GIS REGISTRY
Cover Sheet

May, 2009
(RR 5367)

Source Property Information

CLOSURE DATE: June 10, 2010

BRRTS #: **03-09-000245**

FID #: 609015880

ACTIVITY NAME: Former Chieftain Oil

DATCP #:

PROPERTY ADDRESS: 10 West River Street

COMM #: 54729241610

MUNICIPALITY: Chippewa Falls, Wisconsin

PARCEL ID #: 22808064160011408

***WTM COORDINATES:**

X: **410240** Y: **496671**

** Coordinates are in WTM83, NAD83 (1991)*

WTM COORDINATES REPRESENT:

- (●) Approximate Center Of Contaminant Source
- ( ) Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

- [x] Groundwater Contamination > ES *(236)*
  - [x] Contamination in ROW
  - [x] Off-Source Contamination

  (***note:*** *for list of off-source properties see "Impacted Off-Source Property")*

- [x] Soil Contamination > *RCL or **SSRCL *(232)*
  - [x] Contamination in ROW
  - [ ] Off-Source Contamination

  (***note:*** *for list of off-source properties see "Impacted Off-Source Property")*

Land Use Controls:

- [x] N/A (*Not Applicable*)
- [ ] Soil: maintain industrial zoning *(220)*

  (***note:*** *soil contamination concentrations between non-industrial and industrial levels)*
- [ ] Structural Impediment *(224)*
- [ ] Site Specific Condition *(228)*
- [ ] Cover or Barrier *(222)*

  (***note:*** *maintenance plan for groundwater or direct contact)*
- [ ] Vapor Mitigation *(226)*
- [ ] Maintain Liability Exemption *(230)*

  (***note:*** *local government or economic development corporation)*

Monitoring Wells:

Are all monitoring wells properly abandoned per NR 141? *(234)*

(●) Yes ( ) No ( ) N/A

** Residual Contaminant Level*
***Site Specific Residual Contaminant Level*

GIS Registry Checklist

Form 4400-245 (R 3/10)

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #: 03-09-000245 PARCEL ID #: 22808064160011408

ACTIVITY NAME: Former Chieftain Oil WTM COORDINATES: X: 410240 Y: 496671

CLOSURE DOCUMENTS (the Department adds these items to the final GIS packet for posting on the Registry)

- [x] **Closure Letter**
- [ ] **Maintenance Plan** (*if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.*)
- [ ] **Continuing Obligation Cover Letter** (for property owners affected by residual contamination and/or continuing obligations)
- [ ] **Conditional Closure Letter**
- [ ] **Certificate of Completion (COC)** (for VPLE sites)

SOURCE LEGAL DOCUMENTS

- [x] **Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.
  Note: *If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*
- [x] **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map *for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map.* (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).

  Figure #: **Title:**
- [x] **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

MAPS (meeting the visual aid requirements of s. NR 716.15(2)(h))

Maps must be no larger than 11 x 17 inches unless the map is submitted electronically.

- [x] **Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.
  Note: *Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.*

  Figure #: 1 **Title: Site Location**
- [x] **Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.

  Figure #: 1 **Title: Site Plan**
- [x] **Soil Contamination Contour Map:** For sites closing with residual soil contamination, this map is to show the location of all contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL)as determined under s. NR 720.09, 720.11 and 720.19.

  Figure #: 2 **Title: Estimated Extent of Residual Soil Contamination**

BRRTS #: 03-09-000245 ACTIVITY NAME: Former Chieftain Oil

MAPS (continued)

☒ **Geologic Cross-Section Map:** A map showing the source location and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL). If groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES) when closure is requested, show the source location and vertical extent, water table and piezometric elevations, and locations and elevations of geologic units, bedrock and confining units, if any.

Figure #: 1 **Title: Geologic Cross-Section A-A'**

Figure #: **Title:**

☒ **Groundwater Isoconcentration Map:** For sites closing with residual groundwater contamination, this map shows the horizontal extent of all groundwater contamination exceeding a ch. NR140 Preventive Action Limit (PAL) and an Enforcement Standard (ES). Indicate the direction and date of groundwater flow, based on the most recent sampling data.
Note: *This is intended to show the total area of contaminated groundwater.*

Figure #: 3 **Title: Estimated Extent of Groundwater Contamination**

☒ **Groundwater Flow Direction Map:** A map that represents groundwater movement at the site. If the flow direction varies by more then 20° over the history of the site, submit 2 groundwater flow maps showing the maximum variation in flow direction.

Figure #: 2 **Title: Groundwater Contours March 3, 2009**

Figure #: 2 **Title: Groundwater Contours April 18, 2007**

TABLES (meeting the requirements of s. NR 716.15(2)(h)(3))

Tables must be no larger than 11 x 17 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

☒ **Soil Analytical Table:** A table showing remaining soil contamination with analytical results and collection dates.
Note: This is one table of results for the contaminants of concern. Contaminants of concern are those that were found during the site investigation, that remain after remediation. It may be necessary to create a new table to meet this requirement.

Table #: 3; 2 **Title: Post Excavation Soil Analytical Results; Hydraulic Probe Soil Analytical Results**

☒ **Groundwater Analytical Table:** Table(s) that show the most recent analytical results and collection dates, for all monitoring wells and any potable wells for which samples have been collected.

Table #: 1 **Title: Groundwater Analytical Results**

☒ **Water Level Elevations:** Table(s) that show the previous four (at minimum) water level elevation measurements/dates from all monitoring wells. If present, free product is to be noted on the table.

Table #: 1 **Title: Groundwater Analytical Results**

IMPROPERLY ABANDONED MONITORING WELLS

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.
Note: *If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.*

☒ **Not Applicable**

☐ **Site Location Map:** A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.
Note: *If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.*

Figure #: **Title:**

☐ **Well Construction Report:** Form 4440-113A for the applicable monitoring wells.

☐ **Deed:** The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

☐ **Notification Letter:** Copy of the notification letter to the affected property owner(s).

BRRTS #: 03-09-000245 ACTIVITY NAME: Former Chieftain Oil

NOTIFICATIONS

Source Property

☒ **Not Applicable**

☐ **Letter To Current Source Property Owner:** If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying current source property owner.

Off-Source Property

Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

☐ **Not Applicable**

☐ **Letter To "Off-Source" Property Owners:** Copies of all letters sent by the Responsible Party (RP) to owners of properties with groundwater exceeding an Enforcement Standard (ES), and to owners of properties that will be affected by a land use control under s. 292.12, Wis. Stats.
Note: *Letters sent to off-source properties regarding residual contamination must contain standard provisions in Appendix A of ch. NR 726.*

Number of "Off-Source" Letters:

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying any off-source property owner.

☐ **Deed of "Off-Source" Property:** The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies).** This does not apply to right-of-ways.
Note: *If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*

☒ **Letter To "Governmental Unit/Right-Of-Way" Owners:** Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).

Number of "Governmental Unit/Right-Of-Way Owner" Letters: 1

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Matthew J. Frank, Secretary
Scott Humrickhouse, Regional Director

West Central Region Headquarters
1300 W. Clairemont Avenue
PO Box 4001
Eau Claire, Wisconsin 54702-4001
Telephone 715-839-3700
FAX 715-839-6076
TTY Access via relay - 711

June 10, 2010

Mr. Jayson Smith
City of Chippewa Falls
30 West Central Street
Chippewa Falls, Wisconsin 54729

SUBJECT: Final Closure, Former Chieftain Oil, 10 West River Street, Chippewa Falls, Wisconsin. BRRTS# 03-09-000245.

Dear Mr. Smith:

On August 5, 2009, the West Central Region (WCR) Closure Committee reviewed your request for closure of the case described above. The WCR Closure Committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. On August 5, 2009, you were notified that the Closure Committee had granted conditional closure to this case.

On May 6, 2010, the Department received information or documentation indicating that you have complied with the requirements for final closure. This included abandonment of monitoring wells and submittal of the abandonment forms, submittal of GIS registry information, and submittal of any outstanding VPLE fees. Based on the correspondence and data provided, it appears that your case meets the closure requirements in ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time.

Please be aware that this case may be reopened pursuant to s. NR 726.09, Wisconsin Administrative Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare, or the environment unless a Certificate of Completion (COC) is issued by the Department under the Voluntary Party Liability Exemption (VPLE) Program.

