/2006	12.6
48197	10/1/2002	12.3
48197	2/6/2006	11.1
48197	12/15/1997	8.0
48197	10/1/2002	12.0
48197	3/27/2007	9.9
48197	1/21/2003	11.6
48197	10/17/2006	9.8
48197	3/29/2008	9.8
48197	2/15/2005	8.5
48197	1/17/2006	11.6
48197	11/8/2004	11.5
48197	6/1/2001	11.4
48197	2/1/2001	10.4
48197	6/8/2007	8.4
48197	3/20/2009	8.4
48197	2/10/2000	11.3
48197	2/6/2006	10.3
48197	1/21/2003	9.4
48197	3/1/1999	8.7
48197	4/3/2009	8.7
48197	9/8/2009	8.7
48197	12/10/2004	9.4
48197	10/21/2006	9.4
48197	11/24/2008	9.3
48197	3/5/1998	8.1
48197	5/1/2003	8.1
48197	3/2/2002	8.1
48197	11/16/2005	2.1
48197	3/28/2006	2.0
48197	8/25/1998	9.2
48197	5/8/2006	9.2
48197	3/8/1999	9.1
48197	12/17/2004	9.0
48197	9/29/2003	8.6
48197	12/1/2007	2.1
48197	11/7/2007	2.1
48197	2/18/2005	36.1
48197	12/10/1994	2.1
48197	3/6/1995	2.1
48197	12/6/1994	2.1
48197	3/5/2009	30.9
48197	4/4/2009	28.9
48197	4/27/2009	2.1
48197	3/5/2009	2.1
48197	2/14/2001	26.8
48197	2/3/2009	2.1
48197	2/8/1996	2.0
48197	8/19/1995	4.4
48197		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADON

AREA RADON INFORMATION

	2/23/1998	4.4
48197	12/4/2004	4.3
48197	11/22/2004	4.3
48197	11/2/2009	4.2
48197	8/20/2009	4.2
48197	6/3/2002	4.0
48197	3/12/2002	4.4
48197	2/7/2005	4.4
48197	12/19/2007	4.3
48197	10/22/2007	4.3
48197	4/19/1999	4.3
48197	11/20/1995	4.1
48197	5/6/2004	4.0
48197	5/14/2008	4.6
48197	8/21/2001	4.2
48197	10/11/2005	4.1
48197	9/27/2004	4.1
48197	3/5/2009	4.6
48197	2/13/2009	4.4
48197	10/23/2000	4.1
48197	11/1/2004	4.5
48197	2/7/2003	4.3
48197	11/27/2004	4.3
48197	1/15/2005	4.3
48197	8/24/1998	4.0

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: 48197

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.350 pCi/L	92%	8%	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.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 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^R 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 Service (NRCS)

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 Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, 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

The data in this file was obtained from Wellogis, the Michigan Department of Environmental Quality Statewide Groundwater Database (SGWD). Wellogis contains approximately 425,000 water well records found within the State of Michigan, and although it represents the best available data, it cannot be considered a complete database of all the wells or well records in existence.

OTHER STATE DATABASE INFORMATION

Michigan Oil and Gas Wells

Source: Department of Environmental Quality

Telephone: 517-241-1528

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

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

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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FOIA Requests/ Responses

McDowell & Associates

Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

21355 Hatcher Avenue • Ferndale, MI 48220

Phone: (248) 399-2066 • Fax: (248) 399-2157

October 17, 2016

Ypsilanti Fire Department
525 W Michigan
Ypsilanti, MI 48197
VIA Fax (734) 483-7522

Attention: Fire Chief Max Anthouard

Job No. 16-15594

Subject: Freedom of Information Act Request
Existing Commercial Building on Approximately 2.15 Acres
539 & 569 S. Huron Street
Ypsilanti, Michigan
Parcel ID#'s: 11-37-101-002 & -006

Dear Fire Chief Anthouard:

McDowell & Associates is conducting a Phase I Environmental Site Assessment on the aforementioned property.

We would like to know about any environmental information regarding the subject property, including but not limited to: Underground Storage Tanks, Aboveground Storage Tanks, noxious odors, spills or any HAZMAT type responses that may have occurred on or associated with the property, that the Fire Department may have in their files.

A map showing the location of the subject property is appended. Please reference the following job number in your response: 16-15594.

Thank you for your cooperation in assisting us in this matter.

Very truly yours,

McDOWELL & ASSOCIATES



Mark P. Kochanski
Staff Engineer

MPK



City of Ypsilanti
Fire Department

Date: 10/19/16

Ref: FOIA request of October 17, 2016

Environmental site assessment 539 and 569 S. Huron, Ypsilanti, MI 48197.

Job Number: 16-15594

Mr. Kochanski,

There is no environmental condition such as spill, release, chemical storage or hazmat response by the City of Ypsilanti Fire Department at the addresses listed above. Our records are from Jan 1999 to present date.

Max Anthouard
Fire Chief
City of Ypsilanti Fire Department

A handwritten signature in black ink, appearing to read "Max Anthouard", is written below the typed name.

McDowell & Associates

Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

21355 Hatcher Avenue • Ferndale, MI 48220

Phone: (248) 399-2066 • Fax: (248) 399-2157

October 17, 2016

Washtenaw County Health Department
705 Zeeb Road
P.O. Box 8645
Ann Arbor, Michigan 48107
VIA Fax (734) 222-3930

Attention: Ms. Melissa Robinson

Job No. 16-15594

Subject: Freedom of Information Act Request
Existing Commercial Building on Approximately 2.15 Acres
539 & 569 S. Huron Street
Ypsilanti, Michigan
Parcel ID#'s: 11-37-101-002 & -006

Dear Ms. Robinson:

McDowell & Associates is conducting a Phase I Environmental Site Assessment on the aforementioned property in Ypsilanti, Michigan. We would like to know about any relevant environmental information or concerns regarding the subject property that the WCHD has in their files.

A map showing the location of the subject property is appended. Please reference the following job number in your response: 16-15594.

We would greatly appreciate your cooperation and punctual response to this urgent issue.

Thank you for your cooperation.

Very truly yours,

McDOWELL & ASSOCIATES



Mark P. Kochanski
Staff Engineer

MPK

Mark Kochanski

From: Rainelle Green <greenr@ewashtenaw.org>
Sent: Wednesday, October 26, 2016 4:51 PM
To: Mark Kochanski
Subject: FOIA 539 & 569 S HURON - JOB NO. 16-15594
Attachments: FOIA 539 S HURON.pdf

Good Afternoon,

This email is in response to the FOIA request submitted for the addresses listed above. After further research, the attached record was found for these properties.

If you have any questions, please feel free to contact me via email or at the telephone number listed below.

Thank you,

Rai Green
Customer Service Specialist
Washtenaw County
Environmental Health
705 N. Zeeb Road
Ann Arbor, MI 48107
Phone: 734-222-3800
Fax: 734-222-3930

http://www.ewashtenaw.org/government/departments/risk_management/foia-information/written-public-summary-of-foia-release-with-foia.pdf

http://www.ewashtenaw.org/government/departments/risk_management/foia-information/foia-procedure-effective-7-1-15.pdf

Confidentiality Notice: This message, including any attachments is intended solely for the use of the named recipient(s) and may contain confidential and/or privileged information. Any unauthorized review, use, disclosure, or distribution of this communication(s) is expressly prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy any and all copies of the original message, including attachments.

Imaging Cover Sheet

THIS RECORD WAS PREPARED FOR IMAGING ON 6-27-06

*** IF YOU ADD RECORDS TO THIS FILE PRIOR TO BEING SCANNED YOU MUST MODIFY THIS FORM IF NECESSARY.

PARCEL ID#: 11-11-37-101-002 EQUALIZER STICKER:

STREET NUMBER: 539

☒ Confirmed *** PLACE EQUALIZER GENERATED STICKER TO RIGHT OF TOWNSHIP ONCE ADDRESS IS CONFIRMED.

☐ Approximate

STREET NAME: S. Huron Street

OWNER LAST NAME: Khailany

TOWNSHIP: Ypsilanti City, Ypsilanti Township

Types of information imaged

☐ Sewage System - Septic Case Number: _____

☐ Well Case Number: _____

☐ Soil Evaluation - SEV Case Number: _____

☐ Time of Sale - TOS Case Number: _____

☒ MISC Special Projects

☐ P2

The following information is available for this address:

☐ E size drawing Location: _____

☐ Complaint(s)

☐ Other _____

THIS FILE ALSO CONTAINS INFORMATION FOR THE FOLLOWING ADDRESS(S):

SPECIAL PROJECTS TEAM ACTIVITY REPORT

Department of Human Services
Public Health Division
Environmental Health Bureau



Activity

- ☐ RI/FS
☐ Complaint Investigation
☐ Clean-up Activities
☐ Contractor Oversight
☐ Photos Taken
☐ Samples Taken

Program

- ☐ Act 64
☐ Act 245
☐ Act 307
☐ Act 641
☒ LUST/UST Abandoned
☐ Other

Date <u>3-16-90</u>	Time of Activity <u>1/2 hour</u>	Facility/Site Number
------------------------	-------------------------------------	----------------------

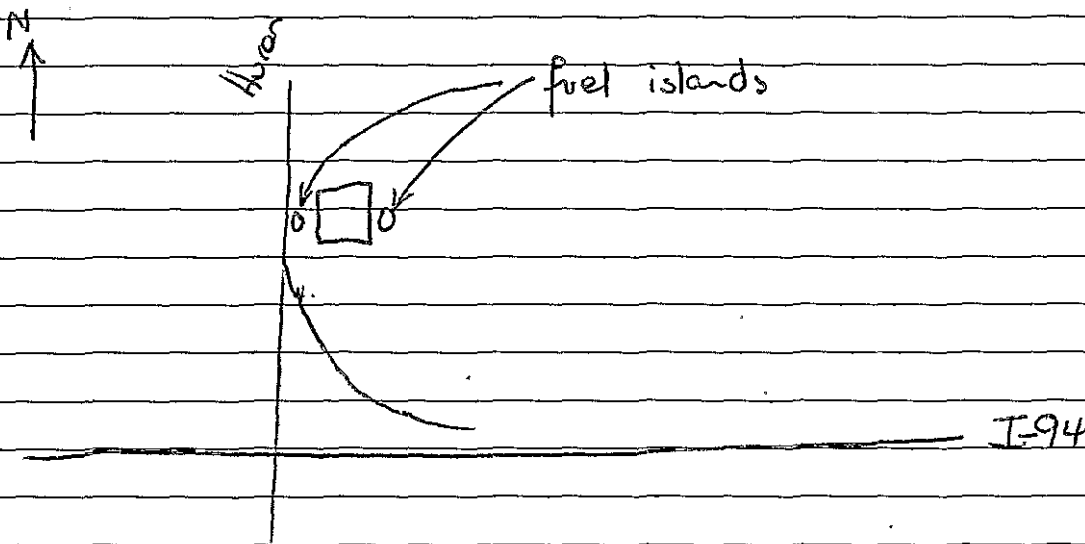
Facility/Site Name <u>Former Gas Station (Mike's Marathon?)</u>	County <u>Washtenaw County</u>
--	-----------------------------------

Address <u>Huron Road S Just N of I-94</u>	City/Township <u>Ypsilanti</u>	Staff <u>R. Blake</u>
---	-----------------------------------	--------------------------

Participants/Contacts <u>R. Blake Washtenaw County Env. Health 313 994 2492</u>
--

REMARKS:

Site visit following report of abandoned tanks at the above site



Premises appears closed for longer than 9 months according to person reporting. Probably require removal under Act 207

Signature:

Date: 3-16-90

Original: Premise File
 Canary: MDNR: Betty Michalski
Ypsilanti City Fire Dept: Bill Strubank
Michigan State Police: Dave Smith

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Bibliography

Bibliography

Aerial Photographs

DTE Energy (formerly Detroit Edison Company)
Geographic Information Service
(McDowell Archive)

Macomb Co. Dept. of Planning & Economic Dev.
1 S. Main Street, 7th Floor
Mt. Clemens, MI 48043
(586) 469-5285

Oakland County Property Gateway
<https://gis.oakgov.com>
1200 North Telegraph Road, Bldg. 34 East
Pontiac, MI 48341
(248) 858-0720

Southeast Michigan Council of Governments
535 Griswold, Suite 300
Detroit, MI 48226
(313) 961-4266

Environmental Data Resources, Inc. (EDR)
3530 Post Road
Southport, CT 06490
(800) 352-0050

MSU Aerial Imagery Archive
Manly Miles Building
1045 S. Harrison Road
East Lansing, MI 48823-5243
(517) 355-3771

Google Earth Pro
Ver. 6.1.0.5001
1100 A L'Avenida
Mountain View, CA 94043

Environmental Records Sources Review

EDR
3530 Post Road
Southport, CT 06490
(800) 352-0050

Title Search

Pat Orlando
25681 Arcadia
Novi, MI 48374
(248) 347-3221

Environmental Liens or Activity and Use Limitations

EDR
3530 Post Road
Southport, CT 06490
(800) 352-0050

MDEQ Remediation Division
http://www.michigan.gov/documents/deq/deq-rrd-ce-liens_234128_7.pdf

Sanborn Fire Ins. Maps/Historical Topographic Maps

EDR
3530 Post Road
Southport, CT 06490
(800) 352-0050

Report

ASTM E1527-13 Standard
Practice for Environmental Site Assessments:
Phase I Environmental Site Assessment Process
100 Barr Harbor Drive
PO Box C700
West Conshohocken, PA 19428

Other

Topographic Maps - 7.5 Minute Series
U.S. Geological Survey

Cross-Index Directory
Bresser's Information Service
684 West Baltimore
Detroit, MI 48202-2998
(313) 874-0570

Site Location Map
DeLorme Topo North America
Version 9.0, 2010 DVD-ROM

Quaternary Geology of Southern Michigan 1982
Department of Geological Sciences
The University of Michigan, Ann Arbor
W.R. Farrand and D.L. Bell

Bedrock Geology of Southern Michigan 1987
Michigan Department of Natural Resources
Geological Survey Division
R. Thomas Segall and Steven E. Wilson

Soil Survey (Various Counties)
United States Department of Agriculture
Soil Conservation Service

Arsenic, Nitrate, and Chloride in Groundwater,
Oakland County, Michigan
U.S. Geological Survey

Michigan Online Oil & Gas Information System
<http://ww2.deq.state.mi.us/mir/>

Consumers Energy SIMS Web On-Line
<https://www.consumersenergy.com/sims/login.aspx>

BS&A Internet Services
<https://is.bsasoftware.com/bsa.is/SelectUnit.aspx>

9.16

Resumes

Douglas M. McDowell, M.S., P.E.
Environmental Manager

PROFESSIONAL EXPERIENCE	1993-Present McDOWELL & ASSOCIATES, INC. Environmental Manager Responsible for department that completes over 200 Phase I's, 100 Phase II's and 15 BEA's per year. Has completed or supervised completion of over 2,000 Phase I's, 500 Phase II's, 100 Asbestos Surveys, 100 BEA's, and 100 Closures.
	1992-1993 INTERNATIONAL TIRE RECYCLERS, INC. Evaluated pyrolysis and potential for development of tire storage and recycling facility.
	1990-1992 PROCTOR & GAMBLE Direct Supervisor of 44 technicians at two plant sites. Also responsible for maintenance of a fleet of over 200 vehicles, fuel storage, and site interaction with key customers.
	1986-1990 U.S. ARMY Executive Officer, Platoon Leader
EDUCATION	B.S. General Engineering United States Military Academy West Point, New York
	M.S. Environmental Engineering Wayne State University Detroit, Michigan
PROFESSIONAL REGISTRATIONS	Professional Engineer in the State of Michigan
CERTIFICATIONS AND AWARDS	OSHA 29 CFR 1910.120 – Forty Hour Hazardous Site Worker Protection and Supervisor Certified with annual update Certified Lead Inspector/Risk Assessor/EBL Investigator, State of Michigan Certified Storm Water Operator (Industrial Sites), State of Michigan



Douglas M. McDowell, M.S., P.E.
Environmental Manager

	Certified Asbestos Building Inspector, Michigan Department of Labor and Economic Growth Recognized by Dow Chemical Company for Outstanding Contribution to the Contractor Owner Safety Team Recognized by the West Point Society of Michigan as its Distinguished Graduate in 2016 for contributions to West Point Outreach Efforts through development and implementation of the Urban Leadership Initiative
PROFESSIONAL AFFILIATIONS	ASTM Engineering Society of Detroit National Association of Environmental Professionals Michigan Association of Environmental Professionals MDEQ Op. Memo. 2 Low Flow Sampling Sub-Committee (2005-2006) MDEQ Part 201 Liability / Compliance Workgroup (2006-2007) National Groundwater Association Society of American Military Engineers United States Green Building Council – Detroit Regional Chapter
SAMPLE PROJECTS	St. Clair River Coastal Wetland Project, Port Huron, MI – St. Clair County Parks and Recreation Commission, Smith Group JJR – Site with industrial history. McDowell & Associates provides environmental consulting to St. Clair County representatives undergoing the acquisition of the property and redevelopment into an interpretive wetlands with nature trails and scenic overlooks. McDowell responsible to project team to provide environmental consulting including evaluation of existing contaminants and likely impact to future construction plans and future users. Most recent work included completion of Documentation of Due Care Compliance submitted to Michigan Department of Environmental Quality for review. Wayne County Child Development Center Redevelopment, Northville Township, MI – Toll Brothers, Biltmore Properties, Robertson Brothers - Site currently under construction with Commercial, Single Family and

Douglas M. McDowell, M.S., P.E.
Environmental Manager

Multifamily Residential, and Arnold Palmer Golf Course. Supervised demolition and clean-up work completed by Wayne County prior to purchase by several developers. Phase I and II Environmental Assessments and Closure Reports. Firm provided Geotechnical Engineering as well as Construction Testing and Quality Control during construction.

Presbyterian Village - Brush Park Redevelopment, Detroit, MI – Presbyterian Villages of Michigan – Phase I, II, and Baseline Environmental Assessments. Firm provided Geotechnical Engineering as well as Construction Testing and Quality Control during construction.

Gem Theatre Relocation and Redevelopment, Detroit, MI – Forbes Management - Phase I, II, and Baseline Environmental Assessments. Firm provided Geotechnical Engineering for evaluation of new foundation and for parking structure as well as Construction Testing and Quality Control during move and construction.

Woodward Place at Brush Park - Residential Redevelopment, Detroit, MI – Crosswinds Communities – Phase I and II Environmental Assessments and Closure Reports. Firm provided Geotechnical Engineering as well as Construction Testing and Quality Control during construction.

Former Packard and Ford Test Track - Proposed Residential Redevelopment, Shelby Township, MI – Pulte Homes, The Lombardo Companies – Phase I and II Environmental Site Assessments. Firm provided Geotechnical and Hydrogeological Engineering.

International Gospel Center Redevelopment, Ecorse, MI – International Gospel Center – Phase I and II Environmental Assessments, Baseline Environmental Assessments, and Closure Reports. Firm provided Geotechnical Engineering as well as Construction Testing and Quality Control during construction.

Jennifer Lagerbohm, M.S., CHMM
Senior Industrial Hygienist

**PROFESSIONAL
EXPERIENCE**

2001-October 2012; May 2013- Present

McDOWELL & ASSOCIATES, INC.

Senior Industrial Hygienist/Environmental Professional

Responsibilities include overall program management of projects including cost estimates, schedule, reporting, and performance tracking. Currently completes Asbestos Surveys, Operations & Maintenance Plans, Lead-Based Paint Investigations, Phase I and Phase II Environmental Site Assessments, Baseline Environmental Assessments, Due Care Plans, remedial and underground storage tank consulting. Responsibilities include soil, soil vapor, sediment, air, and groundwater sampling, interpreting analytical results, compiling data, statistical evaluation of data, and completion of reports.

October 2012 - May 2013

CARDNO ATC

Project Manager/ Environmental Professional

Responsibilities included review and preparation of Phase I Environmental Site Assessments, scope of work development for Phase II Environmental Site Assessments, and due diligence consulting.

EDUCATION

B.S., Environmental Health

Oakland University, College of Arts & Sciences

Rochester Hills, Michigan

M.S., Industrial Hygiene

Wayne State University, Department of Fundamental Sciences

Detroit, Michigan

CERTIFICATIONS

Certified Hazardous Materials Manager (CHMM)- Institute for Hazardous Materials Management

OSHA 29 CFR 1910.120 – Forty-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)

Certified Lead Inspector/Risk Assessor, Michigan Department of Community Health

Certified Asbestos Building Inspector/ Management Planner, Michigan Department of Labor and Economic Growth

Certified Storm Water Operator (Industrial and Construction Sites), Michigan Department of Environmental Quality

Certified Radon Measurement Specialist- National Radon Proficiency Program



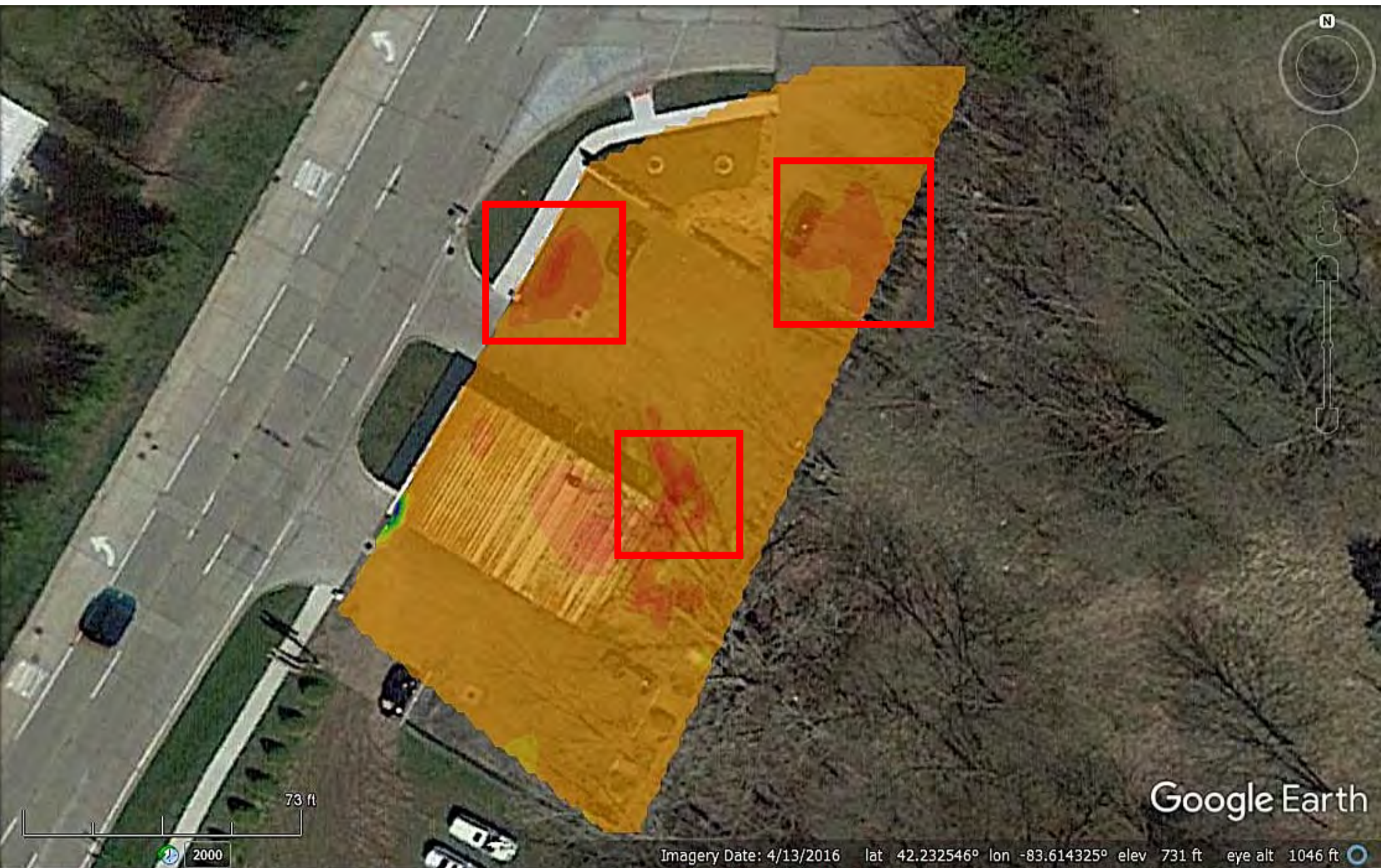
Jennifer Lagerbohm, M.S., CHMM
Senior Industrial Hygienist

TRAINING	MDEQ Petroleum Vapor Intrusion Workshop (2013) PSMJ Project Manager Bootcamp- 2-Day Classroom Training (2012) Zweig-White Leadership 2011- 1 Day Classroom Training (2011) ITRC Vapor Intrusion Pathway 2-Day Classroom Training (2011) ITRC Non-Aqueous Phase Liquid (NAPL) 2-Day Training (2012) ASTM Vapor Encroachment Screening (E2600-10) Evaluation of Indoor Inhalation Pathway- Risk Assessment and Management Group, Inc. Integrated Site Remediation & Vapor Intrusion- Regenesis MDEQ RRD Cleanup Criteria Training (2007) Niton X-Ray Fluorescence (XRF) Operations & Radiation Safety ASTM Risk-Based Corrective Action at Petroleum Sites Nielsen Environmental Field School- Environmental Sampling NGWA- Groundwater Flow, Transport, and Remediation US Department of Transportation Pipeline Emergency Response Troxler Nuclear Gauge Operations & Radiation Safety Excavation Competent Person
PROFESSIONAL AFFILIATIONS	Michigan Association of Environmental Professionals- Board of Directors (2014) American Industrial Hygiene Association
SAMPLE PROJECTS	City of Southfield NSP Program- Asbestos, Lead, Mold, and Radon-assessments for single-family homes throughout the City. Owner: City of Southfield. Brush Park, Detroit, Michigan- Completion of multiple Phase I ESAs, Phase II ESAs, remedial consulting, underground storage tank (UST) consulting, asbestos and lead surveys for historic structures. Owner: Charter Oak Homes. Apartment Buildings, Southeast Michigan- completion of Phase I ESAs, asbestos surveys, asbestos abatement plans, and operations and maintenance plans for eleven apartment complexes across southeast Michigan. Owner: Hartman & Tyner.