Certificate of Completion

Besides approval of the closure of this site in the August 5, 2009, meeting, the WCR Closure Committee stated that this site is eligible for a COC under the VPLE program. The WCR Closure Committee also agreed that the City of Chippewa Falls is eligible for the "off-site exemption" under s. 292.13, Wis. Stats., for the presence of trichloroethylene (TCE) and vinyl chloride found in groundwater during the investigation and the off-site exemption could apply to future property owners that meet the requirements under the statute.

A requirement of getting the COC was that environmental insurance be purchased due to benzene groundwater enforcement standard (ES) exceedances. You decided not to proceed with obtaining a COC, as the cost of the groundwater insurance was prohibitive. However, if you decide in the future to obtain the COC, there are options to do this without the environmental insurance. One way would be to demonstrate that the benzene concentrations in monitoring well MW-5 are less than the ES. If you choose to proceed with this in the future, please contact us, and we can talk to you about the specifics that would be required at that time.

GIS Registry

The conditions of case closure set out below in this letter require that this site be listed on the Remediation and Redevelopment Program's GIS Registry. The specific reasons are summarized below:

- Residual soil contamination exists that must be properly managed should it be excavated or removed
- Groundwater contamination is present above Chapter NR 140 enforcement standards

This letter and information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit the RR Sites Map page at: http://dnr.wi.gov/org/aw/rr/gis/index.htm. If the property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line http://dnr.wi.gov/org/water/dwg/3300254.pdf or at the web address listed above for the GIS Registry.

Residual Soil Contamination

Residual soil contamination remains in the right-of-way as indicated in the information submitted to the Department of Natural Resources (DNR). If this area is disturbed in the future, the soils need to be properly characterized and disposed, and the DNR needs to be notified of these activities. All current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

Residual Groundwater Contamination

Groundwater impacted by benzene contamination greater than enforcement standards set forth in ch. NR140, Wis. Adm. Code, is present on this contaminated property. For more detailed information regarding the locations where groundwater samples have been collected (i.e., monitoring well locations) and the associated contaminant concentrations, refer to the Remediation and Redevelopment Program's GIS Registry at http://dnr.wi.gov/org/aw/rr/gis/index.htm.

Dewatering Permits

The Department's Watershed Management Program regulates point source discharges of contaminated water, including discharges to surface waters, storm sewers, pits or to the ground surface. This includes discharges from construction related dewatering activities, including utility and building construction.

Based on the concentrations of contaminants remaining in groundwater at this location, it appears likely that dewatering activities would require a permit from the Watershed Management Program. If you or any other person plan to conduct such activities, you or that person must contact that program, and if necessary, apply for the necessary discharge permit. Additional information regarding discharge permits is available at http://www.dnr.state.wi.us/org/water/wm/ww/

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact me at 715.839.3765.

Sincerely,

Gina Keenan
Hydrogeologist

cc: SEH
WCR case file

Quit Claim Deed

Document Number | **Document Title**

DOCUMENT# 612514

Recorded
SEP. 18, 2000 AT 11:40AM

Signed: Marge L. Geissler
MARGE L. GEISSLER
REGISTER OF DEEDS
CHIPPEWA COUNTY, WI
Fee Amount: $10.00
Fee Exempt 77.25-(2)

Recording Area

Name and Return Address
CITY CLERK
~~Attorney James B. Sherman~~
30 W. CENTRAL ST.
~~711 N. Bridge Street, Rm. 113~~
Chippewa Falls WI 54729

Parcel # 22808-0641-6001-1408

Parcel Identification Number (PIN)

Chippewa County, a body corporate pursuant to Resolution # 35-00 duly passed on July 11, 2000, does hereby quit claim to the City of Chippewa Falls, Wisconsin the following described real estate in Chippewa County, State of Wisconsin:

WITNESSETH, That the said party of the first part, for and in consideration of the sum and acknowledged, has quit claimed to the party of the second part and to its heirs and assigns forever, the following described real estate, situated in the County of Chippewa, State of Wisconsin, to-wit:

The East 34 feet of Lot Eight (8), Block Fourteen (14) of the Original Plat of the City of Chippewa Falls .

Subject to an easement across the West 6 feet of said East 34 feet of Lot Eight (8). The purpose of this easement is to create a part of a driveway easement for ingress and egress. Said easement shall run with the land.

Lot Nine (9), Block Fourteen (14) of the Original Plat of the City of Chippewa Falls.

Lot Twelve (12), Block Fourteen (14) of the Original Plat of the City of Chippewa Falls, except the Northwesterly 33 feet of said Lot Twelve (12), being more particularly described in the Warranty Deed recorded in the Chippewa County Register of Deeds Office in Volume 158 of Deeds, Page 45.

Subject to : easements, exceptions, reservations, and restrictions of record, if any; municipal and zoning ordinances, and existing highways.

This is not Homestead Property.

Dated this 25th day of August, 2000.

_____ (SEAL)

_____

_____ (SEAL)

_____

Kathleen M. Bernier (SEAL)
Kathleen Bernier, County Clerk

Michael J. Murphy (SEAL)
Michael J. Murphy, County Board Chairman

CHIPPEWA COUNTY CORPORATE SEAL WISCONSIN

AUTHENTICATION

Signatures authenticated this _____ day of _____, 2000

_____

* _____

TITLE: MEMBER OF STATE BAR OF WISCONSIN

This instrument was drafted by James B. Sherman
Chippewa County Corporation Counsel
711 N. Bridge Street
Chippewa Falls, WI 54729
State Bar # 1001855

ACKNOWLEDGMENT

STATE OF WISCONSIN
}ss.
Chippewa County

Personally came before me, this 25th day of August the above named Kathleen M. Bernier and Michael J. Murphy

To me known to be the person s who executed the Foregoing instrument, and acknowledged the same.

Lisa A. Merrell
* Lisa A. Merrell

Notary Public Chippewa County, Wisconsin

My Commission is permanent. (If not, state expiration date:)
1/18/, 2004.)

(*Signatures may be authenticated or acknowledged. Both are not necessary.)

Former Chieftain Oil

Parcel # 22808-0641-60011408

Scale: 1 in = 100 ft	Township 28 Range 08	Print this page

Disclaimer: This drawing is a compilation of records as they appear in the Chippewa County offices affecting the area shown and is to be used only for reference purposes.

Legend

N

Section Lines	Property Lines	Water Lines
Qtr/Qtr & Leader Lines	Misc Lines	Parcels Layer

Notes:
Enter additional data here

I, Jayson Smith, assert to the best of my knowledge that the following legal description describes the former Chieftain Oil parcel located at 10 W. River Street in Chippewa Falls, Wisconsin, which is applicable to the Wisconsin Department of Natural Resources Bureau of Remediation and Redevelopment Tracking System site number 03-09-000245 (Former Chieftain Oil). I also assert that no other properties in the vicinity, other than the parcel described below, are associated with the former Chieftain Oil site.

9-9-09

Jayson Smith, City Planner
City of Chippewa Falls

Date

Property Legal Description for Parcel # 22808-0641-60011408:
Lot Nine (9), Block Fourteen (14) of the Original Plat of the City of Chippewa Falls and Lot Twelve (12), Block Fourteen (14) of the Original Plat of the City of Chippewa Falls, except the Northwesterly 33 feet of said Lot Twelve (12), being more particularly described in the Warranty Deed recorded in the Chippewa County Register of Deeds Office in Volume 158 of Deeds, Page 45.