PROFESSIONAL EXPERIENCE	1986-Present McDOWELL & ASSOCIATES, INC. Staff Engineer; Environmental Professional Reports to Environmental Manager with responsibility of coordinating and conducting Phase I Environmental Site Assessments and UST site assessments. On-site Engineer for the investigation of sites with suspected or known contamination and remediation projects. Prior to current duties, worked as Drilling Manager and Senior Field Technician engaged in all areas of construction quality control.
EDUCATION	B.S., Construction Engineering Lawrence Institute of Technology Southfield, Michigan
CERTIFICATIONS	OSHA 29 CFR 1910.120 – Forty-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) with annual refresher Certified Asbestos Building Inspector, Michigan Department of Labor and Economic Growth Certified Storm Water Operator (Industrial and Construction Sites), Michigan Department of Environmental Quality
TRAINING	ASTM Environmental Site Assessment for Commercial Real Estate Training Certified Lead Inspector Training Environmental Risk Management for Business and Property Transactions Niton X-Ray Fluorescence (XRF) Operations & Radiation Safety Troxler Nuclear Gauge Operations & Radiation Safety
PROFESSIONAL AFFILIATIONS	Michigan Association of Environmental Professionals

Appendix C

AKT Peerless 2016 & 2017 Phase II Documentation



Google Earth

Imagery Date: 4/13/2016 lat 42.232546° lon -83.614325° elev 731 ft eye alt 1046 ft

AKT PEERLESS		BORING LOG				AKT-1		
		539 S. Huron Street				Drawn By: S. Wasielewski		
		Ypsilanti, Michigan				Date: 12/6/2016		
		AKT Peerless Project No: 12150F-1-20						
DRILLING COMPANY:		AKT Peerless		WEATHER:		Cloudy, 40 °F		
TECHNICIAN:		B. Fox		BORING DEPTH:		16 feet bgs		
DATE DRILLED:		12/5/2016		DEPTH TO GW:		12 feet bgs		
DRILLING METHOD:		Geoprobe		SCREEN INTERVAL:		Not applicable		
FIELD GEOLOGIST:		S. Wasielewski		SCREEN MATERIAL:		Not applicable		
DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
						Concrete		
2		60	<0.1		Brown	FILL: Sand matrix	M	
			<0.1		Brown / black	Clay matrix with trace gravel	M	
4				SW	Dark brown	SAND: Fine- to medium-grained with trace gravel	M	
			<0.1					
6		30	<0.1					
			<0.1					
8			<0.1		Brown			
			<0.1					
10		5	<0.1					
			<0.1				M	
12				GP	Orange	GRAVEL: With sand	▽ =	
			<0.1				S	
14		60	<0.1					
							S	
16						End of Boring at 16 feet bgs		
18								
20								

		BORING LOG 539 S. Huron Street Ypsilanti, Michigan AKT Peerless Project No: 12150F-1-20				AKT-2		
						Drawn By: S. Wasielewski Date: 12/6/2016		
		DRILLING COMPANY: AKT Peerless		WEATHER: Cloudy, 40 °F				
TECHNICIAN: B. Fox		BORING DEPTH: 8 feet bgs						
DATE DRILLED: 12/5/2016		DEPTH TO GW: Not encountered						
DRILLING METHOD: Geoprobe		SCREEN INTERVAL: Not applicable						
FIELD GEOLOGIST: S. Wasielewski		SCREEN MATERIAL: Not applicable						
DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
			<0.1		Brown	Concrete	M	
2		80	<0.1		Brown / black	FILL: Clay matrix with gravel, wood debris, and trace coal	M	
			<0.1		Brown			
4			<0.1					
6		80	<0.1					
8			<0.1				M	
						End of Boring at 8 feet bgs		
10								
12								
14								
16								
18								
20								

AKT PEERLESS		BORING LOG				AKT-3	
		539 S. Huron Street				Drawn By: S. Wasielewski	
		Ypsilanti, Michigan				Date: 12/6/2016	
		AKT Peerless Project No: 12150F-1-20					
DRILLING COMPANY:		AKT Peerless		WEATHER:		Cloudy, 40 °F	
TECHNICIAN:		B. Fox		BORING DEPTH:		16 feet bgs	
DATE DRILLED:		12/5/2016		DEPTH TO GW:		15 feet bgs	
DRILLING METHOD:		Geoprobe		SCREEN INTERVAL:		11 to 16 feet bgs	
FIELD GEOLOGIST:		S. Wasielewski		SCREEN MATERIAL:		PVC	

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
						Topsoil		PVC RISER PVC SCREEN
2		60	<0.1		Brown Dark brown	FILL: Sand matrix Clay matrix with gravel, brick, masonry, and concrete debris	M	
4			<0.1					
6		100	<0.1					
8			<0.1					
10		0	<0.1					
12			<0.1		Dark brown	Sand matrix		
14		40	<0.1	OL	Black	SILT: Organic silts and sands	M	
			<0.1	SP	Light brown	SAND: Medium-grained	M	
16						End of Boring at 16 feet bgs	S	
18								
20								

AKT PEERLESS		BORING LOG				AKT-4		
		539 S. Huron Street Ypsilanti, Michigan AKT Peerless Project No: 12150F-1-20				Drawn By: S. Wasielewski		
						Date: 12/6/2016		
DRILLING COMPANY:		AKT Peerless			WEATHER:		Cloudy, 40 °F	
TECHNICIAN:		B. Fox			BORING DEPTH:		16 feet bgs	
DATE DRILLED:		12/5/2016			DEPTH TO GW:		12 feet bgs	
DRILLING METHOD:		Geoprobe			SCREEN INTERVAL:		10 to 15 feet bgs	
FIELD GEOLOGIST:		S. Wasielewski			SCREEN MATERIAL:		PVC	
DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
						Asphalt		
			<0.1		Brown	FILL: Sand matrix	M	
					Black	Asphalt debris	M	
					Brown	FILL: Clay matrix	M	
2		60		SW	Brown	SAND: Fine- to medium grained with gravel	M	
			<0.1					
4							M	
			<0.1	GP	Orange	GRAVEL: With sand	M	
6		50						
			<0.1					
8								
			<0.1					
10		60						
			<0.1					
12					Gray		M ▽ =	
			<0.1				S	
14		100						
			<0.1					
16						End of Boring at 16 feet bgs	S	
18								
20								

AKT PEERLESS		BORING LOG				AKT-5		
		539 S. Huron Street Ypsilanti, Michigan AKT Peerless Project No: 12150F-1-20				Drawn By: S. Wasielewski		
						Date: 12/6/2016		
DRILLING COMPANY:		AKT Peerless			WEATHER:		Cloudy, 40 °F	
TECHNICIAN:		B. Fox			BORING DEPTH:		3 feet bgs (refusal)	
DATE DRILLED:		12/5/2016			DEPTH TO GW:		Not encountered	
DRILLING METHOD:		Geoprobe			SCREEN INTERVAL:		Not applicable	
FIELD GEOLOGIST:		S. Wasielewski			SCREEN MATERIAL:		Not applicable	
DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
			<0.1		Brown	Asphalt		
2		40	1		Dark gray	FILL: Sand matrix	M	
						Petroleum-like staining and odor	M	
4						End of Boring (Refusal) at 3 feet bgs		
6								
8								
10								
12								
14								
16								
18								
20								

		BORING LOG 539 S. Huron Street Ypsilanti, Michigan AKT Peerless Project No: 12150F-1-20				AKT-9		
						Drawn By: S. Wasielewski Date: 12/6/2016		
		DRILLING COMPANY: AKT Peerless		WEATHER: Cloudy, 40 °F				
TECHNICIAN: B. Fox		BORING DEPTH: 3 feet bgs (refusal)						
DATE DRILLED: 12/5/2016		DEPTH TO GW: Not encountered						
DRILLING METHOD: Hand auger		SCREEN INTERVAL: Not applicable						
FIELD GEOLOGIST: S. Wasielewski		SCREEN MATERIAL: Not applicable						
DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
2		100	<0.1	SC	Dark brown	Topsoil		
			<0.1			SAND: Clayey with organic material (roots)	M	
							M	
4						End of Boring (Refusal) at 3 feet bgs		
6								
8								
10								
12								
14								
16								
18								
20								



Analytical Laboratory Report

Supplemental Report

Report ID: S78017.01(02)
Generated on 12/23/2016
Replaces report S78017.01(01) generated on 12/14/2016

Report to

Attention: Scott Wasielewski
AKT Peerless Environmental
22725 Orchard Lake Rd.
Farmington, MI 48336

Phone: 248-615-1333 FAX:
Email: wasielewskis@AKTPEERLESS.COM

Report produced by

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John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S78017.01-S78017.12
Project: 12150F-1-20
Collected Date: 12/05/2016
Submitted Date/Time: 12/07/2016 14:30
Sampled by: Scott Wasielewski
P.O. #:

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Sample Summary (Page 5)

Maya Murshak
Technical Director



Analytical Laboratory Report

Supplemental Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Report Narrative

All analyses completed



Analytical Laboratory Report

Supplemental Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods



Analytical Laboratory Report

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Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
N/A	Not Applicable
RSK-175	RSK-175
SM2540B	Standard Method 2540 B 20th Edition
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW3050B	SW 846 Method 3050B Revision 2 December 1996
SW3510C	SW 846 Method 3510C Revision 3 December 1996
SW3550C	SW 846 Method 3550C Revision 3 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW5035A/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5035A Revision 1 July 2002
SW6020A	SW 846 Method 6020A Revision 1 February 2007
SW7471B	SW 846 Method 7471B Revision 2 February 2007
SW8082A	SW 846 Method 8082A Revision 1 February 2007
SW8270D	SW 846 Method 8270D Revision 4 February 2007



Analytical Laboratory Report

Supplemental Report

Sample Summary (12 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S78017.01	AKT-1 (1-3)	Soil	12/05/16 08:35
S78017.02	AKT-2 (1-3)	Soil	12/05/16 08:50
S78017.03	AKT-3W	Groundwater	12/05/16 09:30
S78017.04	AKT-4 (3-5)	Soil	12/05/16 09:55
S78017.05	AKT-4W	Groundwater	12/05/16 10:10
S78017.06	AKT-5 (2-3)	Soil	12/05/16 10:15
S78017.07	AKT-6 (6-8)	Soil	12/05/16 10:42
S78017.08	AKT-6W	Groundwater	12/05/16 10:50
S78017.09	AKT-7 (6-8)	Soil	12/05/16 11:02
S78017.10	AKT-8 (2-4)	Soil	12/05/16 11:50
S78017.11	AKT-8W	Groundwater	12/05/16 12:00
S78017.12	AKT-9 (2-3)	Soil	12/05/16 13:30



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.01
Sample Tag: AKT-1 (1-3)
Collected Date/Time: 12/05/2016 08:35
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3050B	12/09/16 11:00	PER		
PNA Extraction	Completed			SW3550C	12/13/16 20:24	EMR		

Inorganics

Total Solids*	88	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Lead	50.5	mg/kg	0.20	SW6020A	12/09/16 14:13	PER	7439-92-1	
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Organics - Semi-Volatiles**Polynuclear Aromatics**

Acenaphthene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	120-12-7	
Benzo(a)anthracene	400	ug/kg	300	SW8270D	12/14/16 07:38	PL	56-55-3	
Benzo(a)pyrene	500	ug/kg	300	SW8270D	12/14/16 07:38	PL	50-32-8	
Benzo(b)fluoranthene	1,000	ug/kg	300	SW8270D	12/14/16 07:38	PL	205-99-2	p
Benzo(k)fluoranthene	1,100	ug/kg	300	SW8270D	12/14/16 07:38	PL	207-08-9	p
Benzo(ghi)perylene	400	ug/kg	300	SW8270D	12/14/16 07:38	PL	191-24-2	
Chrysene	500	ug/kg	300	SW8270D	12/14/16 07:38	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	53-70-3	
Fluoranthene	700	ug/kg	300	SW8270D	12/14/16 07:38	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	300	ug/kg	300	SW8270D	12/14/16 07:38	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	85-01-8	
Pyrene	600	ug/kg	300	SW8270D	12/14/16 07:38	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 07:38	PL	90-12-0	

Organics - Volatiles**Volatile Organics 5035**

Diethyl ether*	Not detected	ug/kg	200	SW5035A/8260C	12/08/16 18:12	JGH	60-29-7	
Acetone*	Not detected	ug/kg	1,000	SW5035A/8260C	12/08/16 18:12	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	200	SW5035A/8260C	12/08/16 18:12	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	910	SW5035A/8260C	12/08/16 18:12	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	74-87-3	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.01 (continued)

Sample Tag: AKT-1 (1-3)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Vinyl chloride	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW5035A/8260C	12/08/16 18:12	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	1,000	SW5035A/8260C	12/08/16 18:12	JGH	109-99-9	
Chloroform	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	3,000	SW5035A/8260C	12/08/16 18:12	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	3,000	SW5035A/8260C	12/08/16 18:12	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	56-23-5	
Benzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	10061-01-5	
Toluene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	20	SW5035A/8260C	12/08/16 18:12	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH		
o-Xylene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	95-47-6	
Styrene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	541-73-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.01 (continued)

Sample Tag: AKT-1 (1-3)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:12	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW5035A/8260C	12/08/16 18:12	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	400	SW5035A/8260C	12/08/16 18:12	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	400	SW5035A/8260C	12/08/16 18:12	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:12	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:12	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.02
Sample Tag: AKT-2 (1-3)
Collected Date/Time: 12/05/2016 08:50
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3050B	12/09/16 11:00	PER		
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Inorganics

Total Solids*	89	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Lead	26.2	mg/kg	0.20	SW6020A	12/09/16 14:14	PER	7439-92-1	
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Organics - Volatiles

Volatile Organics 5035

Diethyl ether*	Not detected	ug/kg	200	SW5035A/8260C	12/08/16 18:32	JGH	60-29-7	
Acetone*	Not detected	ug/kg	1,000	SW5035A/8260C	12/08/16 18:32	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	200	SW5035A/8260C	12/08/16 18:32	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	930	SW5035A/8260C	12/08/16 18:32	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW5035A/8260C	12/08/16 18:32	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	1,000	SW5035A/8260C	12/08/16 18:32	JGH	109-99-9	
Chloroform	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	3,000	SW5035A/8260C	12/08/16 18:32	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	3,000	SW5035A/8260C	12/08/16 18:32	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	56-23-5	
Benzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	10061-01-5	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.02 (continued)

Sample Tag: AKT-2 (1-3)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Toluene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	20	SW5035A/8260C	12/08/16 18:32	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH		
o-Xylene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	95-47-6	
Styrene*	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/08/16 18:32	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW5035A/8260C	12/08/16 18:32	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	410	SW5035A/8260C	12/08/16 18:32	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	410	SW5035A/8260C	12/08/16 18:32	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	12/08/16 18:32	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	12/08/16 18:32	JGH	91-57-6	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.03
Sample Tag: AKT-3W
Collected Date/Time: 12/05/2016 09:30
Matrix: Groundwater
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.2	IR
3	40ml Glass	HCL	Yes	4.2	IR
1	125ml Plastic	HNO3	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3015A	12/08/16 10:30	CCM		
pH check for VOCs*	<2	STD Units		N/A	12/09/16 10:20	JML		
PNA Extraction	Completed			SW3510C	12/12/16 16:05	EMR		

Metals

Cadmium	Not detected	mg/L	0.0005	E200.8	12/08/16 13:39	CCM	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	12/08/16 13:39	CCM	7440-47-3	
Lead	0.005	mg/L	0.003	E200.8	12/08/16 13:39	CCM	7439-92-1	

Organics - Semi-Volatiles**Polynuclear Aromatic Hydrocarbon**

Acenaphthene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270D	12/12/16 22:33	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270D	12/12/16 22:33	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 22:33	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 22:33	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270D	12/12/16 22:33	PL	191-24-2	
Chrysene	Not detected	ug/L	1	SW8270D	12/12/16 22:33	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270D	12/12/16 22:33	PL	53-70-3	
Fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 22:33	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270D	12/12/16 22:33	PL	193-39-5	
Naphthalene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	91-20-3	
Phenanthrene	Not detected	ug/L	2	SW8270D	12/12/16 22:33	PL	85-01-8	
Pyrene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/L	5	SW8270D	12/12/16 22:33	PL	90-12-0	

Organics - Volatiles**Volatile Organics - DEQ List**

Diethyl ether*	Not detected	ug/L	10	SW5030C/8260C	12/08/16 15:57	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	12/08/16 15:57	JGH	67-64-1	
Methyl iodide*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	12/08/16 15:57	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	12/08/16 15:57	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	75-71-8	
Chloromethane*	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	74-87-3	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.03 (continued)

Sample Tag: AKT-3W

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	12/08/16 15:57	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	12/08/16 15:57	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	12/08/16 15:57	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	12/08/16 15:57	JGH		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	106-46-7	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.03 (continued)

Sample Tag: AKT-3W

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 15:57	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 15:57	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.04
Sample Tag: AKT-4 (3-5)
Collected Date/Time: 12/05/2016 09:55
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3050B	12/09/16 11:00	PER		
PNA Extraction	Completed			SW3550C	12/13/16 20:24	EMR		

Inorganics

Total Solids*	86	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Cadmium	Not detected	mg/kg	0.20	SW6020A	12/09/16 14:56	PER	7440-43-9	
Chromium	2.98	mg/kg	0.50	SW6020A	12/09/16 14:56	PER	7440-47-3	
Lead	242	mg/kg	0.20	SW6020A	12/09/16 14:56	PER	7439-92-1	

Organics - Semi-Volatiles**Polynuclear Aromatics**

Acenaphthene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	205-99-2	
Benzo(k)fluoranthene	300	ug/kg	300	SW8270D	12/14/16 09:28	PL	207-08-9	p
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 09:28	PL	90-12-0	

Organics - Volatiles**Volatile Organics 5035**

Diethyl ether*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	60-29-7	
Acetone*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 13:14	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	950	SW5035A/8260C	12/12/16 13:14	JGH	78-93-3	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.04 (continued)

Sample Tag: AKT-4 (3-5)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Dichlorodifluoromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 13:14	JGH	109-99-9	
Chloroform	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 13:14	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 13:14	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	56-23-5	
Benzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	10061-01-5	
Toluene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	30	SW5035A/8260C	12/12/16 13:14	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH		
o-Xylene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	95-47-6	
Styrene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	135-98-8	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.04 (continued)

Sample Tag: AKT-4 (3-5)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
p-Isopropyltoluene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:14	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 13:14	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	420	SW5035A/8260C	12/12/16 13:14	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	420	SW5035A/8260C	12/12/16 13:14	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:14	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:14	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.05
Sample Tag: AKT-4W
Collected Date/Time: 12/05/2016 10:10
Matrix: Groundwater
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.2	IR
3	40ml Glass	HCL	Yes	4.2	IR
1	125ml Plastic	HNO3	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3015A	12/08/16 10:30	CCM		
pH check for VOCs*	<2	STD Units		N/A	12/09/16 10:20	JML		
PNA Extraction	Completed			SW3510C	12/12/16 16:05	EMR		

Metals

Cadmium	Not detected	mg/L	0.0005	E200.8	12/08/16 13:40	CCM	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	12/08/16 13:40	CCM	7440-47-3	
Lead	Not detected	mg/L	0.003	E200.8	12/08/16 13:40	CCM	7439-92-1	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon

Acenaphthene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270D	12/12/16 22:51	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270D	12/12/16 22:51	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 22:51	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 22:51	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270D	12/12/16 22:51	PL	191-24-2	
Chrysene	Not detected	ug/L	1	SW8270D	12/12/16 22:51	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270D	12/12/16 22:51	PL	53-70-3	
Fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 22:51	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270D	12/12/16 22:51	PL	193-39-5	
Naphthalene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	91-20-3	
Phenanthrene	Not detected	ug/L	2	SW8270D	12/12/16 22:51	PL	85-01-8	
Pyrene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/L	5	SW8270D	12/12/16 22:51	PL	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether*	Not detected	ug/L	10	SW5030C/8260C	12/08/16 16:18	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	12/08/16 16:18	JGH	67-64-1	
Methyl iodide*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	12/08/16 16:18	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	12/08/16 16:18	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	75-71-8	
Chloromethane*	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	74-87-3	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.05 (continued)

Sample Tag: AKT-4W

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	12/08/16 16:18	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	12/08/16 16:18	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	12/08/16 16:18	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	12/08/16 16:18	JGH		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	106-46-7	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.05 (continued)