REPRODUCED FROM

USGS CHIPPEWA FALLS QUADRANGLE

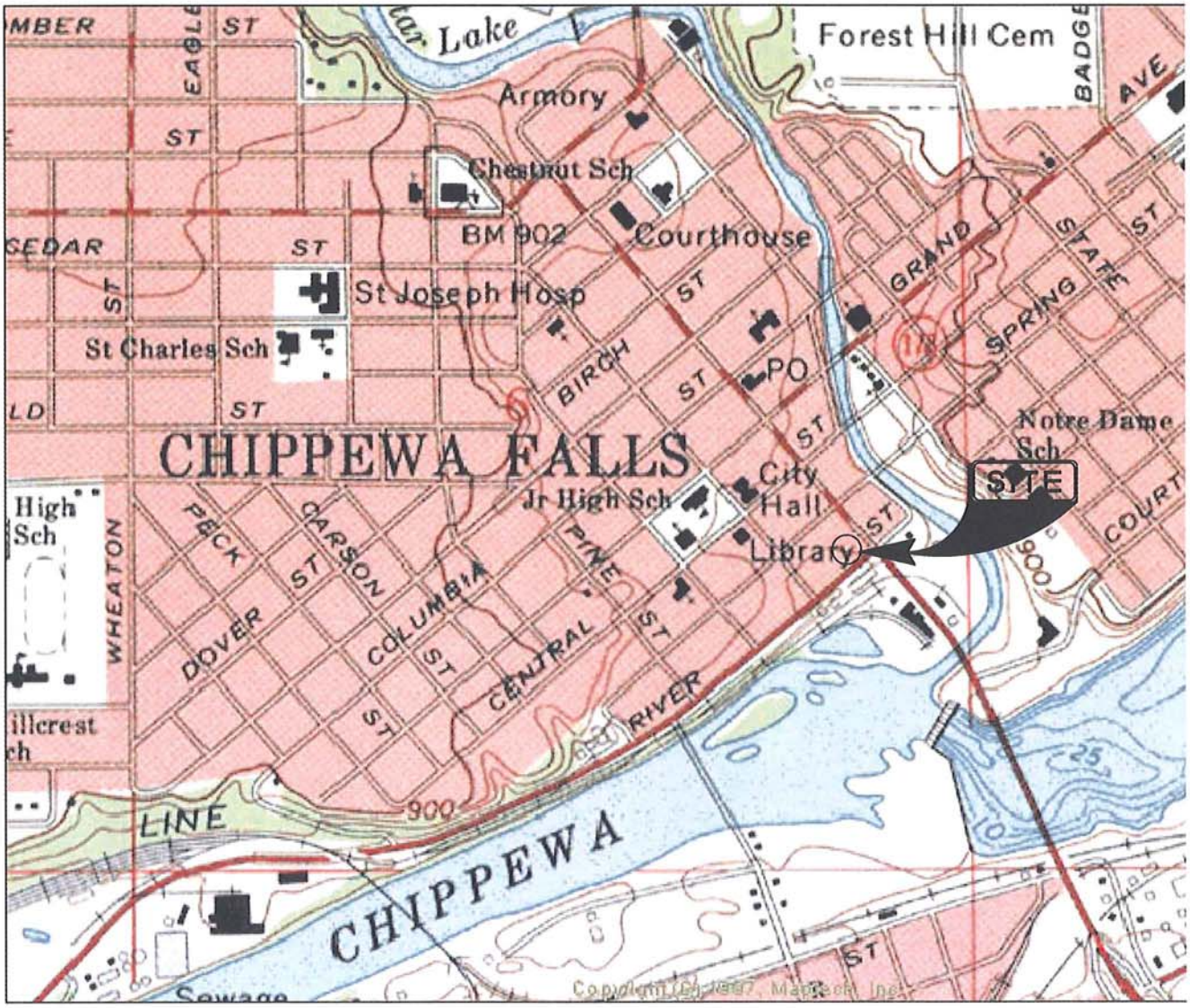
WISCONSIN – CHIPPEWA CO. 7.5 MINUTE SERIES

1981

N

SCALE IN FEET

0 500 1000 2000



NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	08/06/09	GIS REGISTRY	RJH	11/01	KEA	11/01				

SEH

FORMER CHEIFTAIN OIL SITE
GIS REGISTRY

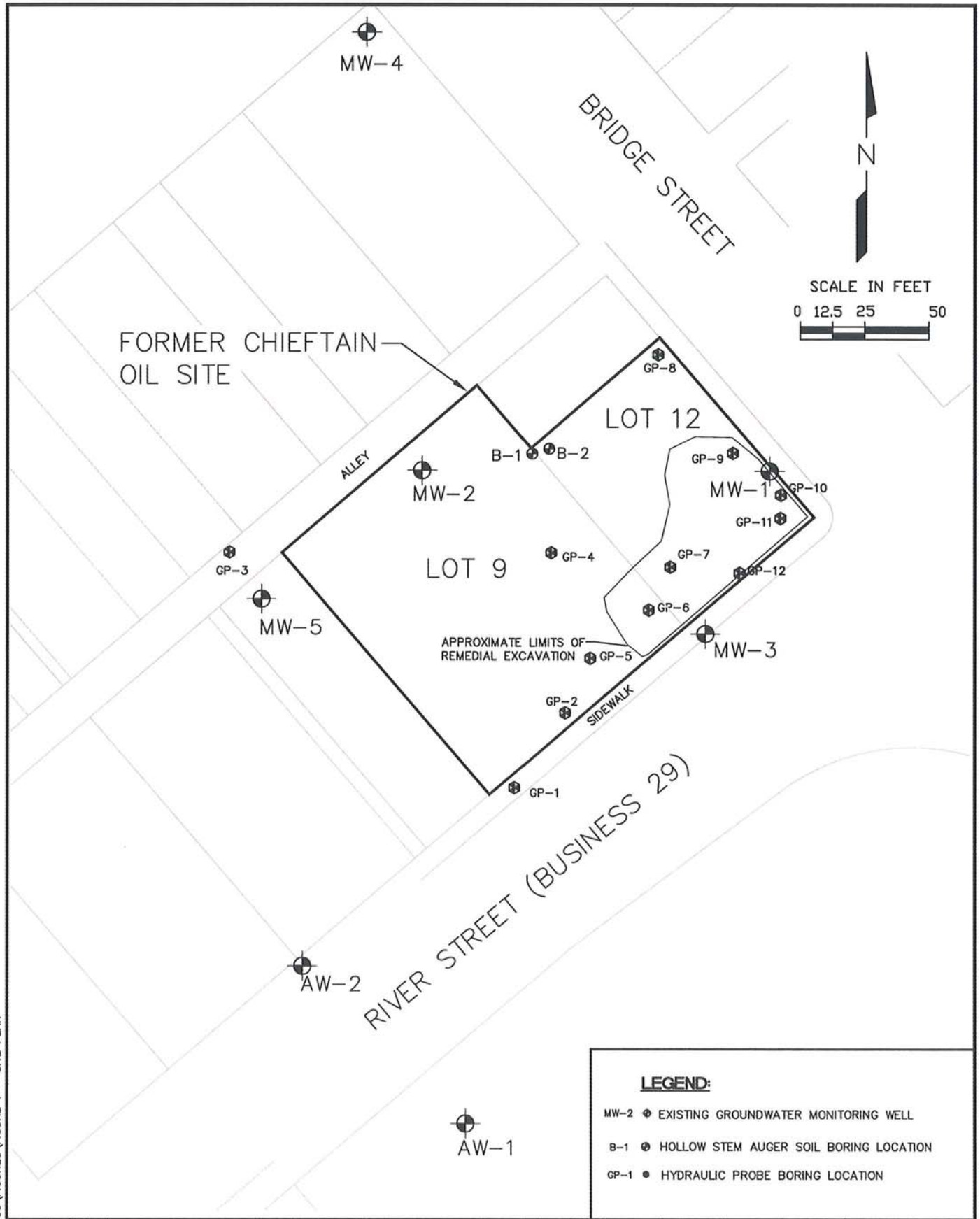
FIGURE 1
SITE LOCATION

PROJ. NO. CFCIT0201.00

DATE 08/06/09

1 / 1

E:\WASTE\CFCIT\0201\SI WORK PLAN\FIGURE 1



NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	08/10/09	GIS REGISTRY	RJH	11/01			KEA	03/09	MFR	03/09