Sample Tag: AKT-4W

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:18	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:18	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.06
Sample Tag: AKT-5 (2-3)
Collected Date/Time: 12/05/2016 10:15
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3050B	12/09/16 11:00	PER		
PNA Extraction	Completed			SW3550C	12/13/16 20:24	EMR		

Inorganics

Total Solids*	90	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Cadmium	0.27	mg/kg	0.20	SW6020A	12/09/16 14:17	PER	7440-43-9	
Chromium	1.79	mg/kg	0.50	SW6020A	12/09/16 14:17	PER	7440-47-3	
Lead	27.1	mg/kg	0.20	SW6020A	12/09/16 14:17	PER	7439-92-1	

Organics - Semi-Volatiles**Polynuclear Aromatics**

Acenaphthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:00	PL	90-12-0	

Organics - Volatiles**Volatile Organics 5035**

Diethyl ether*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 13:34	JGH	60-29-7	
Acetone*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 13:34	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 13:34	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	900	SW5035A/8260C	12/12/16 13:34	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	75-71-8	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.06 (continued)

Sample Tag: AKT-5 (2-3)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Chloromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 13:34	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 13:34	JGH	109-99-9	
Chloroform	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 13:34	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 13:34	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	56-23-5	
Benzene	680	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	10061-01-5	
Toluene	1,970	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	20	SW5035A/8260C	12/12/16 13:34	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	630-20-6	
Ethylbenzene	710	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	100-41-4	
p,m-Xylene*	5,000	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH		
o-Xylene*	1,730	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	95-47-6	
Styrene*	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	96-18-4	
n-Propylbenzene	120	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	108-86-1	
1,3,5-Trimethylbenzene	840	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	98-06-6	
1,2,4-Trimethylbenzene	1,680	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	99-87-6	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.06 (continued)

Sample Tag: AKT-5 (2-3)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	95-50-1	
1,2,3-Trimethylbenzene	440	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW5035A/8260C	12/12/16 13:34	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 13:34	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 13:34	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 13:34	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:34	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:34	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.07
Sample Tag: AKT-6 (6-8)
Collected Date/Time: 12/05/2016 10:42
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3050B	12/09/16 11:00	PER		
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Inorganics

Total Solids*	94	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Cadmium	0.49	mg/kg	0.20	SW6020A	12/09/16 14:18	PER	7440-43-9	
Chromium	1.92	mg/kg	0.50	SW6020A	12/09/16 14:18	PER	7440-47-3	
Lead	5.03	mg/kg	0.20	SW6020A	12/09/16 14:18	PER	7439-92-1	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 13:54	JGH	60-29-7	
Acetone*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 13:54	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 13:54	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	810	SW5035A/8260C	12/12/16 13:54	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 13:54	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 13:54	JGH	109-99-9	
Chloroform	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 13:54	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 13:54	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	56-23-5	
Benzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	75-27-4	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.07 (continued)

Sample Tag: AKT-6 (6-8)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Dibromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	10061-01-5	
Toluene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	20	SW5035A/8260C	12/12/16 13:54	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH		
o-Xylene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	95-47-6	
Styrene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 13:54	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	360	SW5035A/8260C	12/12/16 13:54	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	360	SW5035A/8260C	12/12/16 13:54	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 13:54	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 13:54	JGH	91-57-6	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.08
Sample Tag: AKT-6W
Collected Date/Time: 12/05/2016 10:50
Matrix: Groundwater
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.2	IR
3	40ml Glass	HCL	Yes	4.2	IR
1	125ml Plastic	HNO3	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3015A	12/08/16 10:30	CCM		
pH check for VOCs*	<2	STD Units		N/A	12/09/16 10:20	JML		
PNA Extraction	Completed			SW3510C	12/12/16 16:05	EMR		

Metals

Cadmium	Not detected	mg/L	0.0005	E200.8	12/08/16 13:41	CCM	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	12/08/16 13:41	CCM	7440-47-3	
Lead	Not detected	mg/L	0.003	E200.8	12/08/16 13:41	CCM	7439-92-1	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon

Acenaphthene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270D	12/12/16 23:10	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270D	12/12/16 23:10	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 23:10	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 23:10	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270D	12/12/16 23:10	PL	191-24-2	
Chrysene	Not detected	ug/L	1	SW8270D	12/12/16 23:10	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270D	12/12/16 23:10	PL	53-70-3	
Fluoranthene	Not detected	ug/L	1	SW8270D	12/12/16 23:10	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270D	12/12/16 23:10	PL	193-39-5	
Naphthalene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	91-20-3	
Phenanthrene	Not detected	ug/L	2	SW8270D	12/12/16 23:10	PL	85-01-8	
Pyrene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/L	5	SW8270D	12/12/16 23:10	PL	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether*	Not detected	ug/L	10	SW5030C/8260C	12/08/16 16:39	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	12/08/16 16:39	JGH	67-64-1	
Methyl iodide*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	12/08/16 16:39	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	12/08/16 16:39	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	75-71-8	
Chloromethane*	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	74-87-3	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.08 (continued)

Sample Tag: AKT-6W

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	12/08/16 16:39	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	12/08/16 16:39	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	12/08/16 16:39	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	12/08/16 16:39	JGH		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	106-46-7	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.08 (continued)

Sample Tag: AKT-6W

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	12/08/16 16:39	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	12/08/16 16:39	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.09
Sample Tag: AKT-7 (6-8)
Collected Date/Time: 12/05/2016 11:02
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Metal Digestion	Completed			SW3050B	12/09/16 11:00	PER		
PNA Extraction	Completed			SW3550C	12/13/16 20:24	EMR		

Inorganics

Total Solids*	93	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Cadmium	Not detected	mg/kg	0.20	SW6020A	12/09/16 14:19	PER	7440-43-9	
Chromium	1.54	mg/kg	0.50	SW6020A	12/09/16 14:19	PER	7440-47-3	
Lead	5.32	mg/kg	0.20	SW6020A	12/09/16 14:19	PER	7439-92-1	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:22	PL	90-12-0	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:14	JGH	60-29-7	
Acetone*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 14:14	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:14	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	820	SW5035A/8260C	12/12/16 14:14	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	75-71-8	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.09 (continued)

Sample Tag: AKT-7 (6-8)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Chloromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:14	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 14:14	JGH	109-99-9	
Chloroform	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 14:14	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 14:14	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	56-23-5	
Benzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	10061-01-5	
Toluene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	20	SW5035A/8260C	12/12/16 14:14	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH		
o-Xylene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	95-47-6	
Styrene*	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	99-87-6	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.09 (continued)

Sample Tag: AKT-7 (6-8)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	50	SW5035A/8260C	12/12/16 14:14	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	360	SW5035A/8260C	12/12/16 14:14	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	360	SW5035A/8260C	12/12/16 14:14	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:14	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:14	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.10
Sample Tag: AKT-8 (2-4)
Collected Date/Time: 12/05/2016 11:50
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Mercury Digestion	Completed			SW7471B	12/12/16 10:00	RGS		
Metal Digestion	Completed			SW3050B	12/08/16 12:00	PER		
PNA Extraction	Completed			SW3550C	12/13/16 20:24	EMR		

Inorganics

Total Solids*	76	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Arsenic	1.57	mg/kg	0.20	SW6020A	12/08/16 15:10	PER	7440-38-2	
Barium	47.6	mg/kg	1.0	SW6020A	12/08/16 15:10	PER	7440-39-3	
Cadmium	Not detected	mg/kg	0.20	SW6020A	12/08/16 15:10	PER	7440-43-9	
Chromium	3.19	mg/kg	0.50	SW6020A	12/08/16 15:10	PER	7440-47-3	
Copper	8.83	mg/kg	0.50	SW6020A	12/08/16 15:10	PER	7440-50-8	
Lead	26.3	mg/kg	0.20	SW6020A	12/08/16 15:10	PER	7439-92-1	
Mercury	0.058	mg/kg	0.050	SW7471B	12/12/16 12:29	RGS	7439-97-6	
Selenium	Not detected	mg/kg	0.40	SW6020A	12/08/16 15:10	PER	7782-49-2	
Silver	Not detected	mg/kg	0.20	SW6020A	12/08/16 15:10	PER	7440-22-4	
Zinc	20.1	mg/kg	0.50	SW6020A	12/08/16 15:10	PER	7440-66-6	

Organics - Semi-Volatiles**Polynuclear Aromatics**

Acenaphthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270D	12/14/16 08:44	PL	90-12-0	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.10 (continued)

Sample Tag: AKT-8 (2-4)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:34	JGH	60-29-7	
Acetone*	Not detected	ug/kg	2,000	SW5035A/8260C	12/12/16 14:34	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:34	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	1,200	SW5035A/8260C	12/12/16 14:34	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:34	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	2,000	SW5035A/8260C	12/12/16 14:34	JGH	109-99-9	
Chloroform	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	4,000	SW5035A/8260C	12/12/16 14:34	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	4,000	SW5035A/8260C	12/12/16 14:34	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	56-23-5	
Benzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	10061-01-5	
Toluene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	30	SW5035A/8260C	12/12/16 14:34	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH		
o-Xylene*	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	95-47-6	
Styrene*	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.10 (continued)

Sample Tag: AKT-8 (2-4)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane*	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	80	SW5035A/8260C	12/12/16 14:34	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	500	SW5035A/8260C	12/12/16 14:34	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	530	SW5035A/8260C	12/12/16 14:34	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	530	SW5035A/8260C	12/12/16 14:34	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:34	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	200	SW5035A/8260C	12/12/16 14:34	JGH	91-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.11
Sample Tag: AKT-8W
Collected Date/Time: 12/05/2016 12:00
Matrix: Groundwater
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.2	IR
3	40ml Glass	HCL	Yes	4.2	IR
1	125ml Plastic	HNO3	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics								
Methane in Water*	1.9	ug/L	0.5	RSK-175	12/13/16 14:27	Pac	74-82-8	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.12
Sample Tag: AKT-9 (2-3)
Collected Date/Time: 12/05/2016 13:30
Matrix: Soil
COC Reference: 094942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.2	IR
1	40ml Glass	MeOH	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
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Extraction / Prep.

Extraction, PCB	Completed			SW3550C	12/12/16 14:15	PLB		
Mercury Digestion	Completed			SW7471B	12/12/16 10:00	RGS		
Metal Digestion	Completed			SW3050B	12/08/16 12:00	PER		
PNA Extraction	Completed			SW3550C	12/13/16 20:24	EMR		

Inorganics

Total Solids*	85	%	1	SM2540B	12/08/16 16:20	JBL		
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Metals

Arsenic	2.28	mg/kg	0.20	SW6020A	12/08/16 15:08	PER	7440-38-2	
Barium	86.3	mg/kg	1.0	SW6020A	12/08/16 15:08	PER	7440-39-3	
Cadmium	1.71	mg/kg	0.20	SW6020A	12/08/16 15:08	PER	7440-43-9	
Chromium	4.74	mg/kg	0.50	SW6020A	12/08/16 15:08	PER	7440-47-3	
Copper	24.3	mg/kg	0.50	SW6020A	12/08/16 15:08	PER	7440-50-8	
Lead	45.0	mg/kg	0.20	SW6020A	12/08/16 15:08	PER	7439-92-1	
Mercury	Not detected	mg/kg	0.050	SW7471B	12/12/16 12:31	RGS	7439-97-6	
Selenium	Not detected	mg/kg	0.40	SW6020A	12/08/16 15:08	PER	7782-49-2	
Silver	Not detected	mg/kg	0.20	SW6020A	12/08/16 15:08	PER	7440-22-4	
Zinc	260	mg/kg	0.50	SW6020A	12/08/16 15:08	PER	7440-66-6	

Organics - PCBs/Pesticides**PCB List**

PCB-1016	Not detected	ug/kg	330	SW8082A	12/13/16 13:07	JAN	12674-11-2	
PCB-1242	Not detected	ug/kg	330	SW8082A	12/13/16 13:07	JAN	53469-21-9	
PCB-1221	Not detected	ug/kg	330	SW8082A	12/13/16 13:07	JAN	11104-28-2	
PCB-1232	Not detected	ug/kg	330	SW8082A	12/13/16 13:07	JAN	11141-16-5	
PCB-1248	Not detected	ug/kg	330	SW8082A	12/13/16 13:07	JAN	12672-29-6	
PCB-1254	Not detected	ug/kg	330	SW8082A	12/13/16 13:07	JAN	11097-69-1	
PCB-1260	Not detected	ug/kg	330	SW8082A	12/13/16 13:07	JAN	11096-82-5	

Organics - Semi-Volatiles**Polynuclear Aromatics**

Acenaphthene	Not detected	ug/kg	300	SW8270D	12/14/16 09:50	PL	83-32-9	
Acenaphthylene	3,500	ug/kg	300	SW8270D	12/14/16 09:50	PL	208-96-8	
Anthracene	3,900	ug/kg	300	SW8270D	12/14/16 09:50	PL	120-12-7	
Benzo(a)anthracene	11,200	ug/kg	300	SW8270D	12/14/16 09:50	PL	56-55-3	
Benzo(a)pyrene	12,900	ug/kg	300	SW8270D	12/14/16 09:50	PL	50-32-8	
Benzo(b)fluoranthene	22,000	ug/kg	300	SW8270D	12/14/16 09:50	PL	205-99-2	p
Benzo(k)fluoranthene	24,300	ug/kg	300	SW8270D	12/14/16 09:50	PL	207-08-9	p
Benzo(ghi)perylene	4,300	ug/kg	300	SW8270D	12/14/16 09:50	PL	191-24-2	
Chrysene	10,300	ug/kg	300	SW8270D	12/14/16 09:50	PL	218-01-9	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.12 (continued)

Sample Tag: AKT-9 (2-3)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Polynuclear Aromatics (continued)								
Dibenzo(ah)anthracene	400	ug/kg	300	SW8270D	12/14/16 09:50	PL	53-70-3	
Fluoranthene	21,300	ug/kg	300	SW8270D	12/14/16 09:50	PL	206-44-0	
Fluorene	1,300	ug/kg	300	SW8270D	12/14/16 09:50	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	4,500	ug/kg	300	SW8270D	12/14/16 09:50	PL	193-39-5	
Naphthalene	600	ug/kg	300	SW8270D	12/14/16 09:50	PL	91-20-3	
Phenanthrene	13,300	ug/kg	300	SW8270D	12/14/16 09:50	PL	85-01-8	
Pyrene	20,600	ug/kg	300	SW8270D	12/14/16 09:50	PL	129-00-0	
2-Methylnaphthalene	400	ug/kg	300	SW8270D	12/14/16 09:50	PL	91-57-6	
1-Methylnaphthalene	300	ug/kg	300	SW8270D	12/14/16 09:50	PL	90-12-0	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	60-29-7	
Acetone*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 14:54	JGH	67-64-1	
Methyl iodide*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	74-88-4	
Carbon disulfide*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	107-13-1	
2-Butanone (MEK)*	Not detected	ug/kg	980	SW5035A/8260C	12/12/16 14:54	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	75-09-2	
trans-1,2-Dichloroethene*	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	75-34-3	
cis-1,2-Dichloroethene*	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	156-59-2	
Tetrahydrofuran*	Not detected	ug/kg	1,000	SW5035A/8260C	12/12/16 14:54	JGH	109-99-9	
Chloroform	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 14:54	JGH	108-10-1	
2-Hexanone*	Not detected	ug/kg	3,000	SW5035A/8260C	12/12/16 14:54	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	56-23-5	
Benzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	10061-01-5	
Toluene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	127-18-4	
trans-1,4-Dichloro-2-butene*	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	110-57-6	



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78017.12 (continued)

Sample Tag: AKT-9 (2-3)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Dibromochloromethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	124-48-1	
1,2-Dibromoethane*	Not detected	ug/kg	30	SW5035A/8260C	12/12/16 14:54	JGH	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH		
o-Xylene*	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	95-47-6	
Styrene*	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	98-82-8	
Bromoform*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW5035A/8260C	12/12/16 14:54	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW5035A/8260C	12/12/16 14:54	JGH	67-72-1	
1,2-Dibromo-3-chloropropane*	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	430	SW5035A/8260C	12/12/16 14:54	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	430	SW5035A/8260C	12/12/16 14:54	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	12/12/16 14:54	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	12/12/16 14:54	JGH	91-57-6	

M-Result reported to MDL not RDL



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C.O.C. PAGE # 1 OF 1

094942

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Scott Wasielewski / Deanna Hutzell			
COMPANY AKT Peerless			
ADDRESS 22725 Orchard Lake Rd.			
CITY Farmington		STATE MI	ZIP CODE 48334
PHONE NO. 248-615-1333	FAX NO. 248-615-1334	P.O. NO.	
E-MAIL ADDRESS WASIELEWSKIS@AKTPEERLESS.COM		QUOTE NO.	

CONTACT NAME		☐ SAME
COMPANY		
ADDRESS		
CITY	STATE	ZIP CODE
PHONE NO.	E-MAIL ADDRESS	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME 12150F-1-20	SAMPLER(S) - PLEASE PRINT/SIGN NAME Scott Wasielewski
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER	

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES								
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NiOH	MeOH	OTHER	
7801701	12/5/14	8:35	AKT-1 (1-3)	S	2						X		
02	12/5/14	8:50	AKT-2 (1-3)	S	2						X		
03	12/5/14	9:30	AKT-3W	GW	5	X	X						
04	12/5/14	9:55	AKT-4 (3-5)	S	2					X			
05	12/5/14	10:10	AKT-4W	GW	5	X	X						
06	12/5/14	10:15	AKT-5 (2-3)	S	2					X			
07	12/5/14	10:42	AKT-6 (6-8)	S	2					X			
08	12/5/14	10:50	AKT-6W	GW	5	X	X						
09	12/5/14	11:02	AKT-7 (6-8)	S	2					X			
10	12/5/14	11:50	AKT-8 (2-4)	S	2					X			
11	12/5/14	12:00	AKT-8W	GW	3	X							
12	12/5/14	13:30	AKT-9 (2-3)	S	2					X			

VOCs	PNAs	Cd, Cr, Pb	Pb	ML Metals	PCBs	Dissolved methane	Certifications
							☐ OHIO VAP ☐ Drinking Water
							☐ DoD ☐ NPDES
							Project Locations
							☐ Detroit ☐ New York
							☐ Other
							Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION Sara Watus	☒ Sampler	DATE 12/6/14	TIME 15:52
RECEIVED BY: SIGNATURE/ORGANIZATION My		DATE 12-7-14	TIME 11-
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION W. Chelco	DATE 12-7-14	TIME 14:30
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
NOTES:		TEMP. ON ARRIVAL 4.2

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



December 23, 2016

Merit Laboratories, Inc.
Attn: John Laverty
2680 East Lansing Road
East Lansing, MI 48823

Project: Subcontract Lab Services

Dear John Laverty,

Enclosed is a copy of the laboratory report for the following work order(s) received by Pace Analytical:

Work Order	Received	Description
1612183	12/09/2016	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ANAB DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Georgia EPD (#026-999-161/1023062); Illinois DEP (#200026/003329); Kentucky DEP (AL123065/#0021); Michigan DPH (#0034); Minnesota DPH (#026-999-161/1023062); New York ELAP (#11776/53116); North Carolina DNRE (#659); Virginia DCLS (#460153/7952); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-14-00305).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Brian Hall".

Brian J. Hall
Project Manager II



PROJECT TECHNICAL NARRATIVE(s)

No Project Narrative is associated with this report.



STATEMENT OF DATA QUALIFICATIONS

All analyses have been validated and comply with our Quality Control Program.
No Qualification is required.



ANALYTICAL REPORT

Client: **Merit Laboratories, Inc.**
Project: Subcontract Lab Services
Client Sample ID: **78017.11**
Lab Sample ID: **1612183-01**
Matrix: Water

Work Order: **1612183**
Description: Laboratory Services
Sampled: 12/05/16 12:00
Sampled By: Client
Received: 12/09/16 10:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Methane	1.9	0.50	ug/L	1	RSK-175	12/13/16 14:27	CAC	1613170



QUALITY CONTROL REPORT

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
---------	--------------	------------	--------	--------------	----------------	-----	------------	----

QC Batch: 1613170 Method-Specific Extraction/RSK-175

Method Blank

Unit: ug/L

Analyzed: 12/13/2016 By: CAC

Analytical Batch: 6L13043

Methane

<0.50

0.50

Laboratory Control Sample

Unit: ug/L

Analyzed: 12/13/2016 By: CAC

Analytical Batch: 6L13043

Methane

34.7

30.6

88

70-116

--

0.50

Matrix Spike 1612183-01 78017.11

Unit: ug/L

Analyzed: 12/13/2016 By: CAC

Analytical Batch: 6L13043

Methane

1.87

34.7

27.7

75

42-112

--

0.50

Matrix Spike Duplicate 1612183-01 78017.11

Unit: ug/L

Analyzed: 12/13/2016 By: CAC

Analytical Batch: 6L13043

Methane

1.87

34.7

27.4

73

42-112

1

20

0.50



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C.O.C. PAGE # 1 OF 41

#1612183

25-16

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME John Lavery

CONTACT NAME Julie Teague

NAME

COMPANY Merit Laboratories

COMPANY Merit Laboratories

ADDRESS 2680 East Lansing Drive

ADDRESS 2680 East Lansing Drive

CITY East Lansing

CITY East Lansing

STATE MI

ZIP CODE 48823

PHONE NO. 517-332-0167

FAX NO. 517-332-4034

P.O. NO.

QUOTE NO.

PHONE NO. 517-332-0167

E-MAIL ADDRESS juliet@meritlabs.com

E-MAIL ADDRESS johnlavery@meritlabs.com

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME S78017

SAMPLE(FRIS) - PLEASE PRINT/SIGN NAME

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SO=SOLID
CODE SL=SLUDGE DW=DRINKING WATER O=OIL WP=WPIPE A=AIR W=WASTE

Containers & Preservatives

MERT LAB NO. 12/5/16 1200 78017.11

MATRIX # OF BOTTLES

Dissolved Methane by RSK-175

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DOD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other
Special Instructions

** Subcontracted to
TriMatrix

RELINQUISHED BY: [Signature] IJ Sampler

DATE 12/19/16 TIME 11:35

RELINQUISHED BY: [Signature]

DATE 12/19/16 TIME 12:00

SIGNATURE/ORGANIZATION

DATE

SIGNATURE/ORGANIZATION

DATE

SIGNATURE/ORGANIZATION

DATE

SIGNATURE/ORGANIZATION

DATE

SIGNATURE/ORGANIZATION

DATE

SIGNATURE/ORGANIZATION

DATE

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



SAMPLE RECEIVING / LOG-IN CHECKLIST

Client: <u>Merit</u>	Work Order #: <u>1612183</u>
Receipt Record Page/Line #: <u>25-16</u>	New / Add To: ☐ Project Chemist: ☐ Sample #: ☐

Recorded by (initials/date): <u>SL 12/9/16</u>	☒ Cooler ☐ Box ☐ Other	Qty Received: <u>1</u>	Thermometer Used: ☒ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (# <u> </u>)	☐ See Additional Cooler Information Form
--	--	------------------------	--	---

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time	
<u>Merit</u>	<u>1235</u>							
Custody Seals: ☒ None ☐ Present / Intact ☐ Present / Not Intact		Custody Seals: ☐ None ☐ Present / Intact ☐ Present / Not Intact		Custody Seals: ☐ None ☐ Present / Intact ☐ Present / Not Intact		Custody Seals: ☐ None ☐ Present / Intact ☐ Present / Not Intact		
Coolant Type: ☐ Loose Ice ☐ Bagged Ice ☒ Blue Ice ☐ None		Coolant Type: ☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None		Coolant Type: ☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None		Coolant Type: ☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None		
Coolant Location: <u>Sides</u>		Coolant Location:		Coolant Location:		Coolant Location:		
Dispersed / Top / Middle / Bottom		Dispersed / Top / Middle / Bottom		Dispersed / Top / Middle / Bottom		Dispersed / Top / Middle / Bottom		
Temp Blank Present: ☐ Yes ☐ No		Temp Blank Present: ☐ Yes ☐ No		Temp Blank Present: ☐ Yes ☐ No		Temp Blank Present: ☐ Yes ☐ No		
If Present, Temperature Blank Location is: ☐ Representative ☐ Not Representative		If Present, Temperature Blank Location is: ☐ Representative ☐ Not Representative		If Present, Temperature Blank Location is: ☐ Representative ☐ Not Representative		If Present, Temperature Blank Location is: ☐ Representative ☐ Not Representative		
Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			Temp Blank:			Temp Blank:		
Sample 1:	<u>9.8</u>	<u>-</u>	<u>9.8</u>			Sample 1:		
Sample 2:	<u>9.2</u>	<u>-</u>	<u>9.2</u>			Sample 2:		
Sample 3:	<u>9.7</u>	<u>-</u>	<u>9.7</u>			Sample 3:		
3 Sample Average °C: <u>9.6</u>			3 Sample Average °C:			3 Sample Average °C:		
☐ Cooler ID on COC?			☐ Cooler ID on COC?			☐ Cooler ID on COC?		
☐ VOC Trip Blank received?			☐ VOC Trip Blank received?			☐ VOC Trip Blank received?		

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes	No
☒	☐ Chain of Custody record(s)? If No, Initiated By: _____
☒	Received for Lab Signed/Date/Time?
☒	☐ Shipping document?
☒	☒ Other: <u>Merit - 16174</u>

COC Information

☐ Pace COC	☒ Other: <u>Merit - 16174</u>
COC ID Numbers:	

Check COC for Accuracy

Yes	No
☒	☐ Analysis Requested?
☒	☒ Sample ID matches COC?
☒	☐ Sample Date and Time matches COC?
☒	Container type completed on COC?
☒	☐ All container types indicated are received?

Sample Condition Summary

N/A	Yes	No
☐	☒	☒ Broken containers/lids?
☐	☒	☒ Missing or incomplete labels?
☐	☒	☒ Illegible information on labels?
☐	☒	☒ Low volume received?
☐	☒	☒ Inappropriate or non-Pace containers received?
☐	☒	☒ VOC vials / TOX containers have headspace?
☐	☒	☒ Extra sample locations / containers not listed on COC?

Check Sample Preservation

N/A	Yes	No
☒	☒	☐ Temperature Blank OR average sample temperature, 26° C?
☒	☒	☐ If either is 26° C, was thermal preservation required?
☒	☒	If "Yes", Project Chemist Approval Initials: _____
☒	☒	If "Yes" Completed Non Con Cooler - Cont Inventory Form?
☒	☒	Completed Sample Preservation Verification Form?
☒	☒	☒ Samples chemically preserved correctly?
☒	☒	If "No", added orange tag?
☒	☒	☒ Received pre-preserved VOC soils?
☒	☒	☐ MeOH ☐ Na ₂ SO ₄

Check for Short Hold-Time Prep/Analyses

☐ Bacteriological	AFTER HOURS ONLY: COPIES OF COC TO LAB AREA(S) ☒ NONE RECEIVED ☐ RECEIVED, COCs TO LAB(S)
☐ Air Bags	
☐ EnCores / Methanol Pre-Preserved	
☐ Formaldehyde/Aldehyde	
☐ Green-tagged containers	
☐ Yellow/White-tagged 1 L ambers (SV Prep-Lab)	

Notes

☐ Trip Blank received	☐ Trip Blank not listed on COC	
Cooler Received (Date/Time): <u>12/9/16 1000</u>	Paperwork Delivered (Date/Time): <u>12/9/16 1238</u>	≤1 Hour Goal Met? ☒ Yes ☐ No



Analytical Laboratory Report

Report ID: S78027.01(01)

Generated on 12/08/2016

Report to

Attention: Scott Wasielewski
AKT Peerless Environmental
22725 Orchard Lake Rd.
Farmington, MI 48336

Phone: 248-615-1333 FAX:
Email: wasielewskis@AKTPEERLESS.COM

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S78027.01
Project: 12150F-1-20
Collected Date: 12/05/2016
Submitted Date/Time: 12/07/2016 14:30
Sampled by: Unknown
P.O. #:

Table of Contents

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General Report Notes (Page 2)
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Method Summary (Page 4)
Sample Summary (Page 5)

A handwritten signature in black ink, reading "Maya Murshak".

Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Report Narrative

There is no additional narrative for this analytical report



Analytical Laboratory Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods



Analytical Laboratory Report

Method Summary

Method	Version
TO-15	EPA TO-15 Second Edition January 1999



Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S78027.01	AKT-SG-1	Air	12/05/16 13:40 - 12/05/16



Analytical Laboratory Report

Lab Sample ID: S78027.01

Sample Tag: AKT-SG-1

Collected Date/Time: 12/05/2016 13:40 - 12/05/2016 13:50

Matrix: Air

COC Reference: A00483

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles								
TO-15								
Acetone*	Not detected	ppbv	20	TO-15	12/08/16 10:44	JGH	67-64-1	
1,3-Butadiene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	106-99-0	
Benzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	71-43-2	
Bromodichloromethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-27-4	
Bromoform*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-25-2	
Bromomethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	74-83-9	
Vinyl bromide*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	593-60-2	
Benzyl chloride*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	100-44-7	
Carbon disulfide*	Not detected	ppbv	5	TO-15	12/08/16 10:44	JGH	75-15-0	
Chlorobenzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	108-90-7	
Chloroethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-00-3	
Chloroform*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	67-66-3	
Chloromethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	74-87-3	
3-Chloropropene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	107-05-1	
2-Chlorotoluene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	95-49-8	
Carbon tetrachloride*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	56-23-5	
Cyclohexane*	3	ppbv	2	TO-15	12/08/16 10:44	JGH	110-82-7	
1,1-Dichloroethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-34-3	
1,1-Dichloroethene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-35-4	
1,2-Dibromoethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	106-93-4	
1,2-Dichloroethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	107-06-2	
1,2-Dichloropropane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	78-87-5	
1,4-Dioxane*	Not detected	ppbv	25	TO-15	12/08/16 10:44	JGH	123-91-1	
Dichlorodifluoromethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-71-8	
Dibromochloromethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	124-48-1	
trans-1,2-Dichloroethene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	156-60-5	
cis-1,2-Dichloroethene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	156-59-2	
cis-1,3-Dichloropropene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	10061-01-5	
1,3-Dichlorobenzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	541-73-1	
1,2-Dichlorobenzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	95-50-1	
1,4-Dichlorobenzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	106-46-7	
trans-1,3-Dichloropropene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	10061-02-6	
Ethanol*	Not detected	ppbv	25	TO-15	12/08/16 10:44	JGH	64-17-5	
Ethylbenzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	100-41-4	
Ethyl Acetate*	Not detected	ppbv	10	TO-15	12/08/16 10:44	JGH	141-78-6	
4-Ethyltoluene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	622-96-8	
Freon 113*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	76-13-1	
Freon 114*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	76-14-2	
Heptane*	6	ppbv	2	TO-15	12/08/16 10:44	JGH	142-82-5	
Hexachlorobutadiene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	87-68-3	
Hexane*	7	ppbv	2	TO-15	12/08/16 10:44	JGH	110-54-3	
2-Hexanone*	Not detected	ppbv	5	TO-15	12/08/16 10:44	JGH	591-78-6	



Analytical Laboratory Report

Lab Sample ID: S78027.01 (continued)

Sample Tag: AKT-SG-1

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
TO-15 (continued)								
Isopropyl Alcohol*	Not detected	ppbv	20	TO-15	12/08/16 10:44	JGH	67-63-0	
Methylene chloride*	Not detected	ppbv	5	TO-15	12/08/16 10:44	JGH	75-09-2	
2-Butanone (MEK)*	Not detected	ppbv	10	TO-15	12/08/16 10:44	JGH	78-93-3	
4-Methyl-2-pentanone (MIBK)*	Not detected	ppbv	5	TO-15	12/08/16 10:44	JGH	108-10-1	
tert-Methyl butyl ether (MTBE)*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	1634-04-4	
Methyl methacrylate*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	80-62-6	
Naphthalene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	91-20-3	
Propylene*	27	ppbv	2	TO-15	12/08/16 10:44	JGH	115-07-1	
Styrene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	100-42-5	
1,1,1-Trichloroethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	71-55-6	
1,1,2,2-Tetrachloroethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	79-34-5	
1,1,2-Trichloroethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	79-00-5	
1,2,4-Trichlorobenzene*	Not detected	ppbv	5	TO-15	12/08/16 10:44	JGH	120-82-1	
1,2,4-Trimethylbenzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	95-63-6	
1,3,5-Trimethylbenzene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	108-67-8	
2,2,4-Trimethylpentane*	6	ppbv	2	TO-15	12/08/16 10:44	JGH	540-84-1	
Tert-butyl Alcohol*	Not detected	ppbv	10	TO-15	12/08/16 10:44	JGH	75-65-0	
Tetrachloroethene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	127-18-4	
Tetrahydrofuran*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	109-99-9	
Toluene*	3	ppbv	2	TO-15	12/08/16 10:44	JGH	108-88-3	
Trichloroethene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	79-01-6	
Trichlorofluoromethane*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-69-4	
Vinyl chloride*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	75-01-4	
Vinyl acetate*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	108-05-4	
p,m-Xylene*	Not detected	ppbv	4	TO-15	12/08/16 10:44	JGH		
o-Xylene*	Not detected	ppbv	2	TO-15	12/08/16 10:44	JGH	95-47-6	
Total Xylenes*	Not detected	ppbv	6	TO-15	12/08/16 10:44	JGH	1330-20-7	
TO-15								
Acetone*	Not detected	ug/m3	48	TO-15	12/08/16 10:44	JGH	67-64-1	
1,3-Butadiene*	Not detected	ug/m3	4.4	TO-15	12/08/16 10:44	JGH	106-99-0	
Benzene*	Not detected	ug/m3	6.4	TO-15	12/08/16 10:44	JGH	71-43-2	
Bromodichloromethane*	Not detected	ug/m3	13	TO-15	12/08/16 10:44	JGH	75-27-4	
Bromoform*	Not detected	ug/m3	21	TO-15	12/08/16 10:44	JGH	75-25-2	
Bromomethane*	Not detected	ug/m3	7.8	TO-15	12/08/16 10:44	JGH	74-83-9	
Vinyl bromide*	Not detected	ug/m3	8.7	TO-15	12/08/16 10:44	JGH	593-60-2	
Benzyl chloride*	Not detected	ug/m3	10	TO-15	12/08/16 10:44	JGH	100-44-7	
Carbon disulfide*	Not detected	ug/m3	16	TO-15	12/08/16 10:44	JGH	75-15-0	
Chlorobenzene*	Not detected	ug/m3	9.2	TO-15	12/08/16 10:44	JGH	108-90-7	
Chloroethane*	Not detected	ug/m3	5.3	TO-15	12/08/16 10:44	JGH	75-00-3	
Chloroform*	Not detected	ug/m3	9.8	TO-15	12/08/16 10:44	JGH	67-66-3	
Chloromethane*	Not detected	ug/m3	4.1	TO-15	12/08/16 10:44	JGH	74-87-3	
3-Chloropropene*	Not detected	ug/m3	6.3	TO-15	12/08/16 10:44	JGH	107-05-1	
2-Chlorotoluene*	Not detected	ug/m3	10	TO-15	12/08/16 10:44	JGH	95-49-8	
Carbon tetrachloride*	Not detected	ug/m3	13	TO-15	12/08/16 10:44	JGH	56-23-5	
Cyclohexane*	10	ug/m3	6.9	TO-15	12/08/16 10:44	JGH	110-82-7	
1,1-Dichloroethane*	Not detected	ug/m3	8.1	TO-15	12/08/16 10:44	JGH	75-34-3	
1,1-Dichloroethene*	Not detected	ug/m3	7.9	TO-15	12/08/16 10:44	JGH	75-35-4	
1,2-Dibromoethane*	Not detected	ug/m3	15	TO-15	12/08/16 10:44	JGH	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S78027.01 (continued)

Sample Tag: AKT-SG-1

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
TO-15 (continued)								
1,2-Dichloroethane*	Not detected	ug/m3	8.1	TO-15	12/08/16 10:44	JGH	107-06-2	
1,2-Dichloropropane*	Not detected	ug/m3	9.2	TO-15	12/08/16 10:44	JGH	78-87-5	
1,4-Dioxane*	Not detected	ug/m3	90	TO-15	12/08/16 10:44	JGH	123-91-1	
Dichlorodifluoromethane*	Not detected	ug/m3	9.9	TO-15	12/08/16 10:44	JGH	75-71-8	
Dibromochloromethane*	Not detected	ug/m3	17	TO-15	12/08/16 10:44	JGH	124-48-1	
trans-1,2-Dichloroethene*	Not detected	ug/m3	7.9	TO-15	12/08/16 10:44	JGH	156-60-5	
cis-1,2-Dichloroethene*	Not detected	ug/m3	7.9	TO-15	12/08/16 10:44	JGH	156-59-2	
cis-1,3-Dichloropropene*	Not detected	ug/m3	9.1	TO-15	12/08/16 10:44	JGH	10061-01-5	
1,3-Dichlorobenzene*	Not detected	ug/m3	12	TO-15	12/08/16 10:44	JGH	541-73-1	
1,2-Dichlorobenzene*	Not detected	ug/m3	12	TO-15	12/08/16 10:44	JGH	95-50-1	
1,4-Dichlorobenzene*	Not detected	ug/m3	12	TO-15	12/08/16 10:44	JGH	106-46-7	
trans-1,3-Dichloropropene*	Not detected	ug/m3	9.1	TO-15	12/08/16 10:44	JGH	10061-02-6	
Ethanol*	Not detected	ug/m3	47	TO-15	12/08/16 10:44	JGH	64-17-5	
Ethylbenzene*	Not detected	ug/m3	8.7	TO-15	12/08/16 10:44	JGH	100-41-4	
Ethyl Acetate*	Not detected	ug/m3	36	TO-15	12/08/16 10:44	JGH	141-78-6	
4-Ethyltoluene*	Not detected	ug/m3	9.8	TO-15	12/08/16 10:44	JGH	622-96-8	
Freon 113*	Not detected	ug/m3	15	TO-15	12/08/16 10:44	JGH	76-13-1	
Freon 114*	Not detected	ug/m3	14	TO-15	12/08/16 10:44	JGH	76-14-2	
Heptane*	25	ug/m3	8.2	TO-15	12/08/16 10:44	JGH	142-82-5	
Hexachlorobutadiene*	Not detected	ug/m3	21	TO-15	12/08/16 10:44	JGH	87-68-3	
Hexane*	25	ug/m3	7.0	TO-15	12/08/16 10:44	JGH	110-54-3	
2-Hexanone*	Not detected	ug/m3	20	TO-15	12/08/16 10:44	JGH	591-78-6	
Isopropyl Alcohol*	Not detected	ug/m3	49	TO-15	12/08/16 10:44	JGH	67-63-0	
Methylene chloride*	Not detected	ug/m3	17	TO-15	12/08/16 10:44	JGH	75-09-2	
2-Butanone (MEK)*	Not detected	ug/m3	29	TO-15	12/08/16 10:44	JGH	78-93-3	
4-Methyl-2-pentanone (MIBK)*	Not detected	ug/m3	20	TO-15	12/08/16 10:44	JGH	108-10-1	
tert-Methyl butyl ether (MTBE)*	Not detected	ug/m3	7.2	TO-15	12/08/16 10:44	JGH	1634-04-4	
Methyl methacrylate*	Not detected	ug/m3	8.2	TO-15	12/08/16 10:44	JGH	80-62-6	
Naphthalene*	Not detected	ug/m3	10	TO-15	12/08/16 10:44	JGH	91-20-3	
Propylene*	46	ug/m3	3.4	TO-15	12/08/16 10:44	JGH	115-07-1	
Styrene*	Not detected	ug/m3	8.5	TO-15	12/08/16 10:44	JGH	100-42-5	
1,1,1-Trichloroethane*	Not detected	ug/m3	11	TO-15	12/08/16 10:44	JGH	71-55-6	
1,1,2,2-Tetrachloroethane*	Not detected	ug/m3	14	TO-15	12/08/16 10:44	JGH	79-34-5	
1,1,2-Trichloroethane*	Not detected	ug/m3	11	TO-15	12/08/16 10:44	JGH	79-00-5	
1,2,4-Trichlorobenzene*	Not detected	ug/m3	37	TO-15	12/08/16 10:44	JGH	120-82-1	
1,2,4-Trimethylbenzene*	Not detected	ug/m3	9.8	TO-15	12/08/16 10:44	JGH	95-63-6	
1,3,5-Trimethylbenzene*	Not detected	ug/m3	9.8	TO-15	12/08/16 10:44	JGH	108-67-8	
2,2,4-Trimethylpentane*	28	ug/m3	9.3	TO-15	12/08/16 10:44	JGH	540-84-1	
Tert-butyl Alcohol*	Not detected	ug/m3	30	TO-15	12/08/16 10:44	JGH	75-65-0	
Tetrachloroethene*	Not detected	ug/m3	14	TO-15	12/08/16 10:44	JGH	127-18-4	
Tetrahydrofuran*	Not detected	ug/m3	5.9	TO-15	12/08/16 10:44	JGH	109-99-9	
Toluene*	11	ug/m3	7.5	TO-15	12/08/16 10:44	JGH	108-88-3	
Trichloroethene*	Not detected	ug/m3	11	TO-15	12/08/16 10:44	JGH	79-01-6	
Trichlorofluoromethane*	Not detected	ug/m3	11	TO-15	12/08/16 10:44	JGH	75-69-4	
Vinyl chloride*	Not detected	ug/m3	5.1	TO-15	12/08/16 10:44	JGH	75-01-4	
Vinyl acetate*	Not detected	ug/m3	7.0	TO-15	12/08/16 10:44	JGH	108-05-4	
p,m-Xylene*	Not detected	ug/m3	17	TO-15	12/08/16 10:44	JGH		
o-Xylene*	Not detected	ug/m3	8.7	TO-15	12/08/16 10:44	JGH	95-47-6	
Total Xylenes*	Not detected	ug/m3	26	TO-15	12/08/16 10:44	JGH	1330-20-7	



A 00483

INVOICE TO

RELINQUISHED BY: SIGNATURE/ORGANIZATION: <i>[Signature]</i> RECEIVED BY: SIGNATURE/ORGANIZATION: <i>[Signature]</i> RELINQUISHED BY: SIGNATURE/ORGANIZATION: RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE: 12/4/16 TIME: 15:52 DATE: 12/6/16 TIME: DATE: TIME: DATE: TIME: DATE: TIME:
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RELINQUISHED BY: SIGNATURE/ORGANIZATION: <i>[Signature]</i> RECEIVED BY: SIGNATURE/ORGANIZATION: <i>[Signature]</i> RELINQUISHED BY: SIGNATURE/ORGANIZATION: RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE: 12-7-16 TIME: DATE: 12/7/16 TIME: 1430 DATE: TIME: DATE: TIME: DATE: TIME:
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SEAL NO. _____ SEAL INTACT YES ☐ NO ☐ SEAL NO. _____ SEAL INTACT YES ☐ NO ☐	INITIALS _____ INITIALS _____ NOTES: _____ TEMP. ON ARRIVAL: <i>RT</i>
--	---

Rev. 7.10.15



Analytical Laboratory Report

Supplemental Report

Report ID: S78690.01(02)
Generated on 01/19/2017
Replaces report S78690.01(01) generated on 01/18/2017

Report to

Attention: Scott Wasielewski
AKT Peerless Environmental
22725 Orchard Lake Rd.
Farmington, MI 48336

Phone: 248-615-1333 FAX:
Email: wasielewskis@AKTPEERLESS.COM

Additional Contacts: Deanna Hutsell

Report produced by

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John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S78690.01-S78690.02
Project: 12150F
Collected Date: 01/10/2017
Submitted Date/Time: 01/12/2017 08:00
Sampled by: Unknown
P.O. #:

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Maya Murshak
Technical Director



Analytical Laboratory Report

Supplemental Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Report Narrative

Lead added to both samples per client request



Analytical Laboratory Report

Supplemental Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods



Analytical Laboratory Report

Supplemental Report

Method Summary

Method	Version
SM2540B	Standard Method 2540 B 20th Edition
SW3050B	SW 846 Method 3050B Revision 2 December 1996
SW5035A/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5035A Revision 1 July 2002
SW6020A	SW 846 Method 6020A Revision 1 February 2007



Analytical Laboratory Report

Supplemental Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S78690.01	AKT-TP-1	Soil	01/10/17 12:45
S78690.02	AKT-TP-2	Soil	01/10/17 13:30



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78690.01
Sample Tag: AKT-TP-1
Collected Date/Time: 01/10/2017 12:45
Matrix: Soil
COC Reference: 094943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.9	IR
1	40ml Glass	MeOH	Yes	4.9	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3050B	01/19/17 09:00	JRH		
Inorganics								
Total Solids*	91	%	1	SM2540B	01/13/17 15:45	JBL		
Metals								
Lead	34.2	mg/kg	0.30	SW6020A	01/19/17 10:27	JRH	7439-92-1	
Organics - Volatiles								
Leaded Gasoline Range Volatiles								
Benzene	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	71-43-2	
Toluene	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	108-88-3	
Ethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH		
o-Xylene*	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	95-47-6	
1,2,3-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	526-73-8	
1,2,4-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	95-63-6	
1,3,5-Trimethylbenzene	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	108-67-8	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	01/17/17 12:56	JGH	98-82-8	
n-Propylbenzene	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	103-65-1	
1,2-Dibromoethane*	Not detected	ug/kg	20	SW5035A/8260C	01/17/17 12:56	JGH	106-93-4	M
1,2-Dichloroethane	Not detected	ug/kg	60	SW5035A/8260C	01/17/17 12:56	JGH	107-06-2	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	01/17/17 12:56	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	01/17/17 12:56	JGH	91-57-6	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Supplemental Report

Lab Sample ID: S78690.02
Sample Tag: AKT-TP-2
Collected Date/Time: 01/10/2017 13:30
Matrix: Soil
COC Reference: 094943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	8oz Glass	None	Yes	4.9	IR
1	40ml Glass	MeOH	Yes	4.9	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3050B	01/19/17 09:00	JRH		
Inorganics								
Total Solids*	84	%	1	SM2540B	01/13/17 15:45	JBL		
Metals								
Lead	13.9	mg/kg	0.30	SW6020A	01/19/17 10:28	JRH	7439-92-1	
Organics - Volatiles								
Leaded Gasoline Range Volatiles								
Benzene	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	71-43-2	
Toluene	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	108-88-3	
Ethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	100-41-4	
p,m-Xylene*	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH		
o-Xylene*	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	95-47-6	
1,2,3-Trimethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	526-73-8	
1,2,4-Trimethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	95-63-6	
1,3,5-Trimethylbenzene	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	108-67-8	
Isopropylbenzene	Not detected	ug/kg	300	SW5035A/8260C	01/17/17 13:16	JGH	98-82-8	
n-Propylbenzene	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	103-65-1	
1,2-Dibromoethane*	Not detected	ug/kg	30	SW5035A/8260C	01/17/17 13:16	JGH	106-93-4	M
1,2-Dichloroethane	Not detected	ug/kg	70	SW5035A/8260C	01/17/17 13:16	JGH	107-06-2	
Naphthalene	Not detected	ug/kg	300	SW5035A/8260C	01/17/17 13:16	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	100	SW5035A/8260C	01/17/17 13:16	JGH	91-57-6	

M-Result reported to MDL not RDL

C.O.C. PAGE # 1 OF 1

094943

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME		☐ SAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.		E-MAIL ADDRESS	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

<i>Leaded gasoline pumps</i>					Certifications
					☐ OHIO VAP ☐ Drinking Water
					☐ DoD ☐ NPDES
					Project Locations
					☐ Detroit ☐ New York
					☐ Other _____
				Special Instructions	

<i>Leaded gasoline pumps</i>					Certifications
					☐ OHIO VAP ☐ Drinking Water
					☐ DoD ☐ NPDES
					Project Locations
					☐ Detroit ☐ New York
					☐ Other _____
				Special Instructions	

[illegible]

RELINQUISHED BY: SIGNATURE/ORGANIZATION		Merit Storage		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		M. Calcutt		DATE	TIME
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL	4.9
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

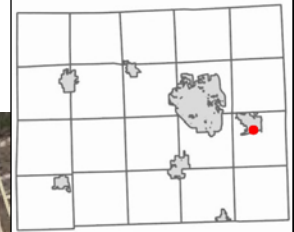
Rev. 5/18/12

Appendix D

Parcel Map



Parcel Map: 539 S. Huron Street, Ypsilanti, Michigan



Legend

- Ann Arbor
- County
- TaxParcel_2K
- Simultaneous Conveyan
- Lot and Units_1K
- ROW lots
- Quarter Sections
- Sections
- University and College
- K12 Schools
- Police Stations
- Fire Stations
- County Buildings
- Local Unit Offices
- Lakes
- Streams
- Parks
 - Game Area
 - Park
 - Farmland or Conser

THIS MAP REPRESENTS PARCELS AT THE TIME OF PRINTING. THE OFFICIAL PARCEL TAX MAPS ARE MAINTAINED SOLELY BY THE WASHTENAW COUNTY EQUALIZATION DEPARTMENT AND CAN BE OBTAINED BY CONTACTING THAT OFFICE AT 734-222-6662.