SEH

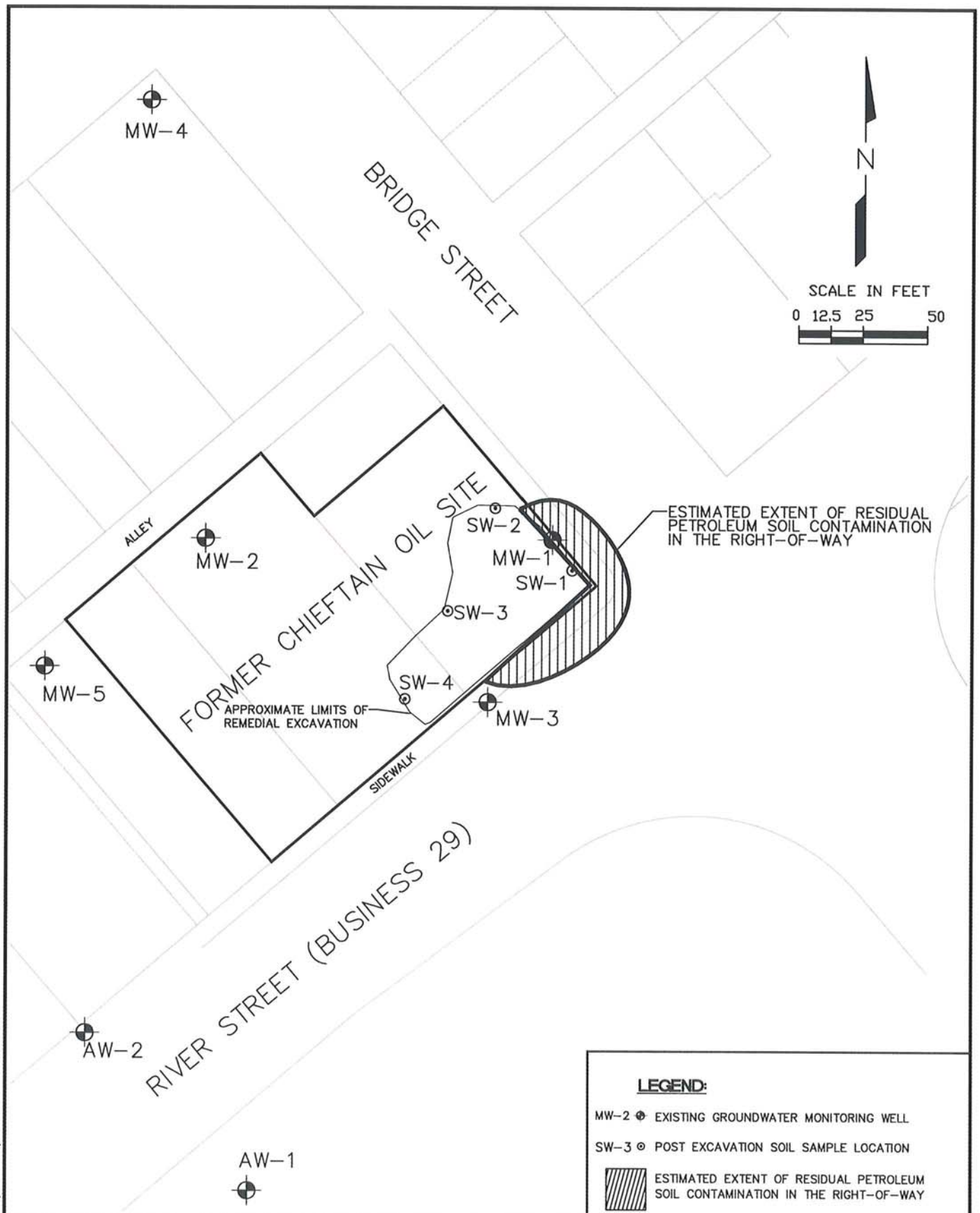
CITY OF CHIPPEWA FALLS
FORMER CHIEFTAIN OIL SITE

FIGURE 1
SITE PLAN

PROJ. NO. CFCIT0201.00
DATE 08/10/09

1 / 2

P:\AE\C\CFCIT\020100\FIGURES\FIGURE 1 - SITE PLAN



NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	08/06/09	GIS REGISTRY	RJH	11/01			KEA	03/09	MFR	03/09

SEH

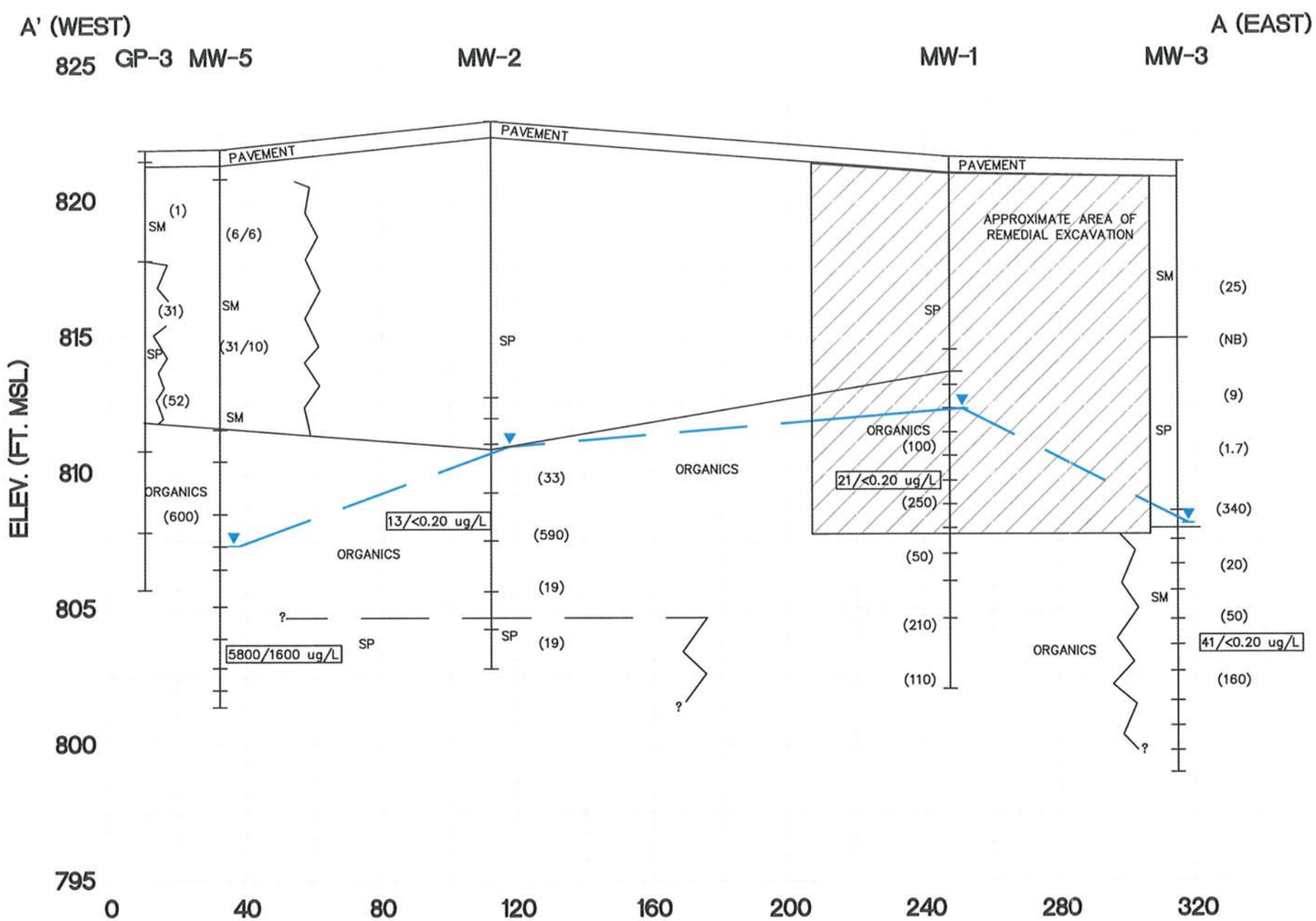
CITY OF CHIPPEWA FALLS
FORMER CHIEFTAIN OIL SITE