The information contained in this cadastral map is used to locate, identify and inventory parcels of land in Washtenaw County for appraisal and taxing purposes only and is not to be construed as a "survey description". The information is provided with the understanding that the conclusions drawn from such information are solely the responsibility of the user. Any assumption of legal status of this data is hereby disclaimed.

NOTE: Parcels may not be to scale.
1/4/2017



0 100.00 200.0
Feet

Notes

Appendix E

Resumes of Environmental Professionals

Deanna Hutsell

Senior Environmental Consultant P.E.

Ms. Hutsell has over 10 years of professional services consulting experience focusing on environmental due diligence and remediation solutions.

PROFESSIONAL EXPERIENCE

Environmental Consultant

AKT Peerless Environmental Services

Project Manager

The Traverse Group, Inc.

Environmental Consultant

The Traverse Group, Inc.

AREA OF EXPERTISE

- Conducting Phase I environmental site assessments
- Conducting Phase II subsurface investigations
- Preparing Baseline Environmental Assessments and Due Care Plans
- Evaluating the potential environmental risk at commercial, industrial, and residential properties
- Coordinating environmental investigations
- Oversight of field operations such as monitoring well installation, contaminant delineation, soil excavation, and UST removal
- Preparation of Spill Prevention Control and Countermeasure Plans (SPCC) and Pollution Incident Prevention Plans (PIPP) plans
- Preparation of Stormwater Pollution Prevention Plans (SWPPP)
- Completion of Property Condition and Physical Needs Assessments for commercial, institutional and multi-family facilities

EDUCATION

BS: Environmental Engineering, 2002

Michigan Technological University, Houghton, MI

CERTIFICATIONS

Professional Engineer

(P.E. License 55527) State of Michigan

Michigan Asbestos Inspector

Accreditation Number A32752

OSHA

40-Hour Hazardous Waste Operations Training (with annual refreshers)

AHERA Asbestos Building Inspector Course

MDEQ Brownfields Training

February 2008

SUMMARY OF SELECTED PROJECTS

Managed Phase I ESAs, including proposal generation, cost analysis, project management, client communication, and invoicing for financial institutions, manufacturing facilities, real estate developers, and property managers.

Completed Phase I ESAs in compliance with the American Society for Testing and Materials (ASTM), U.S. Department of Housing and Urban Development (HUD), and/or Michigan State Housing Development Authority (MSHDA) guidelines in support of acquisition/divestiture for various properties in Michigan, Ohio, and Nevada.

These properties included vacant properties and properties improved with various commercial businesses, schools, light industrial facilities, automotive parts supply warehouses, and multi-family residential developments. The properties ranged in size from less than one acre to more than 30 acres.

Managed Phase II subsurface investigations (including the coordination of soil boring and monitoring well installation, laboratory data interpretation, and report completion) to (a) evaluate the potential presence of contaminants, (b) evaluate the type of contaminants, and (c) delineate horizontal and vertical extent.

Additional activities included the preparation of Baseline Environmental Assessments and Due Care Plans to address identified contamination at facilities for submittal to the Michigan Department of Environmental Quality (MDEQ).

Managed Phase II Environmental Site Assessments and Leaking Underground Storage Tank (LUST) projects, including proposal generation, client communications, obtaining subcontractor costs and scheduling field activities, preparing soil and groundwater samples for laboratory submittal, interpreting analytical results, and generating all associated reports.

Performed monthly methane gas monitoring, leachate sampling, and groundwater sampling at a landfill in Ohio and prepared associated reports submitted to the Ohio Environmental Protection Agency (EPA).

Prepared Spill Prevention Control and Countermeasure Plans (SPCC), Pollution Incident Prevention Plans (PIPP), and Stormwater Pollution Prevention Plans (SWPPP) for large and small facilities in Michigan.

Completed Physical Needs Assessment (PNA) for 147,234 square foot 18-story senior living facility. The subject property was built in 1973 and consists of 202 one bedroom units.

Provide Property Condition Evaluation services for several multi-family apartment complexes. These sites were constructed in the mid 1970s and included a range of units (241, 346 and 723).

Scott Wasielewski

Environmental Consultant

Mr. Wasielewski has more than three years of experience in environmental due diligence, subsurface investigations, environmental construction oversight, and vapor mitigation system installation/inspection, along with knowledge and understanding of many geologic disciplines and processes.

EDUCATION

MS: Environmental Science, 2014 / University of Michigan – Dearborn

BS: Environmental Biology/Microbiology, 2007 / Michigan State University

CERTIFICATIONS

40-Hour Hazardous Waste Operations & Emergency Response / OSHA, 29 CFR 1910.120

2-Hour Asbestos Awareness / EPA, 40 CFR Part 763; OSHA, 29 CFR 1926.1101

Certified Vapor Intrusion Inspector / Land Science Technologies (Geo-Seal®); CETCO® (Liquid Boot®)

EXPERIENCE

Environmental Consultant

AKT Peerless (current)

Research Assistant

Michigan State University

SKILLS

- Phase I and Phase II Environmental Site Assessments
- Baseline Environmental Assessments
- Inspection of vapor intrusion mitigation system installations and associated system monitoring and testing in residential and commercial settings
- Quarterly groundwater monitoring in active industrial setting
- Academic background in aqueous geochemistry, glacial geology, contaminant hydrogeology, and groundwater modeling; research background in environmental monitoring of heavy metals associated with urban land use in lake sediments and shallow groundwater

SOILS INVESTIGATION
PROPOSED PATIENT STATION BUILDING
SOUTH HURON AND KRAMER STREETS
YPSILANTI, MICHIGAN

MR. JAMES NAMETH
c/o METRO GENERAL CONTRACTORS, INC.
48155 WEST ROAD
SUITE 1
WIXOM, MICHIGAN 48393

NOVEMBER 2, 2016
BY
McDOWELL & ASSOCIATES

McDowell & Associates

Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

21355 Hatcher Avenue, Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157

November 2, 2016

Mr. James Nameth
c/o Metro General Contractors
48155 West Road
Suite 1
Wixom, Michigan 48393

Job No. 16-347

Subject: Soils Investigation
Proposed Patient Station Building
South Huron and Kramer Streets
Ypsilanti, Michigan

Dear Mr. Nameth:

In accordance with your request, we have performed a Soils Investigation at the subject project.

Two (2) Soil Test Borings, designated as 1 and 2, were performed at the site. The approximate locations of the borings are shown on the Soil Boring Location Plan which accompanies this report. The borings were advanced to depths of fifteen feet six inches (15'6") and twenty feet six inches (20'6") below the existing ground surface at the boring locations.

Soil descriptions, groundwater observations and the results of field and laboratory tests are to be found on the accompanying Logs of Soil Test Borings and summary sheet of Sieve Analysis results.

The borings encountered three feet nine inches (3'9") and seven feet (7') of fill soils consisting of surficial topsoil, buried topsoil, concrete slab, very compact discolored brown and dark brown silty fine sand to silty sand and very stiff discolored brown gravelly sand to sand and gravel which were found throughout the remainder of the borings. Buried topsoil was found in Boring 1 between the depths of two feet (2') and two feet six inches (2'6"). A concrete slab was found in Boring 1 between the depths of three feet six inches (3'6") and four feet (4').

Soil descriptions and depths shown on the boring logs are approximate indications of change from one soil type to another and are not intended to represent an area of exact geological change or stratification. Also, the site shows signs of modification which could indicate fill and soil conditions different from those encountered at the boring locations.

Water was encountered in the borings at depths of nine feet six inches (9'6") and fourteen feet (14') below the existing ground surface. Water was measured upon completion of the drilling operation in the borings at depths of ten feet (10') and fourteen feet three inches (14'3"). It should be noted that short-term groundwater observations may not provide a reliable indication of the depth of the water table. In clay soils, this is due to the slow rate of infiltration of water into the borehole as well as the potential for water to become trapped in overlying layers of

Mid-Michigan Office

3730 James Savage Road, Midland, MI 48642
Phone: (989) 496-3610 • Fax: (989) 496-3190

granular soils during periods of heavy rainfall. Water levels in granular soils fluctuate with seasonal and climatic changes as well as the amount of rainfall in the area immediately prior to the measurements.

Standard Penetration Tests made during the sampling operation indicate that the site soils have very good strengths and densities. Tests taken at a depth of two feet six inches (2'6") gave a result of twenty-one (21) blows per foot. The five foot (5') test values were eighteen (18) blows per foot and thirty-three (33) blows per six inches (6"). At a depth of seven feet six inches (7'6"), the penetration indices were twenty (20) and twenty-five (25) blows per six inches (6"). At depths of ten feet (10') and below, the test values were thirty-one (31), thirty-five (35) and thirty-seven (37) blows per foot.

It is understood that a one-story slab-on-grade building with a parking lot and drive is planned to be constructed at the site. It is assumed that the new structure will transmit relatively light loads to the supporting soils.

Based on the project information provided and the results of field and laboratory tests, it is believed that the new structure could be supported by conventional spread or strip footings. All exterior footings should be constructed at, or below, a minimum frost penetration depth of three feet six inches (3'6") below finished grade. All interior and exterior load-bearing footings should extend through non-engineered fill soils, soils containing a significant amount of organic substances, or excessively weak soils. All strip footings should be continuously reinforced in order to minimize the noticeable effects of differential settlement.

Footings could be proportioned for a design soil pressure of four thousand pounds per square foot (4,000 psf) at and below depths of seven feet (7') at the location of Boring 1 and four feet (4') at the location of Boring 2, provided that the footings rest in suitable native non-organic soils.

If the possibility of more than normal differential movement can be tolerated, slab-on-grade floors or floor-supporting backfill could be placed at, or near, the present grade. If any existing asphalt or concrete pavement is found within the proposed building area, it should be either removed or thoroughly broken. If any existing underground utilities are found within the planned building area, they should be removed and properly backfilled or grouted in place. Any surficial topsoil, highly organic or obviously objectionable material should be removed and the subgrade thoroughly proof-compacted with heavy, rubber-tired equipment. If any buried topsoil is found within eighteen inches (18") below the planned floor elevation of the building, it should be removed in its entirety from the planned building area. It appears that the buried topsoil found at Boring 1 should be removed. If, during the proof-compaction operation, areas are found where the soils yield excessively, the yielding materials should be scarified, dried and re-compacted or removed and replaced with engineered fill. Where fill or backfill is required to raise the subgrade for concrete floors, it is suggested that clean, well-graded granular soils be used. If clay material is utilized, it should be placed within two percent (2%) of its optimum moisture content. The fill should be deposited in horizontal lifts not to exceed nine inches (9") in thickness with each lift being compacted uniformly to a minimum density of ninety-five percent (95%) of its maximum value as determined by the Modified Proctor Test (A.A.S.H.T.O. T-180 or A.S.T.M. D-1557).

If the possibility of more than normal differential movement cannot be tolerated, then all existing fill soils and buried topsoil should be removed and replaced with engineered fill meeting the requirements outlined above or the floor slab should be structurally supported.

If any existing structures are found, they should be entirely removed from the proposed building area. Buried utilities should be removed or grouted in place. In lawn or parking areas, any existing structure foundations should be removed to a minimum depth of three feet (3') below finished grade. The resulting excavation should be backfilled with engineered fill meeting the requirements outlined above. If any existing floor slabs are located outside of the proposed building, then they can remain but should be broken up.

It appears that the subgrade soils consist of clay and sand soils. We would expect the clay soils to have California Bearing Ratios on the order of three percent (3%) and a modulus of subgrade reaction of about one hundred pounds per cubic inch (100 pci). It appears these soils may have a high percentage of silt-size particles which would indicate they could tend to have a severe frost heave potential.

Based on the above estimated CBR value, we have made the following pavement analysis. The site soils appear to be susceptible to frost heave. Consequently, it is suggested that in areas of automobile and light truck traffic, three inches (3") of asphalt with eight inches (8") of high quality, well-graded granular base course be used. In the areas subject to a considerable amount of truck traffic, it is recommended that the asphalt thickness be increased by a minimum of one and one-half inches (1½"). In the areas to be paved, the site should be prepared in a manner similar to that recommended above. Buried topsoil found within eighteen inches (18") of the pavement surface should be removed from the planned pavement areas. It appears the buried topsoil found at Boring 1 needs to be removed. In addition, the subgrade should be reworked until approximately the upper one foot (1') of the subgrade is compacted to at least ninety-five percent (95%) of its maximum dry density as determined by the Modified Proctor Test. It is recommended as a minimum that stub drains be provided at the storm sewer catch basins to provide some drainage for the pavement base. The subgrade should be properly sloped to allow drainage of surface water. Eight inches (8") of concrete pavement should be used in the dumpster area and other intensive truck wheel load areas.

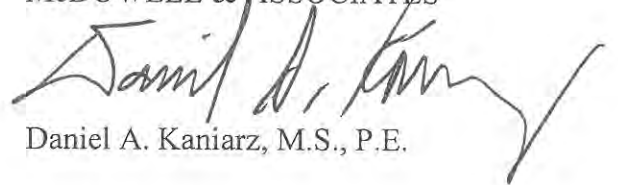
Experience indicates that the actual subsoil conditions at the site could vary from those found at the two (2) soil borings made at specific locations. It is, therefore, essential that McDowell & Associates be notified of any variation of soil conditions to determine their effects on the recommendations presented in this report. The evaluations and recommendations presented in this report have been formulated on the basis of reported or assumed data relating to the proposed project. Any significant change in this data in the final design plans should be brought to our attention for review and evaluation with respect to the prevailing subsoil conditions.

It is recommended that the services of McDowell & Associates be engaged to observe the soils in the footing excavations prior to concreting in order to test the soils for the required bearing capacities. Testing should also be performed to check that suitable materials are being used for controlled fills and that they are properly placed and compacted.

If we can be of any further service, please feel free to call.

Very truly yours,

McDOWELL & ASSOCIATES

A handwritten signature in black ink, appearing to read "Daniel A. Kaniarz", with a long, sweeping horizontal stroke extending to the right.

Daniel A. Kaniarz, M.S., P.E.

DAK/jb



McDOWELL & ASSOCIATES
Geotechnical, Environmental, & Hydrogeologic Services
21355 Hatcher Avenue • Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157

LOG OF SOIL
BORING NO. 1

PROJECT Soils Investigation
LOCATION Patient Station Building
South Huron and Kramer Streets

JOB NO. 16-347

SURFACE ELEV. _____ DATE 10-27-16

Ypsilanti, Michigan

Sample & Type	Depth	Legend	SOIL DESCRIPTION	Penetration Blows for 6"	Moisture %	Natural Wt. P.C.F.	Dry Den Wt. P.C.F.	Unc. Comp. Strength PSF	Str. %
	1		Moist dark brown silty sandy TOPSOIL with trace of bricks and occasional stones, fill						
	2		Moist discolored brown fine SAND with some topsoil seams, fill	5					
A	3		Very stiff moist dark brown clayey TOPSOIL with sand and pebbles, fill	7	9.6				
SS	4		CONCRETE SLAB	14					
	5		Very compact moist discolored brown silty fine SAND with moist dark brown clay seams, occasional stones and trace of concrete, fill	10	7.1				
B	6			8					
SS	7		Moist dark brown silty SAND with topsoil, fill	10					
	8		Extremely compact moist brown SAND & GRAVEL with trace of silt						
	9			9					
C	10			25	3.4				
SS	11			--					
	12								
	13								
	14								
	15			25					
D	16			30	5.0				
SS	17			--					
	18								
	19								
	20								
	21								
	22								
	23								
	24								
	25								

TYPE OF SAMPLE
D. - DISTURBED
U.L. - UNDIST. LINER
S.T. - SHELBY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
() - PENETROMETER

REMARKS:

Standard Penetration Test - Driving 2" OD Sampler 1' With
140# Hammer Falling 30": Count Made at 6" Intervals

GROUND WATER OBSERVATIONS

G.W. ENCOUNTERED AT 14 FT. 0 INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. AFTER COMPLETION 14 FT. 3 INS.
G.W. AFTER HRS. FT. INS.
G.W. VOLUMES Heavy



McDOWELL & ASSOCIATES
Geotechnical, Environmental, & Hydrogeologic Services
21355 Hatcher Avenue • Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157

LOG OF SOIL
BORING NO. 2

PROJECT Soils Investigation
LOCATION Patient Station Building
South Huron and Kramer Streets

JOB NO. 16-347

SURFACE ELEV. DATE 10-27-16

Ypsilanti, Michigan

Sample & Type	Depth	Legend	SOIL DESCRIPTION	Penetration Blows for 6"	Moisture %	Natural Wt. P.C.F.	Dry Den Wt. P.C.F.	Unc. Comp. Strength PSF	Str. %
	1		Moist dark brown clayey TOPSOIL with sand and pebbles and vegetation, fill						
	2		1'3"	6					
A	3		Very stiff moist discolored brown sandy CLAY with some topsoil and moist brown silty sand seams, fill	10	11.7				
SS	4			11					
	5		3'9"	33					
B	6		Extremely compact moist brown silty fine SAND with trace of gravel and moist brown clayey silty sand seams	--	6.2				
SS	7			--					
	8		6'6"	18					
C	9			20	3.2				
SS	10		Extremely compact moist to wet brown gravelly SAND with trace of silt and silty fine sand seams	--					
	11			15					
D	12			22					
SS	13			--					
	14		12'0"						
	15		Extremely compact wet brown silty SAND & GRAVEL with stones	15					
E	16			20					
SS	17			17					
	18		15'6"						
	19								
	20								
	21								
	22								
	23								
	24								
	25								

TYPE OF SAMPLE
D. - DISTURBED
U.L. - UNDIST. LINER
S.T. - SHELBY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
() - PENETROMETER

REMARKS:

Standard Penetration Test - Driving 2" OD Sampler 1' With
140# Hammer Falling 30": Count Made at 6" Intervals

GROUND WATER OBSERVATIONS

G.W. ENCOUNTERED AT 9 FT. 6 INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. AFTER COMPLETION 10 FT. 0 INS.
G.W. AFTER HRS. FT. INS.
G.W. VOLUMES heavy

SIEVE ANALYSIS

<u>Boring</u>	<u>Sample</u>	<u>% Passing #4 Sieve</u>	<u>% Passing #10 Sieve</u>	<u>% Passing #40 Sieve</u>	<u>% Passing #100 Sieve</u>	<u>% Passing #200 Sieve</u>
1	C	67.2	58.6	36.3	11.9	9.2
2	C	81.9	71.9	52.7	12.4	7.7

No Scale



Sore Boring Location Plan
#16-347

Project Name: Patient Station Medical Marijuana Dispensary

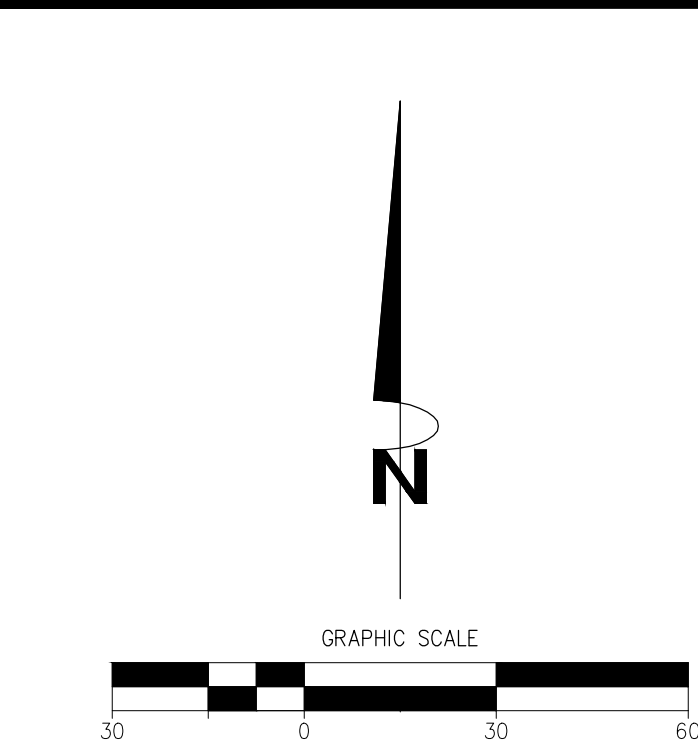
539 South Huron St. Ypsilanti, Michigan

ZONING CLASSIFICATION AND DATA:

ZONING REGULATION:	PERMITTED	PROPOSED	
ZONING: ADJACENT ZONING: PROPOSED LAND USE: LOT AREA: LOT REQUIREMENTS AND BUILDING ENVELOP: LOT WIDTH: LOT DEPTH: LOT COVERAGE : STREET SET BACK: MINIMUM SIDE SETBACK: MINIMUM REAR SETBACK: LANDSCAPING , GREENBELTS: SITE LANDSCAPING: GROSS BUILDING AREA: PARKING REQUIREMENTS: CARS: LOADING SPACE	GC-General Corridor PMD-Production , Manufacturing, Distribution NC- Neighborhood Corridor PARCEL 2 GROSS SITE AREA: 33,453 S.F., 0.77 ACRES 50 FEET MINIMUM 300 FEET MAXIMUM 100 FEET MINIMUM 300 FEET MAXIMUM 60 PERCENT OR 33,453 S.F.ZX.6 = 20,071 S.F. MINIMUM 5 FEET, MAXIMUM 15 FEET NONE 15 FEET 1 TREE FOR 30 FEET OF FRONTAGE OR 165 / 30 =6 10% OF SITE AREA 33,453 S.F.ZX.10 = 3,345 S.F. 1 SPACE PER 250 SQUARE FEET OF GROSS AREA 1 SPACE 10'X50'	244.35 FEET LOT WIDTH 269.08 FEET LOT DEPTH 7,000. S.F. 15 FEET AVERAGE 13 FEET AND 4 FEET 95 FEET 4 WITH CREDIT FOR EXISTING 3,744 S.F. 6,700 S.F. 27 SPACES 1 SPACE 10'X50'	

LOCATION MAP:

PROPERTY DESCRIPTION:	PLAN DISTRIBUTION LIST:						DRAWING INDEX:	
PARCEL 2: PART OF LOT 3 PLAN OF CLARKSVILLE, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 3, PAGE 1, WASHTENAW COUNTY RECORDS, AND PART OF FRENCH CLAIM 680, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF HURON STREET WITH THE CENTERLINE OF MONROE AVENUE (NOW ABANDONED); THENCE NORTHEASTERLY 76.89 FEET ALONG THE CENTERLINE OF HURON STREET; THENCE SOUTHEASTERLY DEFLECTING 98 DEGREES 14 MINUTES TO THE RIGHT 271.80 FEET; THENCE SOUTHWESTERLY DEFLECTION 81 DEGREES 46 MINUTES TO THE RIGHT 121.83 FEET; THENCE NORTHWESTERLY DEFLECTING 88 DEGREES 33 MINUTES TO THE RIGHT 269.07FEET TO THE CENTER OF HURON STREET; THENCE NORTHEASTERLY DEFLECTING 91 DEGREES 27 MINUTES TO THE RIGHT 90.67 FEET ALONG THE CENTER OF HURON STREET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THAT PART TAKEN FOR HIGHWAY PURPOSES AS SET FORTH IN DECLARATION OF TAKING RECORDED IN LIBER 1296, PAGE 428, WASHTENAW COUNTY RECORDS.	AGENCY:	DEPARTMENT:	CONTACT:	EMAIL ADDRESS	TELEPHONE:	DATE:	COVER SHEET - SURVEY SP-1 SITE PLAN L-1 LANDSCAPE PLAN C-1 GRADING , SITE UTILITY PLAN E-1 SITE PHOTOMETRIC PLAN A-1 BUILDING FLOOR PLAN A-2 BUILDING ELEVATIONS A-3 BUILDING ELEVATIONS	
	CITY OF Ypsilanti	Cmmunity and Economic Development	Bonnie Wessler City Planner	bwessler@cityofypsilanti.com	734.483.9646	01/17/2017		
PETITIONER AND OWNER:		ARCHITECT: / ENGINEER:						
James Nameth: 539 South Huron St. Ypsilanti Michigan 48197 Phome: 734 544 9999		A Atelier Architect, Inc. 6346 ORCHARD LAKE RD #16. WEST BLOOMFIELD TWP. MIICHIGAN 48322 PHONE: 248-885-8286 FAX: 248-885-8287 EMAIL : info@AtelierArchitect.com						SUBMITTAL DATE 1ST SITE PLAN APPROVAL 01/18/2017 COVER SHEET



BENCHMARK DATA:

SITE BENCHMARK:
TOP NUT ON FIRE HYDRANT ON THE WEST SIDE OF SOUTH HURON STREET.
ELEVATION = 732.83 NAVD83

TITLE REPORT EXCEPTIONS:

ONLY THOSE EXCEPTIONS CONTAINED WITHIN ATA NATIONAL TITLE GROUP, LLC TITLE REPORT FILE NO. 81-16494244-FHR, DATED AUGUST 28, 2016 AND RE-LISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

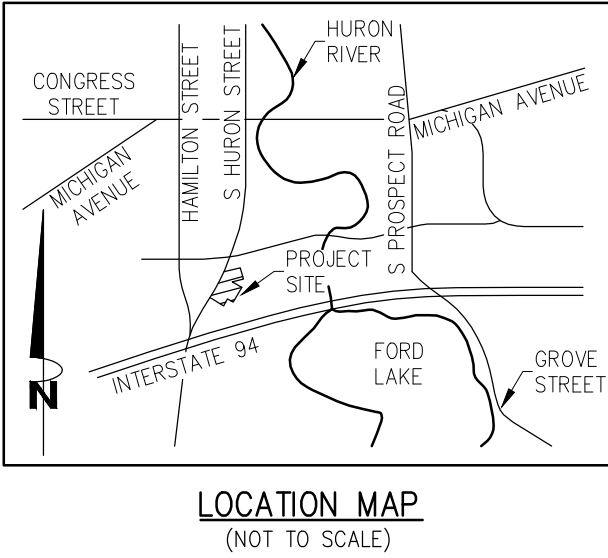
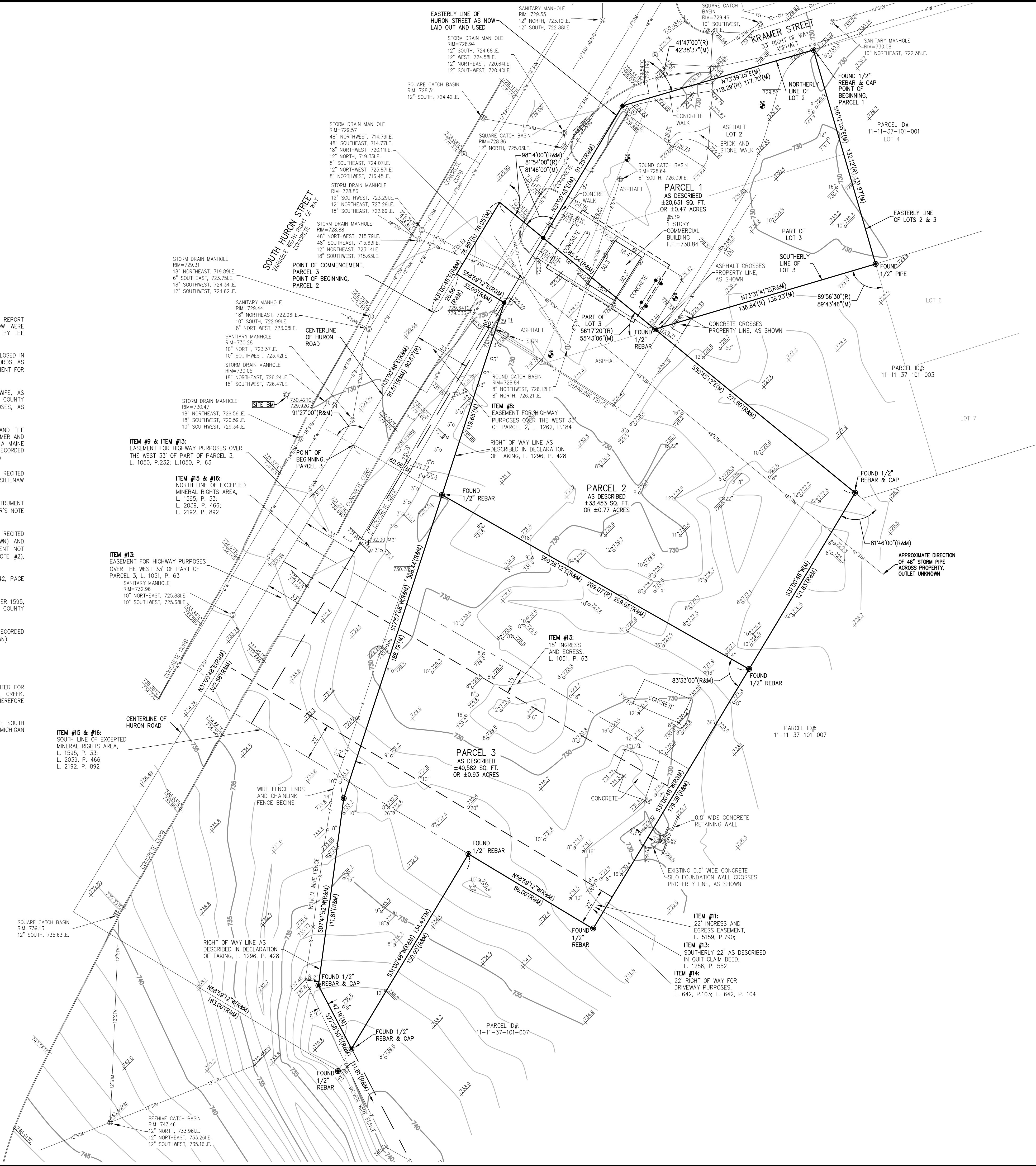
8. INTEREST OF THE AMERICAN OIL COMPANY, A MARYLAND CORPORATION, AS DISCLOSED IN WARRANTY DEED RECORDED IN LIBER 1262, PAGE 184, WASHTENAW COUNTY RECORDS, AS TO PARCEL 2. (33' EASEMENT FOR HIGHWAY PURPOSES, AS SHOWN) (SEE DOCUMENT FOR ADDITIONAL INTERESTS)
9. INTEREST OF GEORGE R. MASSEY AND CARRIE D. MASSEY, HUSBAND AND WIFE, AS DISCLOSED IN WARRANTY DEED RECORDED IN LIBER 1050, PAGE 232, WASHTENAW COUNTY RECORDS, AS TO PART OF PARCEL 3. (33' EASEMENT FOR HIGHWAY PURPOSES, AS SHOWN)
10. LESSEE'S INTEREST OF SINCLAIR REFINING COMPANY, A MAINE CORPORATION AND THE TERMS CONDITIONS AND PROVISIONS CONTAINED IN THE LEASE BETWEEN J.J. HAMMER AND MARTHELYN HAMMER, HIS WIFE, AS LESSOR AND SINCLAIR REFINING COMPANY, A MAINE CORPORATION, AS LESSEE. SAID LEASE BEING DISCLOSED BY THE INSTRUMENT RECORDED IN LIBER 658, PAGE 444, WASHTENAW COUNTY RECORDS. (NO EASEMENTS LISTED)
11. EASEMENTS AND THE TERMS, CONDITIONS AND PROVISIONS THEREOF WHICH ARE REITED IN GRANT OF PERPETUAL EASEMENTS RECORDED IN LIBER 5159, PAGE 790, WASHTENAW COUNTY RECORDS. (AS SHOWN)
12. RIGHT OF WAY FOR SEWERS PURPOSES VESTED IN CITY OF YPSILANTI BY INSTRUMENT RECORDED IN LIBER 337, PAGE 8, WASHTENAW COUNTY RECORDS. (SEE SURVEYOR'S NOTE #1)
13. EASEMENTS AND THE TERMS, CONDITIONS AND PROVISIONS THEREOF WHICH ARE REITED IN GRANT OF RIGHT OF WAY RECORDED IN LIBER 1051, PAGE 63 (AS SHOWN) AND FURTHER EVIDENCED IN DEEDS RECORDED IN LIBER 1260, PAGE 393 (DOCUMENT NOT PROVIDED) AND IN LIBER 1236, PAGE 552 (AS SHOWN) (SEE SURVEYOR'S NOTE #2), WASHTENAW COUNTY RECORDS.
14. RIGHT OF WAY FOR DRIVEWAY AS SET FORTH IN DEEDS RECORDED IN LIBER 642, PAGE 103 AND IN LIBER 642, PAGE 104, WASHTENAW COUNTY RECORDS. (AS SHOWN)
15. RESERVING FLUID AND MINERAL RIGHTS AS DISCLOSED IN DEEDS RECORDED IN LIBER 1595, PAGE 33, IN LIBER 2039, PAGE 466 AND IN LIBER 2192, PAGE 892, WASHTENAW COUNTY RECORDS. (AS SHOWN)
16. TERMS AND CONDITIONS CONTAINED IN THE DEED DATED MAY 11, 1977 AND RECORDED MAY 25, 1977 IN LIBER 1595 PAGE 33, WASHTENAW COUNTY RECORDS. (AS SHOWN)

SURVEYOR'S NOTES:

1. ITEM #12, LIBER 337, PAGE 8 CALLS FOR A 25 FOOT WIDE EASEMENT, THE CENTER FOR THE PROPOSED RIGHT OF WAY TO FOLLOW THE CENTER OF THE NATURAL CREEK. EVIDENCE TO THE LOCATION OF THE NATURAL CREEK WAS NOT OBSERVED, THEREFORE SAID EASEMENT IS NOT SHOWN HEREON.
2. ITEM #13, LIBER 1256, PAGE 552 IS A QUIT CLAIM DEED THAT QUIT CLAIMS THE SOUTH 22 FEET OF THE PARCEL AS DESCRIBED FROM THE CITY OF YPSILANTI TO THE MICHIGAN STATE HIGHWAY DEPARTMENT.

LEGEND:

- FOUND MONUMENT (AS NOTED)
- PROPERTY CORNER
- SQUARE CATCH BASIN
- ⊙ STORM MANHOLE
- ⊕ ROUND CATCH BASIN
- ⊕ FIRE HYDRANT
- ⊕ WATER VALVE
- ⊕ SEWER MANHOLE
- ⊕ GAS METER
- ⊕ EXISTING ELEVATION
- TREE WITH DIAMETER IN INCHES
- LIGHT POLE BASE
- UTILITY POLE
- ELECTRIC METER
- ⊕ ELECTRIC TRANSFORMER
- ⊕ TELEPHONE MANHOLE
- BOLLARD
- DOUBLE POST SIGN
- MONITORING WELL
- ADJOINING BOUNDARY LINE
- EDGE OF ASPHALT
- BOUNDARY LINE
- BUILDING
- BUILDING OVERHANG
- EDGE OF CONCRETE
- 800 CONTOUR MAJOR
- CONTOUR MINOR
- CONCRETE CURB
- EASEMENT
- OVERHEAD UTILITY LINE
- FENCE (AS NOTED)
- PLATTED SUBDIVISION
- RIGHT OF WAY
- SEWER LINE
- EDGE OF SIDEWALK
- STW STORM DRAIN LINE
- WALL (AS NOTED)
- WATER MAIN



LEGAL DESCRIPTION

LAND SITUATED IN THE COUNTY OF WASHTENAW, CITY OF YPSILANTI, STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

PARCEL 1:
LOT 2 AND PART OF LOT 3, PLAN OF CLARKSVILLE, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 3, PAGE 1, WASHTENAW COUNTY RECORDS, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 2; THENCE SOUTHERLY 132.12 FEET ALONG THE EASTERLY LINE OF LOTS 2 AND 3; THENCE WESTERLY DEFLECTING 89 DEGREES 56 MINUTES 30 SECONDS TO THE RIGHT 138.64 FEET ALONG THE SOUTHERLY LINE OF SAID LOT 3; THENCE NORTHWESTERLY DEFLECTING 56 DEGREES 17 MINUTES 20 SECONDS TO THE RIGHT 85.54 FEET; THENCE NORTHWESTERLY DEFLECTING 81 DEGREES 54 MINUTES TO THE RIGHT 91.25 FEET ALONG THE EASTERLY LINE OF HURON STREET AS NOW LAID OUT AND USED; THENCE EASTERLY DEFLECTING 41 DEGREES 47 MINUTES TO THE RIGHT 118.29 FEET ALONG THE NORTHERLY LINE OF SAID LOT 2 TO THE POINT OF BEGINNING.

PARCEL 2:
PART OF LOT 3 PLAN OF CLARKSVILLE, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 3, PAGE 1, WASHTENAW COUNTY RECORDS, AND PART OF FRENCH CLAIM 680, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF HURON STREET WITH THE CENTERLINE OF MONROE AVENUE (NOW ABANDONED); THENCE NORTHEASTERLY 76.89 FEET ALONG THE CENTERLINE OF HURON STREET; THENCE SOUTHEASTERLY DEFLECTING 98 DEGREES 14 MINUTES TO THE RIGHT 271.80 FEET; THENCE SOUTHWESTERLY DEFLECTING 81 DEGREES 46 MINUTES TO THE RIGHT 121.83 FEET; THENCE NORTHWESTERLY DEFLECTING 88 DEGREES 33 MINUTES TO THE RIGHT 269.07 FEET TO THE CENTER OF HURON STREET; THENCE NORTHEASTERLY DEFLECTING 91 DEGREES 27 MINUTES TO THE RIGHT 90.67 FEET ALONG THE CENTER OF HURON STREET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THAT PART TAKEN FOR HIGHWAY PURPOSES AS SET FORTH IN DECLARATION OF TAKING RECORDED IN LIBER 1296, PAGE 428, WASHTENAW COUNTY RECORDS.

PARCEL 3:
ALL THAT PART OF FRENCH CLAIM 680, CITY OF YPSILANTI, WASHTENAW COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF HURON STREET AND MONROE AVENUE; THENCE SOUTH 31 DEGREES 00 MINUTES 48 SECONDS WEST A DISTANCE OF 91.51 FEET ALONG THE CENTERLINE OF HURON STREET TO THE POINT OF BEGINNING; THENCE SOUTH 60 DEGREES 26 MINUTES 12 SECOND EAST A DISTANCE OF 269.08 FEET; THENCE SOUTH 31 DEGREES 00 MINUTES 48 SECONDS WEST A DISTANCE OF 179.39 FEET; THENCE NORTH 58 DEGREES 59 MINUTES 12 SECONDS WEST A DISTANCE OF 86.00 FEET; THENCE SOUTH 31 DEGREES 00 MINUTES 48 SECONDS WEST A DISTANCE OF 150.00 FEET; THENCE NORTH 58 DEGREES 59 MINUTES 12 SECONDS WEST, A DISTANCE OF 183.00 FEET TO THE CENTERLINE OF HURON STREET; THENCE NORTH 31 DEGREES 00 MINUTES 48 SECONDS EAST A DISTANCE OF 322.58 FEET TO THE POINT OF BEGINNING, WHICH LIES SOUTHEASTERLY OF A LINE DESCRIBED AS COMMENCING AT THE INTERSECTION OF THE CENTERLINES OF MONROE AVENUE AND HURON STREET; THENCE NORTH 31 DEGREES 00 MINUTES 48 SECONDS EAST ALONG THE CENTERLINE OF HURON STREET A DISTANCE OF 26.56 FEET; THENCE SOUTH 58 DEGREES 59 MINUTES 12 SECONDS EAST A DISTANCE OF 33.00 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 17 DEGREES 57 MINUTES 08 SECONDS WEST A DISTANCE OF 308.44 FEET; THENCE SOUTH 07 DEGREES 41 MINUTES 52 SECONDS WEST A DISTANCE OF 111.81 FEET; THENCE SOUTH 27 DEGREES 38 MINUTES 50 SECONDS EAST A DISTANCE OF 111.81 FEET TO A POINT OF ENDING.

NOTES:

1. SURVEY IN ACCORDANCE WITH TITLE COMMITMENT FILE NO. 81-16494244-FHR PREPARED BY ATA NATIONAL TITLE GROUP, LLC, AN AGENCY FOR STEWART TITLE GUARANTY COMPANY, DATED AUGUST 28, 2016.
2. TELEPHONE, GAS, ELECTRIC, AND CABLE TV UTILITY MAPS WERE NOT AVAILABLE AT THE TIME OF SURVEY.
3. TREE SIZES ARE THE BEST ESTIMATION OF THE FIELD SURVEYOR. SPECIFIC QUESTIONS REGARDING INDIVIDUAL TREES SHOULD BE DIRECTED TO A QUALIFIED FORESTER.
4. BY GRAPHIC PLOTTING ONLY, THIS PARCEL IS LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD AREA ZONE X - OTHER AREAS (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, MAP NUMBER 26161C0426E, EFFECTIVE DATE OF APRIL 3, 2012. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THE ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

UTILITY NOTES:

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.
2. PRIOR TO ANY BUILDING IMPROVEMENTS, AND/OR CONSTRUCTION, THE RESPECTIVE UTILITY COMPANIES MUST BE NOTIFIED TO STAKE THE PRECISE LOCATION OF THE UTILITIES.

DESCRIPTION

REVISION

DATE

BY

CORE LAND CONSULTING

PROFESSIONAL SURVEYING

59445 Northwestern Hwy., Suite 320

Southfield, MI 48034

Phone: (248) 932-7120

Fax: (248) 932-7124

Email: info@corelandconsulting.com

www.corelandconsulting.com

CLIENT:

ATELIER ARCHITECT, PC

PROJECT LOCATION:

539 S. HURON STREET

YPSILANTI, MICHIGAN

DRAWN BY: NEM

CHECKED BY: NEM

FIELD WORK BY: MDL

811

Know what's below.

Call before you dig.