FIGURE 2
ESTIMATED EXTENT OF RESIDUAL SOIL CONTAMINATION

PROJ. NO. CFCIT0201.00
DATE 08/06/09

2 / 2

P:\AE\C\CFCIT\020100\FIGURES\FIGURE 1 - SITE PLAN

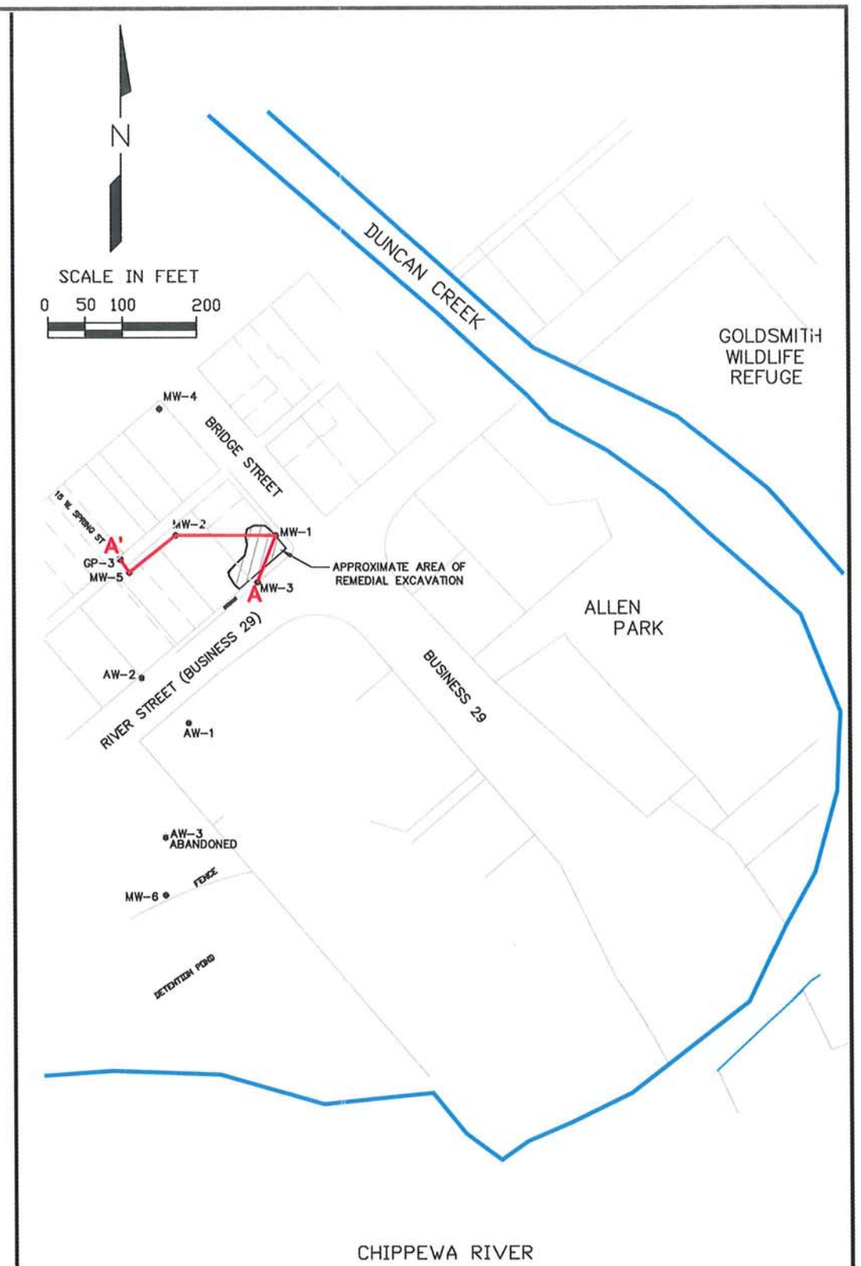


LEGEND:

SP = POORLY GRADED SAND
SM = SILTY SAND
ORGANICS = WOOD DEBRIS FILL
(6/6) = FID/PID HEADSPACE GAS MEASUREMENT (lu)
(33) = PID HEADSPACE GAS MEASUREMENT (lu)
▼ = GW ELEV. 4/18/07
13/<0.20 ug/L = VINYL CHLORIDE CONC. (4-18-07/3-3-09)
= SCREENED INTERVAL

SCALE IN FEET: 0, 2.5, 5

SCALE IN FEET: 0 10 20 40



NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		QC CHECK	
1	07/13/09	VINYL CHLORIDE LETTER TO GINA KEENAN	RJH	06/09	DRR	06/09	DRR	06/09

SEH

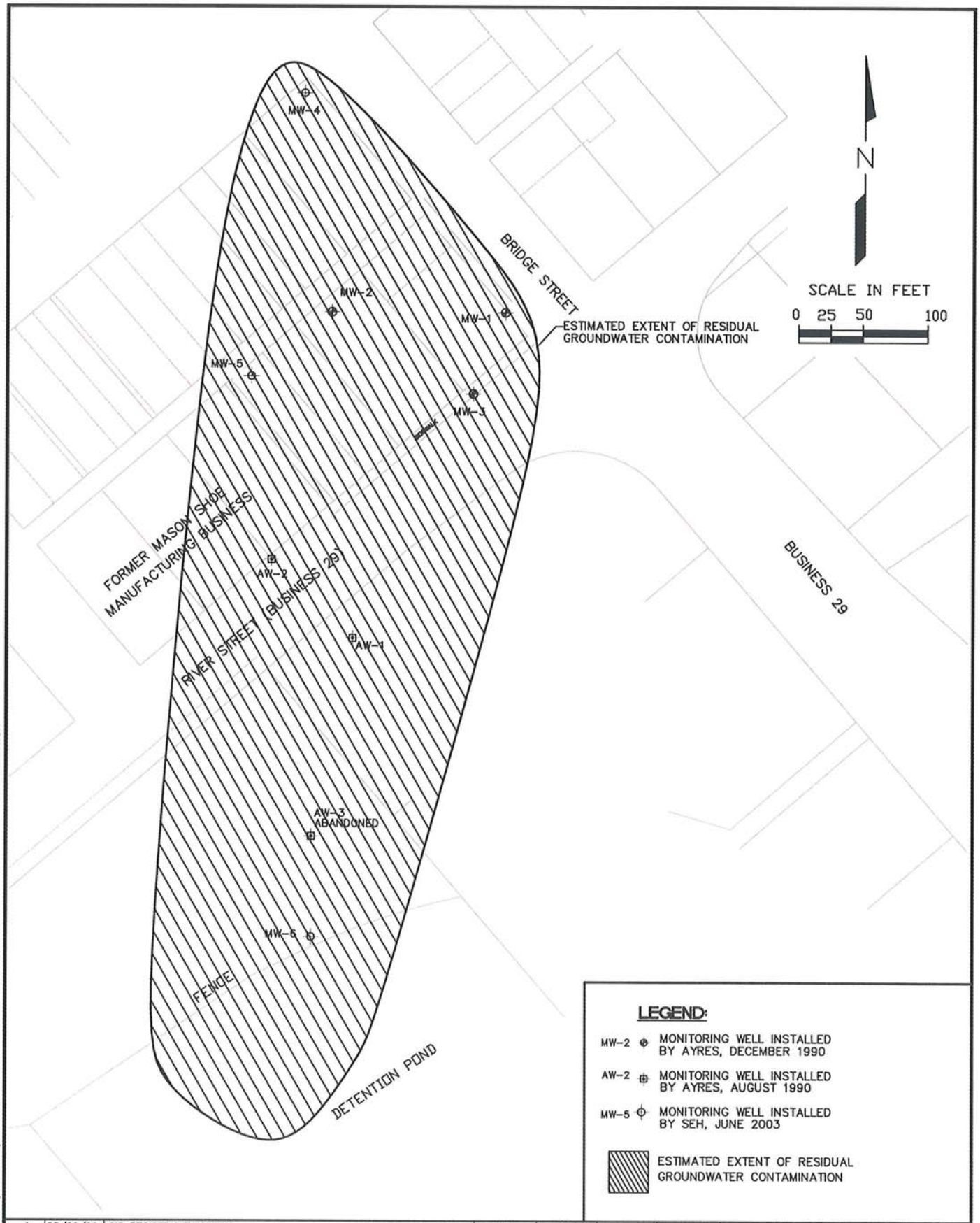
CITY OF CHIPPEWA FALLS
FORMER CHIEFTAIN OIL SITE
CHIPPEWA FALLS, WISCONSIN

FIGURE 1
GEOLOGIC CROSS SECTION
A'-A

PROJ. NO. CFCIT020100
DATE 07/13/09

1 / 2

DRAWING DIRECTORY:P:\AE\C\CFCIT\020100\FIGURES\POST CLOSURE SUBMITTAL\FIGURE 1 - GEOLOGIC CROSS SECTION



NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	08/06/09	GIS REGISTRY SUBMITTAL	RJH	03/09			KEA	03/09	MFR	03/09

SEH

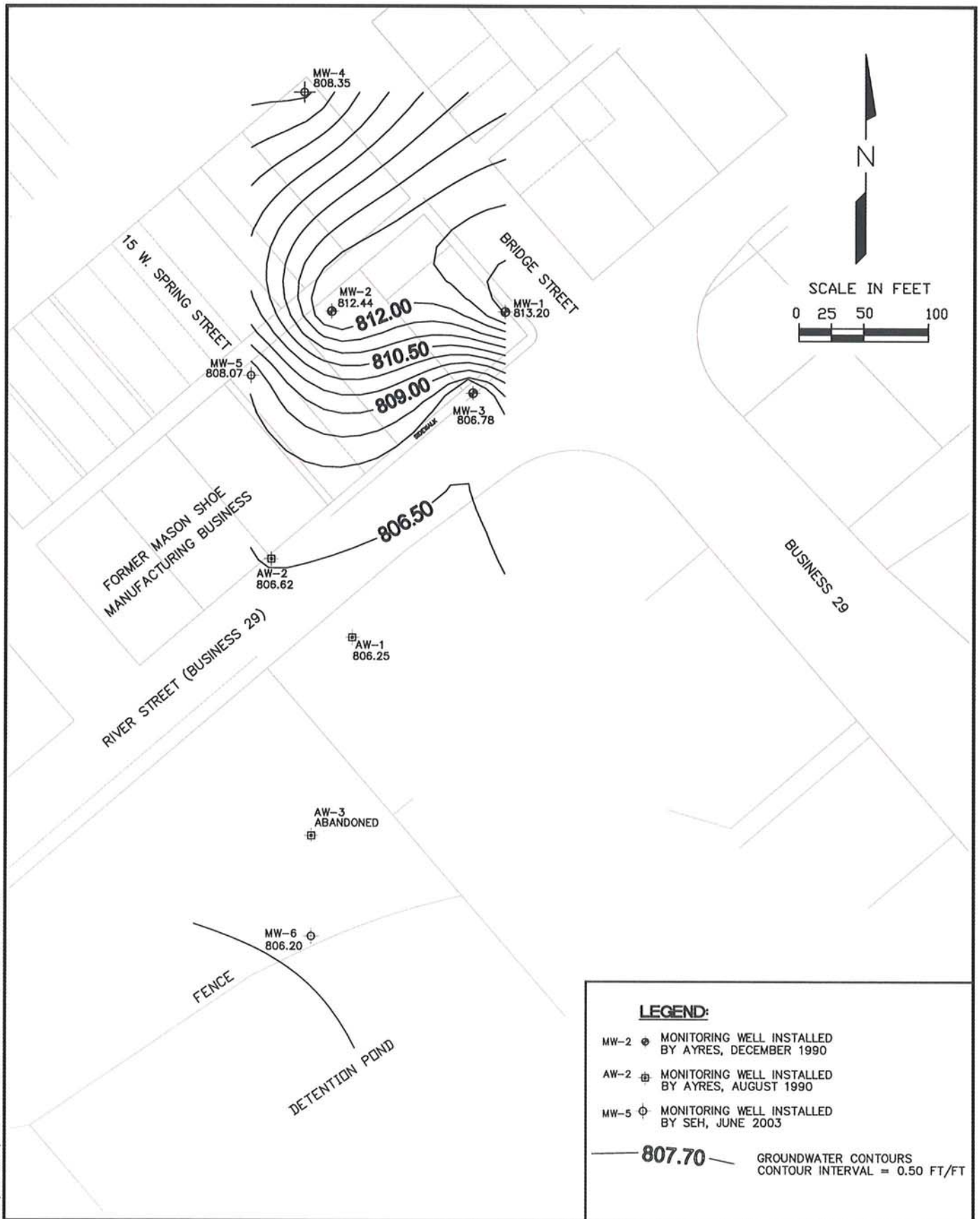
CITY OF CHIPPEWA FALLS
FORMER CHIEFTAIN OIL SITE

FIGURE 3
ESTIMATED EXTENT OF GROUNDWATER CONTAMINATION

PROJ. NO. CFCIT0201.00
DATE 08/06/09

3 / 3

P:\AE\C\CFCIT\020100\FIGURES\FIGURE 3 ESTIMATED EXTENT OF RESIDUAL GROUNDWATER CONTAMINATION



NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	03/24/09	STATUS REPORT	KEA	03/09			KEA	03/09	MFR	03/09

SEH

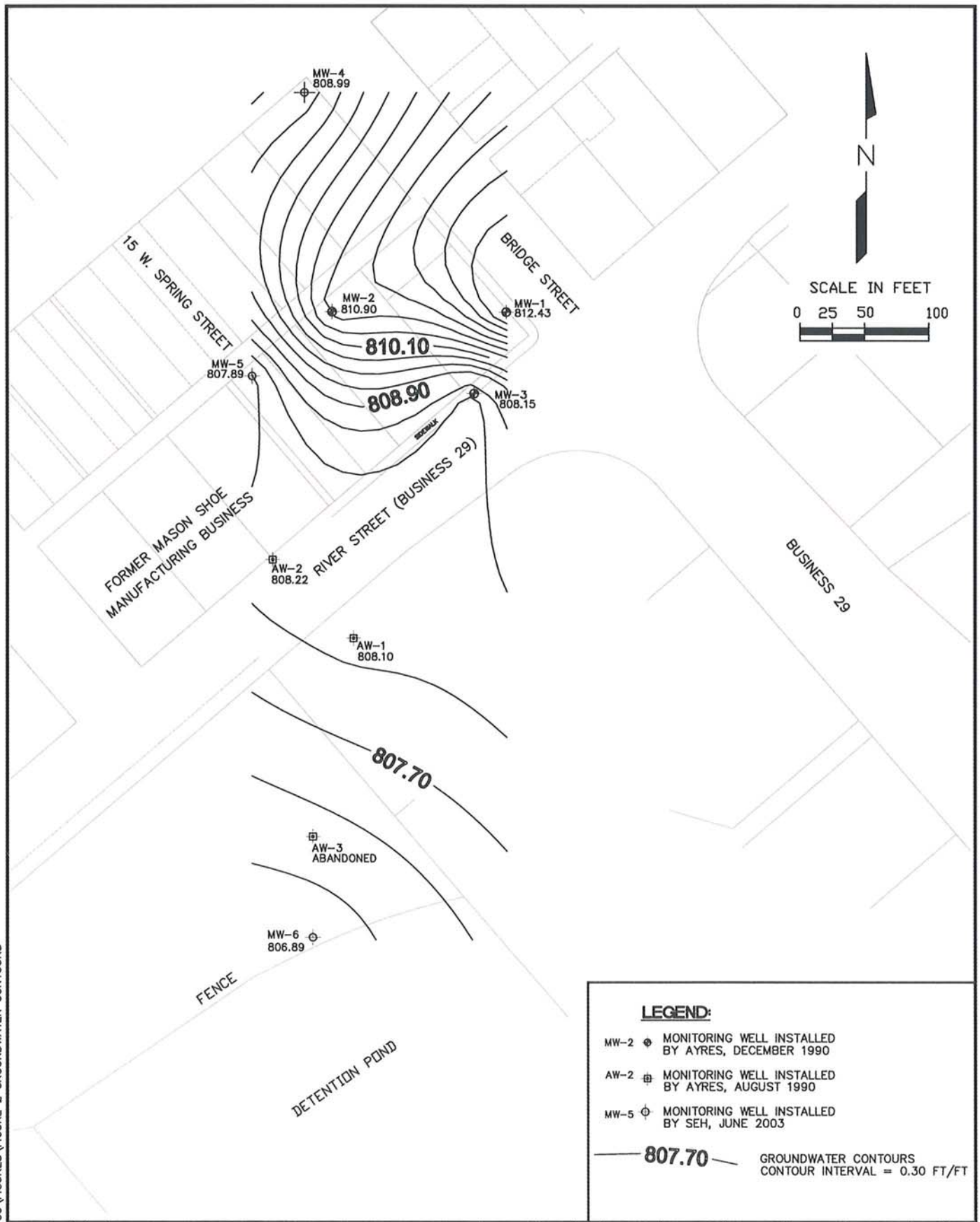
CITY OF CHIPPEWA FALLS
FORMER CHIEFTAIN OIL SITE

FIGURE 2
GROUNDWATER CONTOURS
MARCH 3, 2009

PROJ. NO. CFCIT0201.00
DATE 03/24/09

2 / 2

P:\AE\C\CFCIT\020100\FIGURES\FIGURE 2 GROUNDWATER CONTOURS_030309



NO.	DATE	ISSUE/REVISIONS	DRAWN BY	DESIGN	FIELD REVIEW	QC CHECK
1	05/31/07	STATUS REPORT	RJH 06/03			KEA 05/07

SEH

CITY OF CHIPPEWA FALLS
FORMER CHIEFTAIN OIL SITE

FIGURE 2
GROUNDWATER CONTOURS
APRIL 18, 2007

PROJ. NO. CFCIT0201.00
DATE 05/31/07

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Table 3
Post Excavation Soil Analytical Results