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SHEET:

ARCHITECTURAL SURVEY

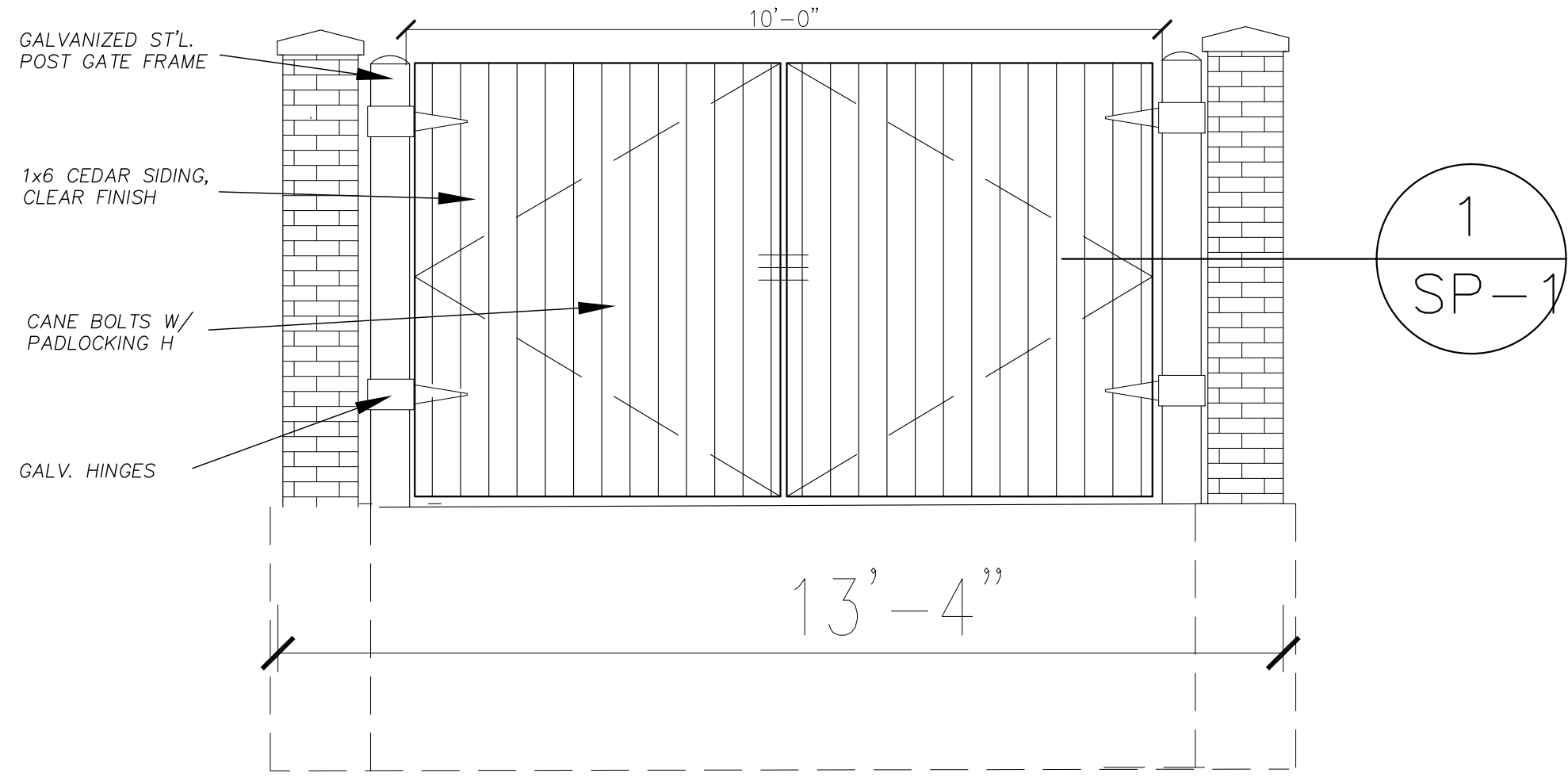
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PROJECT NO: 2794-178

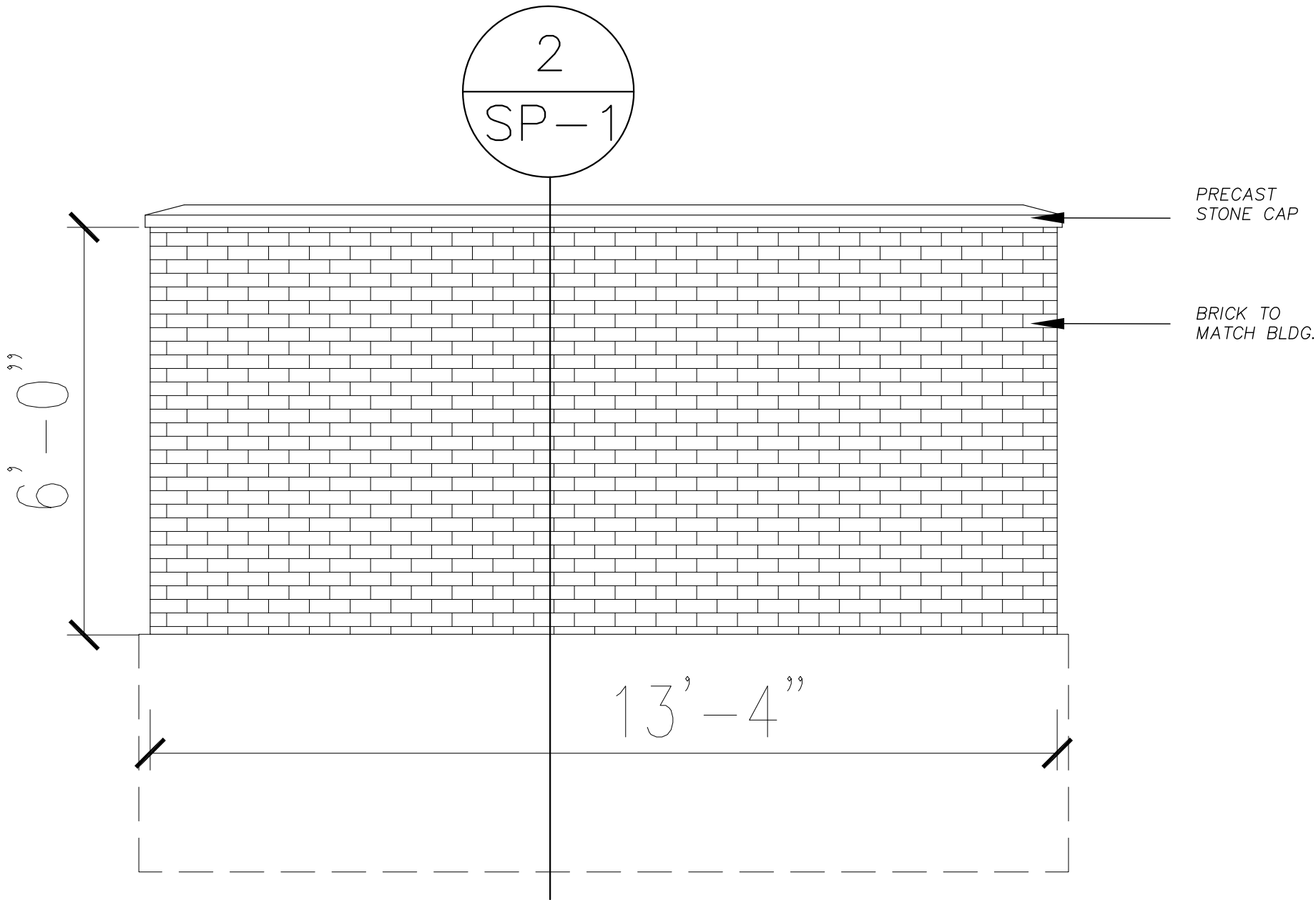
1

SHEET 1 OF 1



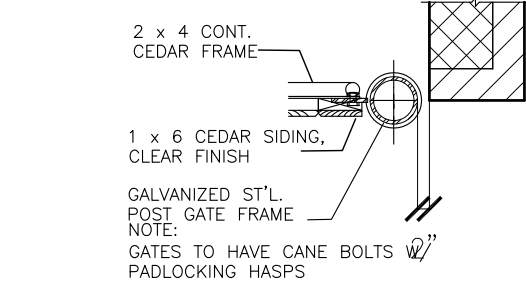
FRONT ELEVATION

SCALE: 1/2"=1'-0"



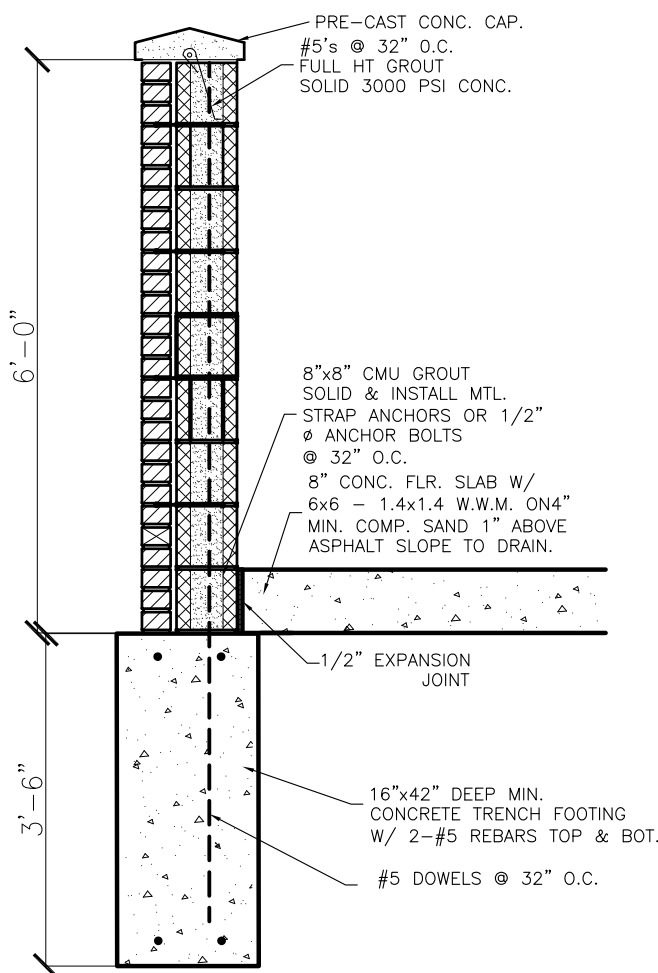
REAR ELEVATION

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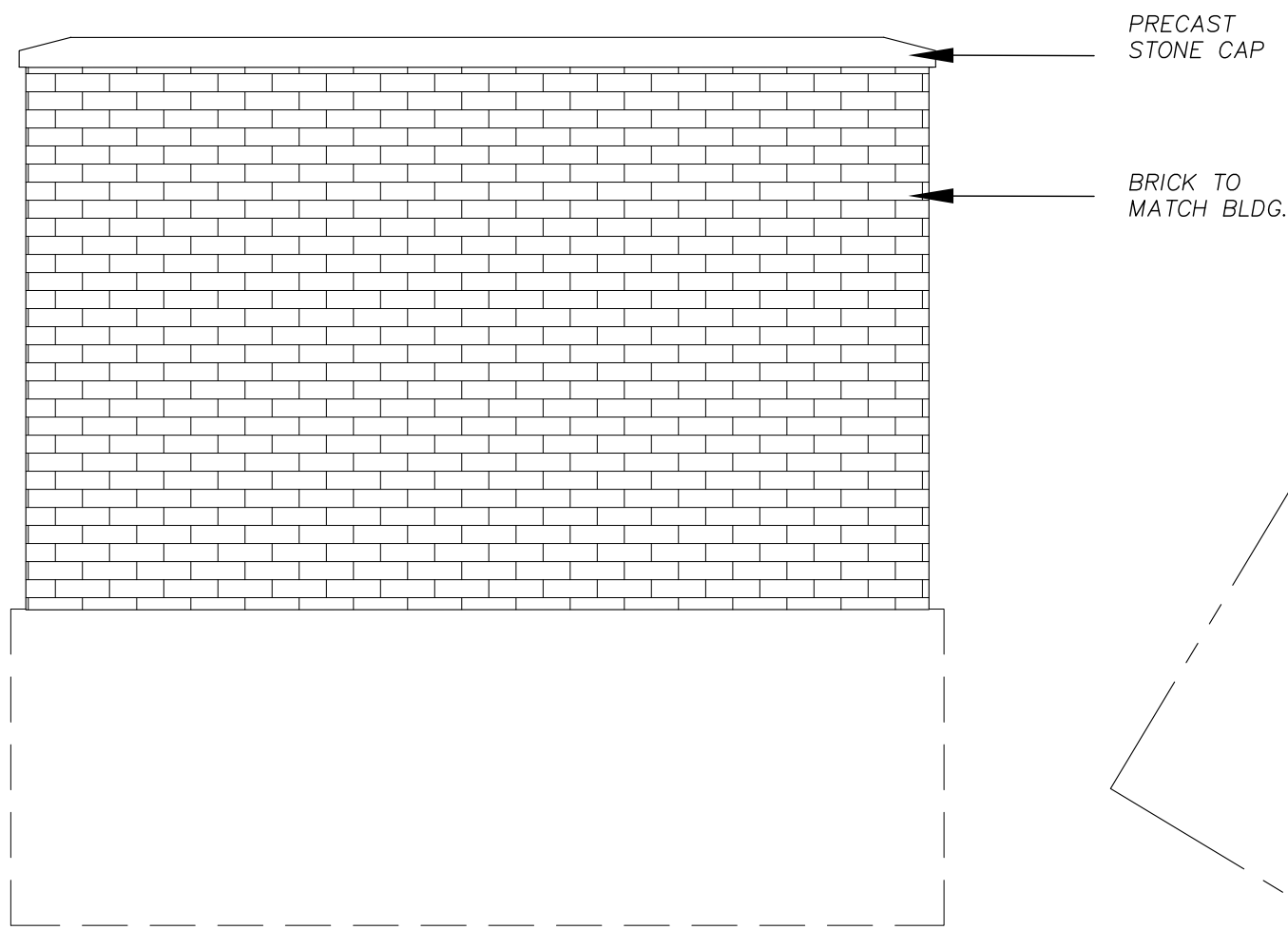
1 HINGE SECTION

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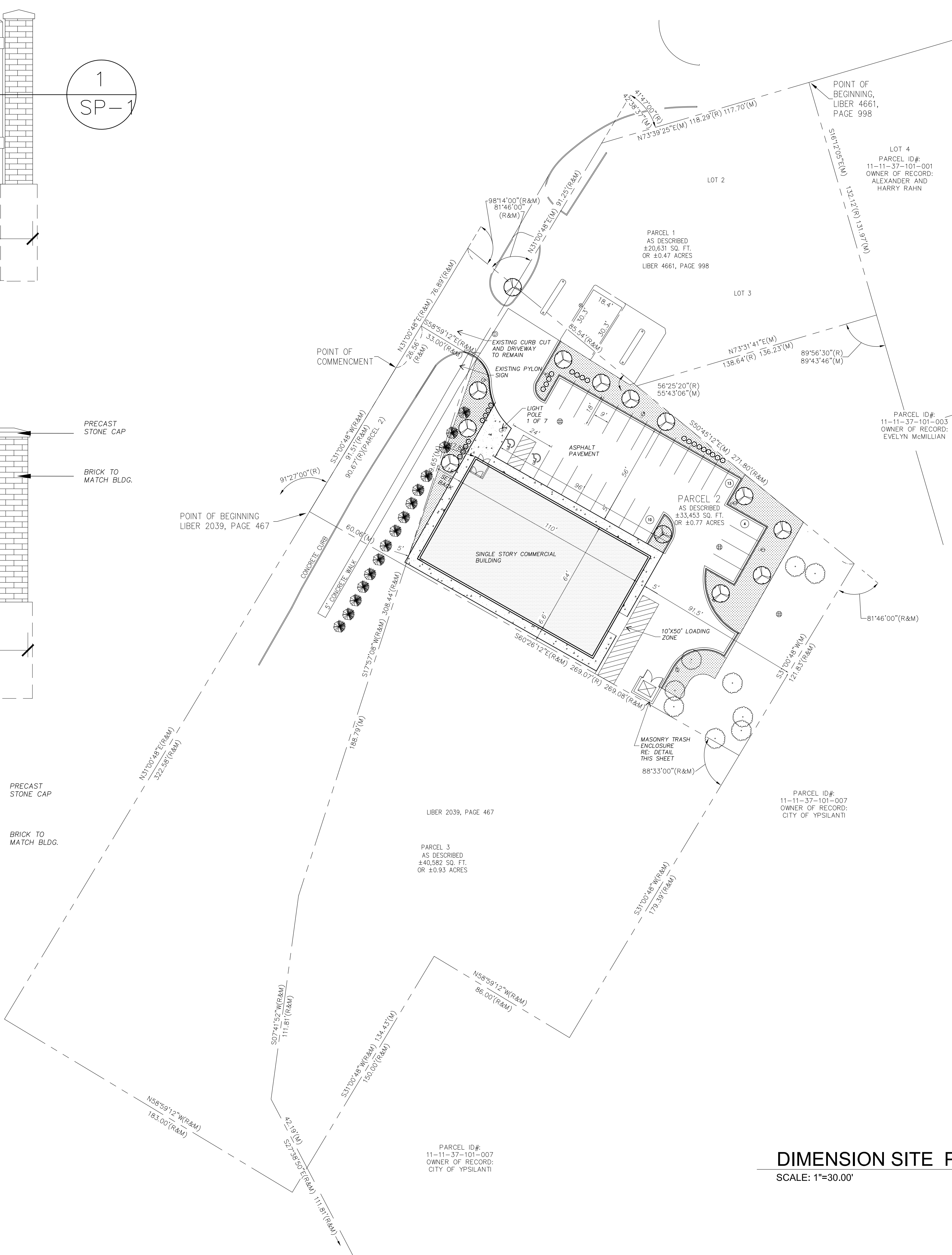
2 HINGE SECTION

SCALE: 1/2"=1'-0"



SIDE ELEVATION

SCALE: 1"=30.00'



DIMENSION SITE PLAN

SCALE: 1"=30.00'



LOCATION MAP



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e-mail: Info@atelierarchitect.com

Project

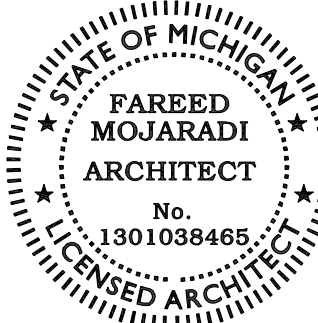
PATIENT STATION

Project No.

2016-25

Certification

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Sheet Title

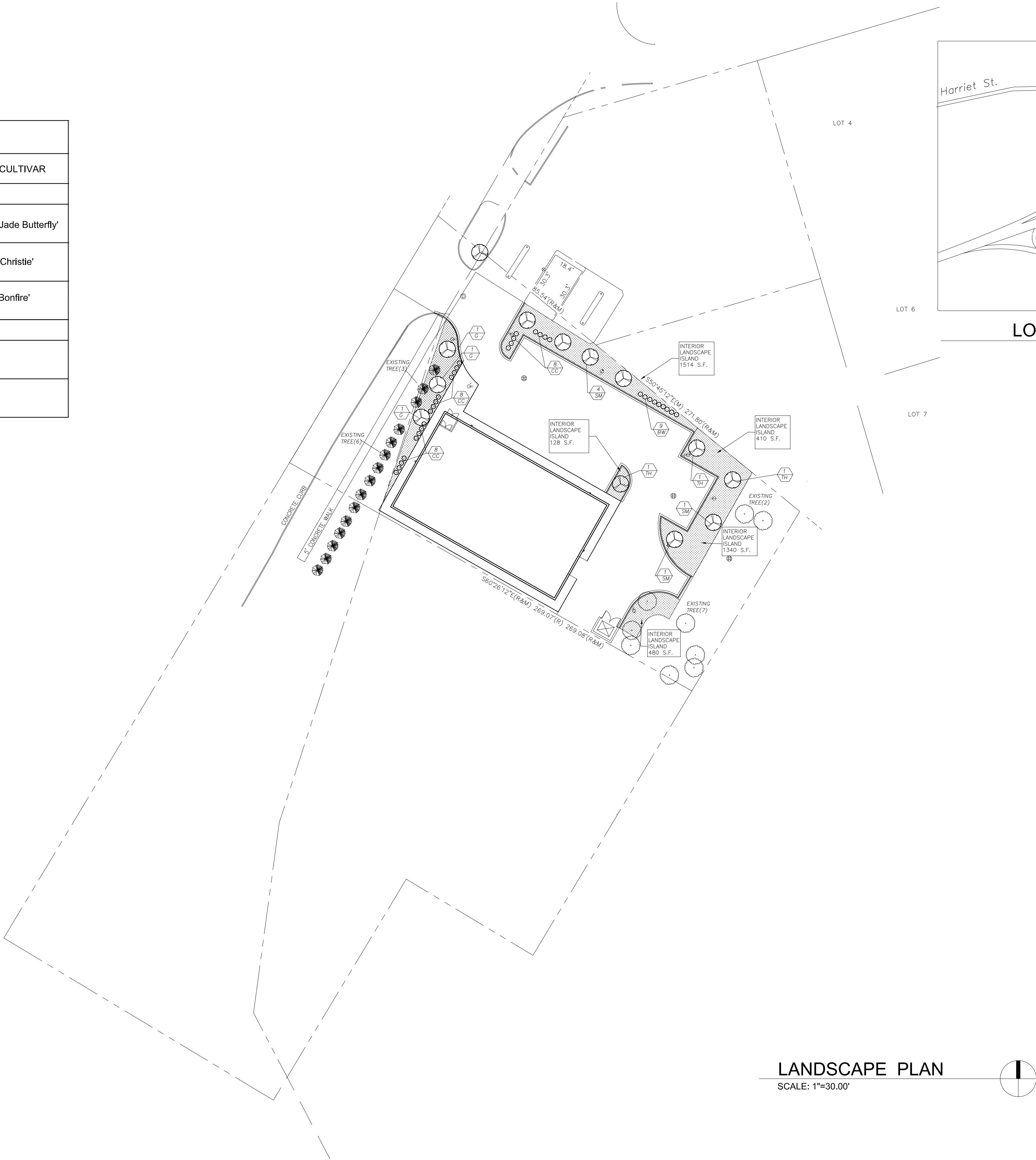
DIMENSION SITE PLAN

Issued Date

SITE PLAN APP. 01 / 18 / 2017

Sheet No.
SP-1

PLANT MATERIAL LIST					
CODE	QTY.	COMMON NAME	BOTANICAL NAME	ROOT TYPE	CULTIVAR
Canopy Trees					
G	3	Ginkgo	Ginkgo Biloba	2.5" B & B	'Jade Butterfly'
TH	3	Thornless Honeylocust	Gleditsia Triacanthos Inermis	3" B & B	'Christie'
SM	6	Sugar Maple	Acer Saccharum	3" B & B	'Bonfire'
Shrubs					
BW	9	Wintergreen Boxwood	Buxus sinica var	3 GAL.	
CC	24	Cranberry Cotoneaster	Cotoneaster Apiculatus	3 GAL.	



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Project

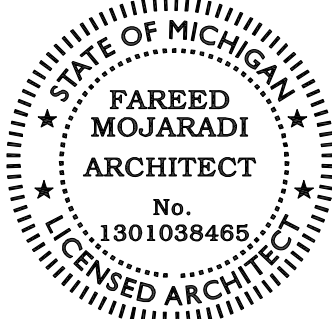
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Sheet Title

LANDSCAPE PLAN

Issued

SITE PLAN APP

Date

01 / 18 / 2017

Sheet No.

L-1

DETERMINATION OF UNDERGROUND DETENTION VOLUME

DETENTION SYSTEM AREA = 31,845 SQ.FT.= 0.731 ACRES

A(LAWN) = 9,303 SQ.FT. = 0.214 ACRES

A(PAVING+BUILDINGS) = 22,542 SQ.FT. = 0.517 ACRES

C(BUILDING)= 0.95, C(PAVEMENT)= 0.95 , C(LAWN)= 0.25

C(AVE.)= (0.517X0.95+0.214X0.25)/0.731 = 0.75

C(AVE.)= 0.75

Qo=0.15X0.731= 0.110 CFS

$Q_o = \frac{Q_a}{CA} = \frac{0.110}{0.75 \times 0.517} = 0.284$

$T_{100} = -25 + \sqrt{\frac{10312.5}{Q_o}} = -25 + \sqrt{\frac{10312.5}{0.284}} = 166 \text{ MIN.}$

$V_{s100} = \frac{16500T}{T+25} - 40Q_oT = \frac{16500 \times 166}{166+25} - 40 \times 0.284 \times 168 = 12,432$

Vs= 12,432 CU. FT./ ACRE IMPERVIOUSNESS

Vt=VsAC = 12,432X0.731X0.75= 6,816

TOTAL VOLUME REQUIRED = 6,816 CU.FT.