Analytical Parameters	NR 746 Table 1 Values[2]	NR 746 Table 2 Values[3]	NR 720 Table 2 RCLs[4]	Boring No.(Sampled Depth)/Date				
				WO-1 (2-4')	SW-1 (8-10')	SW-2 (8-10')	SW-3 (8-10')	SW-4 (8-10')
				11/14/2002				
GRO (mg/kg) WI DNR	NSE	NSE	NSE	--	1,460	<5.61	<5.36	<5.48
DRO (mg/kg) WI DNR	NSE	NSE	NSE	13,500	808	<5.61	<5.36	<5.48
VOCs[1] (mg/kg) EPA Method 8021								
Benzene	8.5	1.1	NSE	<0.1	<5.0	<0.025	<0.025	<0.025
n-Butylbenzene	NSE	NSE	NSE	1.22	13.5	<0.025	<0.025	<0.025
sec-Butylbenzene	NSE	NSE	NSE	0.597	<5.0	<0.025	<0.025	<0.025
tert-Butylbenzene	NSE	NSE	NSE	<0.1	<5.0	<0.025	<0.025	<0.025
1,4-Dichlorobenzene	NSE	NSE	NSE	<0.1	<5.0	<0.025	<0.025	<0.025
cis-1,2-Dichloroethylene	NSE	NSE	NSE	<0.1	<5.0	<0.025	<0.025	<0.025
Ethylbenzene	4.6	NSE	NSE	0.214	**12.3**	<0.025	<0.025	<0.025
p-Isopropyltoluene	NSE	NSE	NSE	0.495	<5.0	<0.025	<0.025	<0.025
Naphthalene	2.7	NSE	NSE	2.02	**22.5**	<0.025	<0.025	<0.025
n-Propylbenzene	NSE	NSE	NSE	0.242	6.94	<0.025	<0.025	<0.025
Tetrachloroethylene	NSE	NSE	NSE	0.584	<5.0	<0.025	<0.025	<0.025
Toluene	38	NSE	NSE	<0.1	<5.0	<0.025	<0.025	<0.025
Trichloroethylene	NSE	NSE	NSE	<0.1	<5.0	<0.025	<0.025	<0.025
1,2,4-Trimethylbenzene	83	NSE	NSE	0.79	**105**	<0.025	<0.025	<0.025
1,3,5-Trimethylbenzene	11	NSE	NSE	1.09	**34.9**	<0.025	<0.025	<0.025
Total Xylenes	42	NSE	NSE	0.372	**66.6**	<0.025	<0.025	<0.025
Cadmium (mg/kg) EPA Method 6010	NSE	NSE	8	0.042	--	--	--	--
Lead (mg/kg) EPA Method 6010	NSE	NSE	50	46.7	--	--	--	--

NSE = No standard established

-- = Not analyzed for indicated parameter

[1] =VOC list is not complete; VOCs not listed were below the limit of detection

[2] = Soil screening levels are found in ch. NR746.06 Table 1 and are used to determine whether a site may be closed at the completion of a SI or remedial action.

[3] = Soil contaminant concentrations are found in ch. NR746.06 Table 2 and are used to determine whether a site may be closed at the completion of a SI or remedial action. These concentrations are based on direct contact with soil within 4 feet of the ground surface.

[4] = Residual Contaminant Levels (RCLs) based on human health risk from direct contact at non-industrial land use sites.

105 = Concentration exceeds ch. NR746.06 Table 1 soil screening level.

Compiled by: BLK Checked by: KEA

Table 2
Hydraulic Probe Soil Analytical Results

Analytical Parameters	NR 746 Table 1 Values[2]	NR 746 Table 2 Values[3]	NR 720 Table 2 RCLs[4]	Boring No.(Sampled Depth)/Date									
				GP-1 (4-8')	GP-2 (4-8')	GP-3 (4-8')	GP-4 (4-8')	GP-5 (4-8')	GP-7 (4-8')	GP-9 (0-4')	GP-10 (0-4')	GP-11 (0-4')	GP-12 (4-8')
				12/17/2001	12/17/2001	12/18/2001	12/17/2001	12/17/2001	12/17/2001	12/17/2001	12/17/2001	12/17/2001	12/17/2001
GRO (mg/kg) WI DNR	NSE	NSE	NSE	<5.61	<5.35	<5.54	--	<5.5	--	<5.38	<5.49	<5.42	<5.43
DRO (mg/kg) WI DNR	NSE	NSE	NSE	--	--	32	12	8.36	79	22.3	6.7	47	6.19
PVOCs (mg/kg) EPA Method 8021													
Benzene	8.5	1.1	NSE	--	--	--	--	--	<0.025	--	--	--	--
Ethylbenzene	4.6	NSE	NSE	--	--	--	--	--	<0.025	--	--	--	--
Methyl tert butyl ether	NSE	NSE	NSE	--	--	--	--	--	<0.025	--	--	--	--
Naphthalene	2.7	NSE	NSE	--	--	--	--	--	<0.025	--	--	--	--
Toluene	38	NSE	NSE	--	--	--	--	--	<0.025	--	--	--	--
1,2,4-Trimethylbenzene	83	NSE	NSE	--	--	--	--	--	<0.05	--	--	--	--
1,3,5-Trimethylbenzene	11	NSE	NSE	--	--	--	--	--	<0.05	--	--	--	--
Total Xylenes	42	NSE	NSE	--	--	--	--	--	<0.05	--	--	--	--
PAHs (mg/kg) EPA Method 8310													
Acenaphthene	NSE	NSE	NSE	--	--	<0.0052	0.00721	<0.00517	1.16	<0.00505	<0.00516	<0.0051	<0.0051
Acenaphthylene	NSE	NSE	NSE	--	--	<0.00731	<0.00719	<0.00726	<0.00703	<0.0071	<0.00725	<0.00716	<0.00717
Anthracene	NSE	NSE	NSE	--	--	<0.00111	0.00535	0.00678	<0.00106	0.0066	<0.0011	<0.00108	<0.00109
Benzo(a)Anthracene	NSE	NSE	NSE	--	--	<0.00454	0.0141	0.0104	<0.00437	0.0259	<0.00451	<0.00445	0.00977
Benzo(a)Pyrene	NSE	NSE	NSE	--	--	0.00594	0.0167	0.0111	0.31	0.0289	<0.00253	0.0187	0.0121
Benzo(b)Fluoranthene	NSE	NSE	NSE	--	--	0.00564	0.0237	0.0133	<0.00224	0.0419	<0.00231	0.0191	0.195
Benzo(k)Fluoranthene	NSE	NSE	NSE	--	--	<0.00321	0.00671	0.0038	<0.00309	0.0135	<0.00319	0.00759	0.00626
Benzo(g,h,i)Perylene	NSE	NSE	NSE	--	--	<0.00233	0.0248	0.0111	<0.00224	0.0383	<0.00231	0.0303	0.0173
Chrysene	NSE	NSE	NSE	--	--	<0.00255	0.0221	0.0153	<0.00245	0.0498	<0.00253	0.0131	0.0192
Dibenzo(a,h)Anthracene	NSE	NSE	NSE	--	--	<0.00155	0.00408	0.00673	<0.00149	0.0197	<0.00154	0.0123	0.0081
Fluoranthene	NSE	NSE	NSE	--	--	0.00944	0.032	0.0242	0.759	0.0714	<0.0011	0.0161	0.0127
Fluorene	NSE	NSE	NSE	--	--	0.00535	<0.00218	0.00287	2.02	<0.00215	<0.0022	<0.00217	<0.00217
Indeno(1,2,3-cd)Pyrene	NSE	NSE	NSE	--	--	<0.00177	0.0194	0.00934	<0.17	0.0313	<0.00176	0.0254	0.0153
1-Methyl Naphthalene	NSE	NSE	NSE	--	--	<0.00388	<0.00381	<0.00385	4.61	0.00557	<0.00385	0.00991	<0.0038
2-Methyl Naphthalene	NSE	NSE	NSE	--	--	<0.00454	<0.00447	0.00471	6.28	<0.00441	<0.00451	0.00862	<0.00445
Naphthalene	2.7	NSE	NSE	--	--	<0.00177	0.00363	0.00294	3.95	0.00225	0.00384	0.00463	0.00249
Phenanthrene	NSE	NSE	NSE	--	--	<0.00255	0.101	0.0207	4.43	0.0387	<0.00253	0.0128	0.00512
Pyrene	NSE	NSE	NSE	--	--	0.0175	0.033	0.0223	1.5	0.0675	<0.0011	0.0184	0.0168
VOCs[1] (mg/kg) EPA Method 8021													
Benzene	8.5	1.1	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
n-Butylbenzene	NSE	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
sec-Butylbenzene	NSE	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	0.0332	<0.025
tert-Butylbenzene	NSE	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
1,4-Dichlorobenzene	NSE	NSE	NSE	<0.025	0.0411	<0.025	--	<0.025	--	<0.025	<0.025	0.0601	0.0429
cis-1,2-Dichloroethylene	NSE	NSE	NSE	<0.025	<0.025	0.116	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
Ethylbenzene	4.6	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
p-Isopropyltoluene	NSE	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
Naphthalene	2.7	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	0.0271	<0.025
n-Propylbenzene	NSE	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
Tetrachloroethylene	NSE	NSE	NSE	<0.025	<0.025	0.0927	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
Toluene	38	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
Trichloroethylene	NSE	NSE	NSE	<0.025	<0.025	0.0898	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
1,2,4-Trimethylbenzene	83	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	0.0369	<0.025
1,3,5-Trimethylbenzene	11	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	0.0369	<0.025
Total Xylenes	42	NSE	NSE	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	0.0355	<0.025
Lead (mg/kg) EPA Method 6010	NSE	NSE	50	10.1	8.23	5.07	--	97.7	--	10.7	6.35	50.7	24.5