REQUIRED 72" PIPES LENGTH= 6,816/28.29 = 241 LF

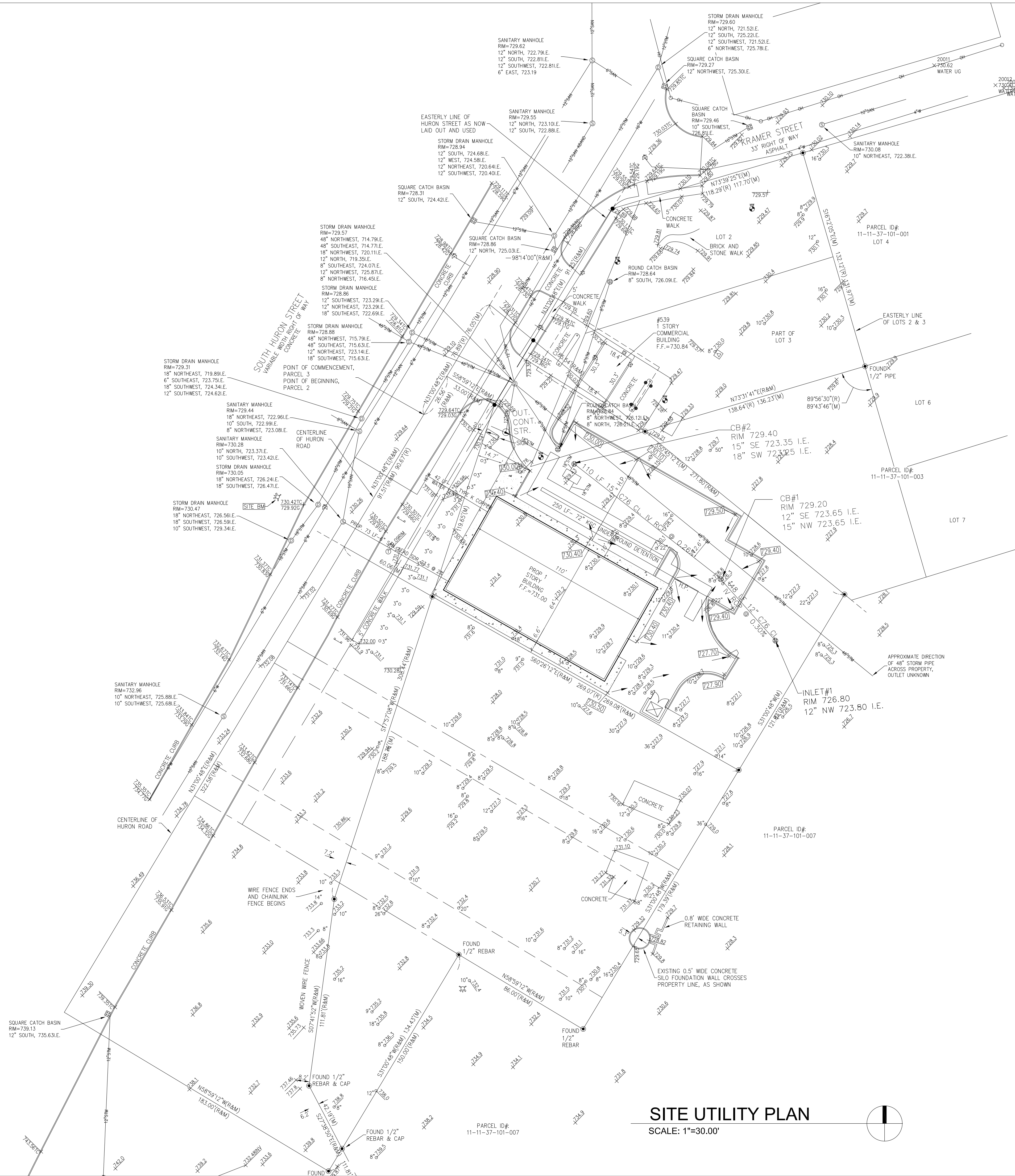
USE 250 LF- 72" KSC PIPES

VOL. = 250X28.29 = 7,072 CU.FT.

TOTAL STORAGE AVAILABLE = 7,072 CU.FT. > 6,816 CU.FT. O.K.

LEGEND:

- FOUND MONUMENT (AS NOTED)
- PROPERTY CORNER
- SQUARE CATCH BASIN
- ⊕ STORM MANHOLE
- ⊙ ROUND CATCH BASIN
- ⊕ FIRE HYDRANT
- ⊕ WATER VALVE
- ⊕ SEWER MANHOLE
- ⊕ GAS METER
- ⊕ EXISTING ELEVATION
- ⊕ TREE, WITH DIAMETER IN INCHES
- ⊕ LIGHT POLE BASE
- ⊕ UTILITY POLE
- ⊕ ELECTRIC METER
- ⊕ ELECTRIC TRANSFORMER
- ⊕ TELEPHONE MANHOLE
- ⊕ BOLLARD
- ⊕ DOUBLE POST SIGN
- ⊕ MONITORING WELL
- ADJOINING BOUNDARY LINE
- EDGE OF ASPHALT
- BOUNDARY LINE
- BUILDING
- BUILDING OVERHANG
- EDGE OF CONCRETE
- 800 CONTOUR MAJOR
- CONTOUR MINOR
- CONCRETE CURB
- EASEMENT
- OVERHEAD UTILITY LINE
- FENCE (AS NOTED)
- PLATTED SUBDIVISION
- RIGHT OF WAY
- SEWER LINE
- EDGE OF SIDEWALK
- STORM DRAIN LINE
- WALL (AS NOTED)
- WATER MAIN



SITE UTILITY PLAN

SCALE: 1"=30.00'



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Project

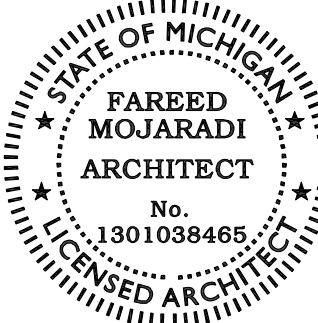
PATIENT STATION

Project No.

2016-25

Certification

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Sheet Title

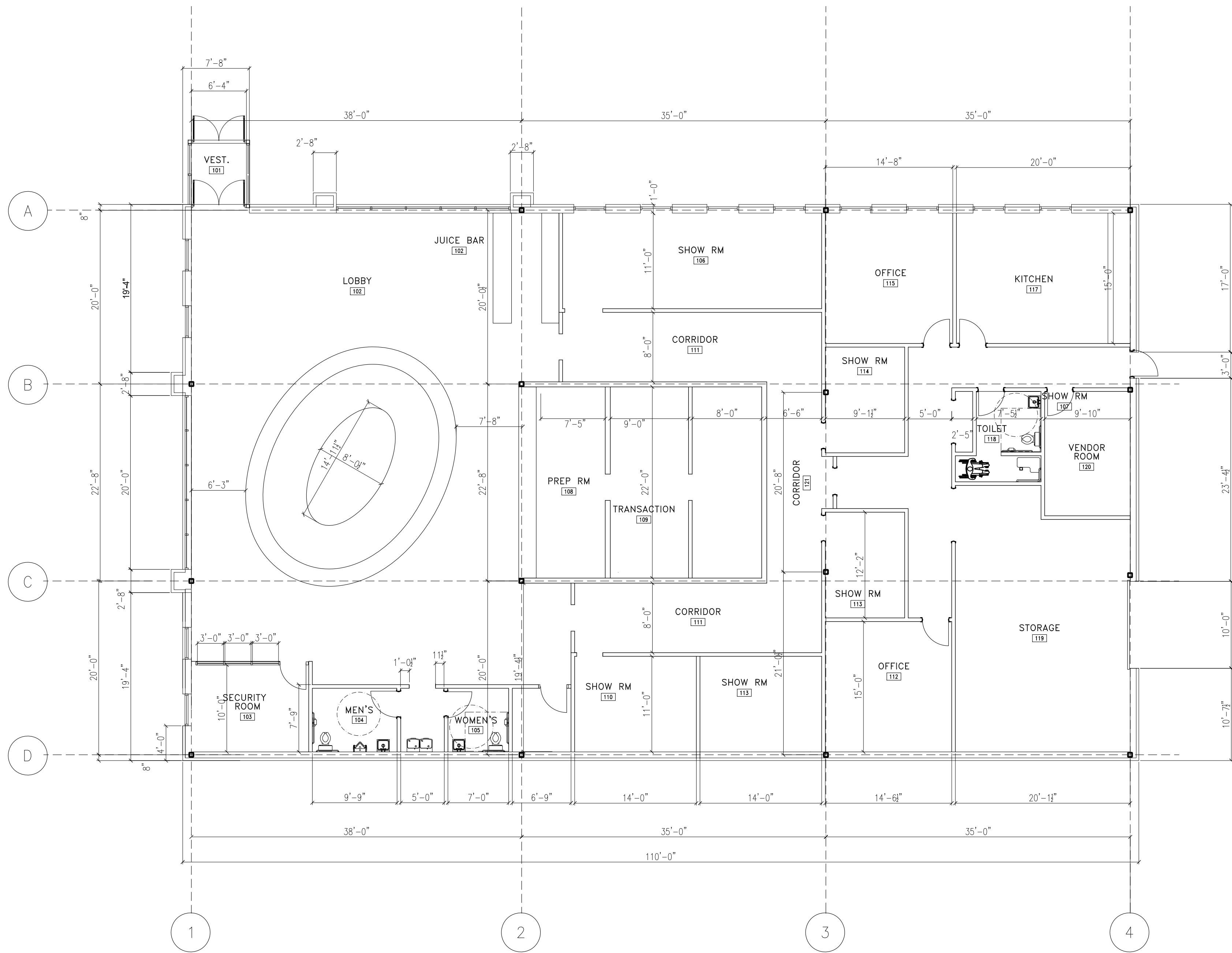
SITE UTILITY PLAN

Issued

BUILDING PERMIT 03 / 27 / 2016
REVISION 1 06 / 23 / 2016

Date

Sheet No.
C-1



FLOOR PLAN
SCALE: 1/8"=1'-0"



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Project

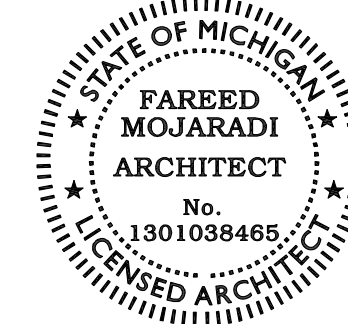
PATIENT STATION

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2016-25

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Sheet Title

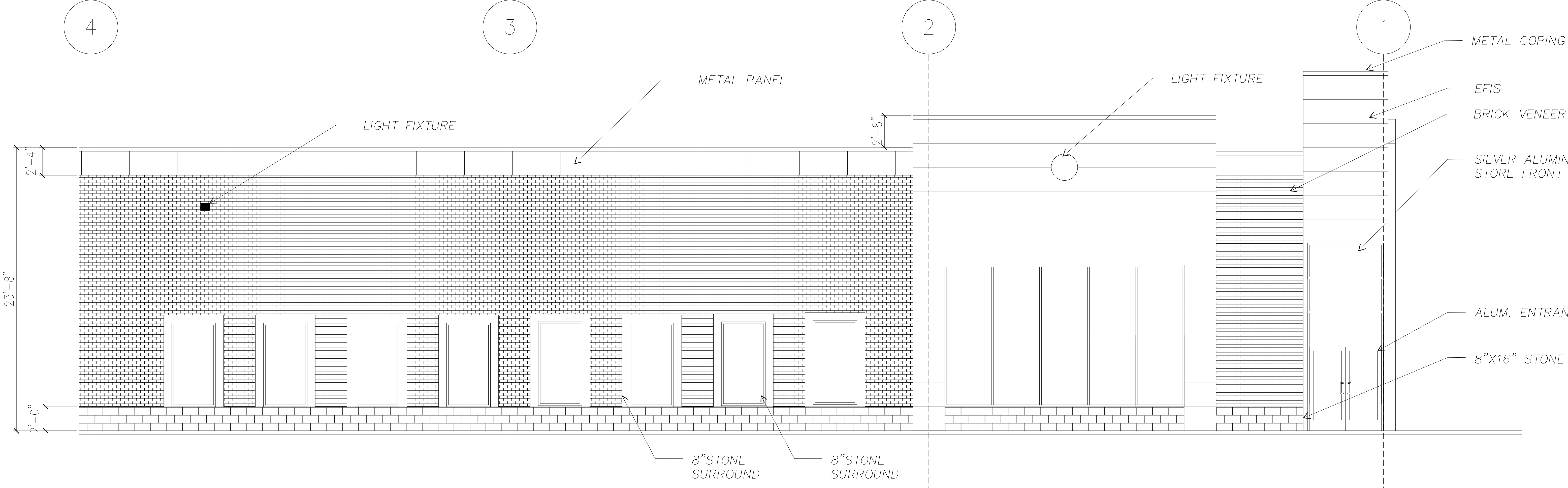
FLOOR PLAN

Issued Date

SITE PLAN APP 01 / 18 / 2017

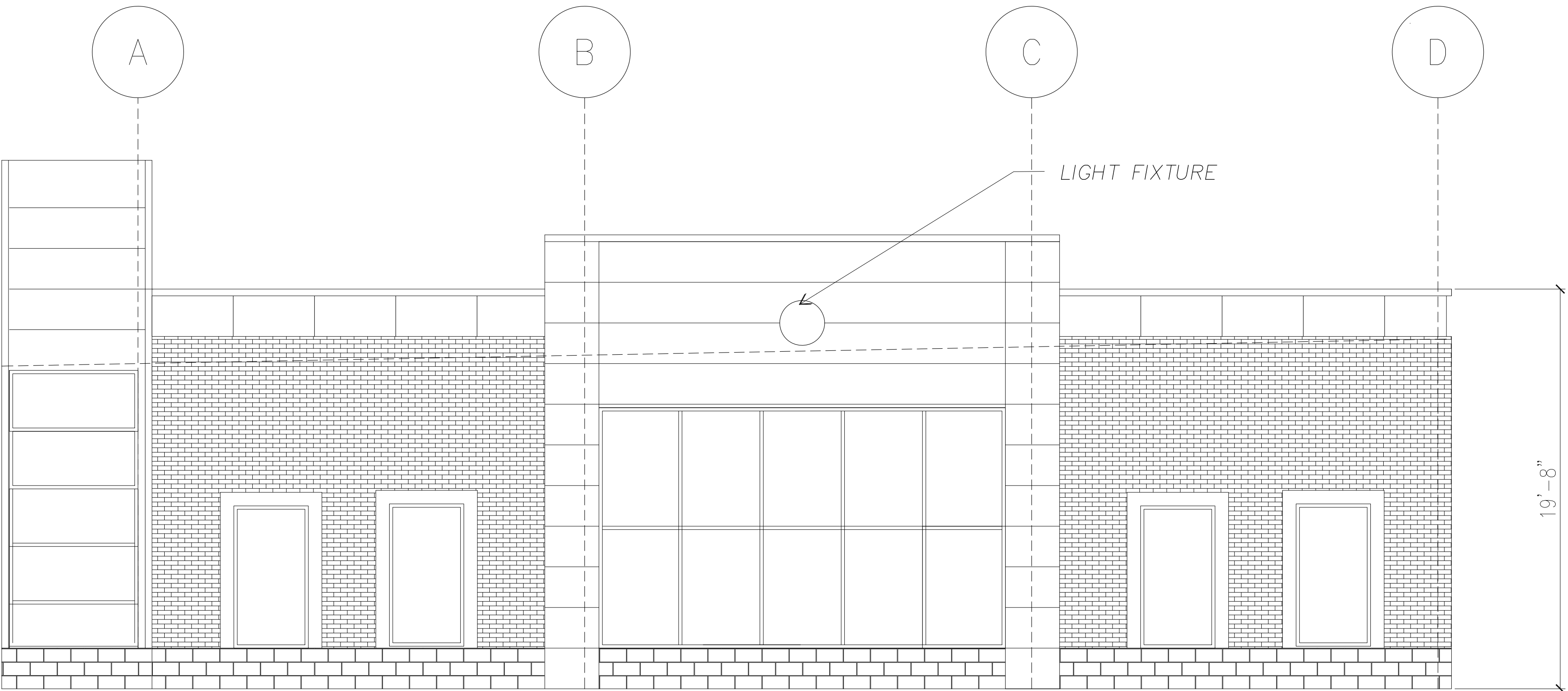
Sheet No.

A-1



NORTH ELEVATION

SCALE: 1/4"=1'-0"



WEST ELEVATION

SCALE: 1/4"=1'-0"



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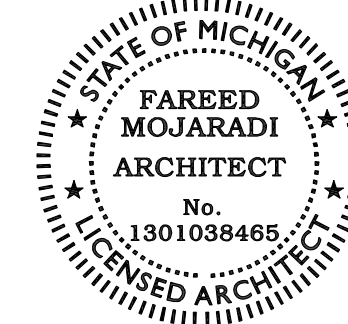
PATIENT STATION

Project No.

2016-25

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Sheet Title

ELEVATIONS

Issued

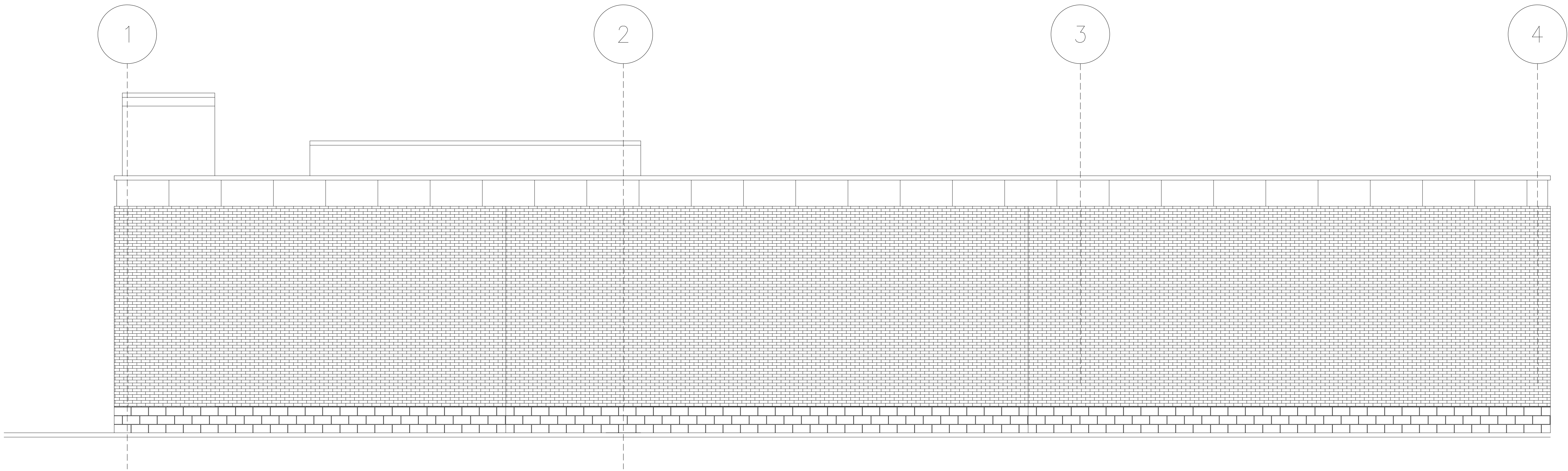
SITE PLAN APP

Date

01 / 18 / 2017

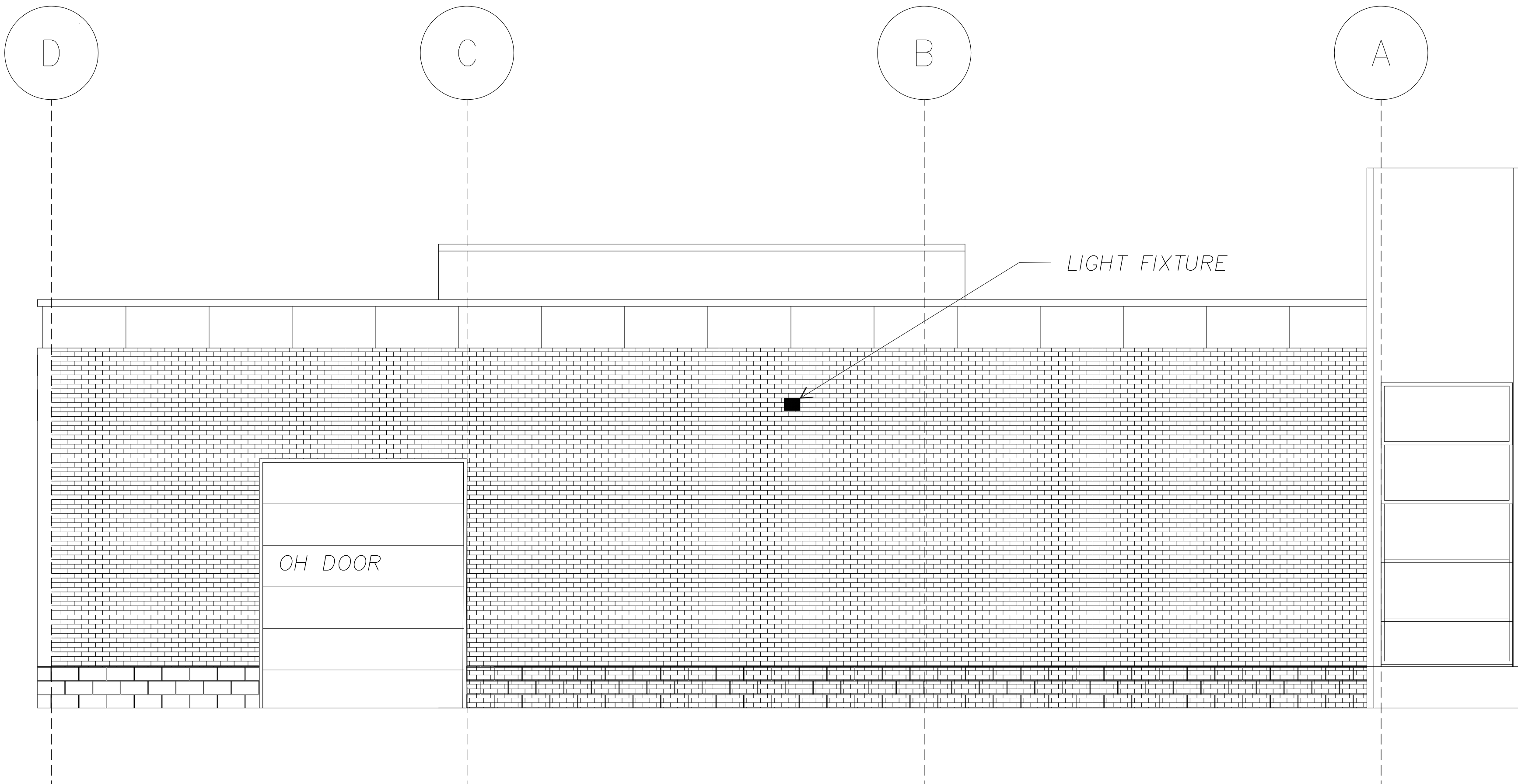
Sheet No.

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SOUTH ELEVATION

SCALE: 1/4"=1'-0"



EAST ELEVATION

SCALE: 1/4"=1'-0"



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Project

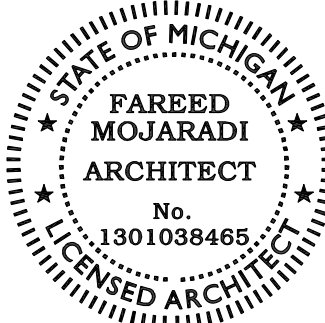
PATIENT STATION

Project No.

2016-25

Certification

I here by certify that the construction documents contained herein were prepared under my direct supervision and I am a registered architect under the laws of the State of Michigan.



Sheet Title

ELEVATIONS

Issued

Date

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Sheet No.

A-3