NSE = No standard established

-- = Not analyzed for indicated parameter

[1] =VOC list is not complete; VOCs not listed were below the limit of detection.

[2] = Soil screening levels are found in ch. NR746.06 Table 1 and are used to determine whether a site may be closed at the completion of a SI or remedial action.

[3] = Soil contaminant concentrations are found in ch. NR746.06 Table 2 and are used to determine whether a site may be closed at the completion of a SI or remedial action. These concentrations are based on direct contact with soil within 4 feet of the ground surface.

[4] = Residual Contaminant Levels (RCLs) based on human health risk from direct contact at non-industrial land use sites.

Compiled by: KEA Checked by: BLK

Table 1
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date											
			MW-1											
	ES	PAL	12/19/1990	2/4/1991	10/20/2000	1/8/2001	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Elevation Data														
Ground Surface	--	--	821.67	821.67	821.67	821.67	821.67	821.67	821.67	821.67	821.67	821.67	821.67	821.67
Top of PVC	--	--	821.11	821.11	821.11	821.11	821.11	821.11	821.11	821.11	821.11	821.11	821.11	821.11
Top of Screen	--	--	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6
Bottom of Screen	--	--	804.6	804.6	804.6	804.6	804.6	804.6	804.6	804.6	804.6	804.6	804.6	804.6
Groundwater	--	--	811.43	807.33	811.57	808.2	812.14	811.45	808.18	812.33	812.69	812.69	812.37	813.2
Field & NA Parameter Data														
Dissolved Oxygen (mg/l)	NSE	NSE	--	--	--	--	0.52	5.22	4.17	1.76	1.16	0.56	0.69	--
Temperature (°C)	NSE	NSE	--	--	--	--	13.35	18.07	9.33	7.81	10.02	8.36	8.2	7.4
ORP (mV)	NSE	NSE	--	--	--	--	-118	-200	-82	-148	-125	-236	31	--
Conductivity (mS/m)	NSE	NSE	--	--	--	--	3.00	1.89	1.77	3.52	3.54	3.28	3.16	2.08
pH (mg/l)	NSE	NSE	--	--	--	--	6.21	6.18	6.89	6.65	6.71	5.90	6.77	6.58
Fe^{+2} (mg/l)	0.3	0.15	--	--	--	--	**12.3**	**10.4**	**8.8**	**4.73**	**12.4**	--	**4.3**	--
SO_4^{-2} (mg/l)	250	125	--	--	--	--	25.3	8.13	112	95.6	41.0	--	47.6 (B)	--
NO_3^- (as N) (mg/l)	10	2.0	--	--	--	--	<0.1	<0.1	0.2 (J)	0.31 (J)	0.2 (J)	--	<0.1	--
Mn^{+2} (mg/l)	0.05	0.025	--	--	--	--	**1.76**	**1.04**	**0.986**	**1.55**	**1.53**	--	**0.78**	--
GRO (µg/l) WDNR Method	NSE	NSE	--	--	1,360	74.2	602	2,030	--	--	--	--	--	--
VOCs[1] (µg/l)														
Benzene	5.0	0.5	**200**	**5.5**	**201**	3.36	**42.3**	**92.6**	1.71	**6.45**	**20.6**	**5.9**	**6.4**	1.6
Bromobenzene	NSE	NSE	--	--	<3.00	<0.15	<20.5	<2.05	<0.41	<0.41	<0.41	<0.41	<0.20	<0.20
Bromodichloromethane	0.6	0.06	<10	<1.0	<2.60	<0.13	<4.15	<4.15	<0.83	<0.83	<0.3	<0.3	<0.20	<0.20
Bromoform	NSE	NSE	<10	<1.0	--	--	--	--	--	--	--	--	<0.20	<0.20
Bromomethane	NSE	NSE	<10	<0.5	--	--	--	--	--	--	--	--	<0.20	<0.50
n-Butylbenzene	NSE	NSE	--	--	13.6	1.25	4.33	22.5	0.457 (J)	0.363 (J)	3.28	<0.36	<0.20	<0.20
sec-Butylbenzene	NSE	NSE	--	--	7.36	0.474	<1.65	<1.65	<0.33	<0.4	1.37	<0.4	<0.25	<0.25
tert-Butylbenzene	NSE	NSE	--	--	<3.00	<0.15	<1.55	<1.55	<0.31	<0.4	<0.4	<0.4	<0.20	<0.20
Carbon Tetrachloride	5.0	0.5	<10	<0.5	<3.00	<0.15	<2.95	<2.95	<0.59	<0.5	<0.3	<0.3	<0.50	<0.50
Chlorobenzene	NSE	NSE	<10	<0.5	<3.00	<0.15	<1.55	<1.55	<0.31	<0.7	<0.7	<0.7	<0.20	<0.20
Chlorodibromomethane	NSE	NSE	<10	<0.5	<3.00	<0.15	<4.35	<4.35	<0.87	<0.87	<0.87	<0.87	<0.20	<0.20
Chloroethane	400	80	<10	<0.5	<3.00	<0.15	<2.20	<2.20	<0.44	<1.00	<1.00	<1.00	<1.0	<1.0
Chloroform	6.0	0.6	<10	<1.0	<2.80	<0.14	<1.35	<1.35	<0.27	<0.4	<0.2	<0.2	<0.20	<0.20
Chloromethane	3.0	0.3	<10	<0.5	<3.00	<0.15	<1.45	<1.45	<0.29	<0.29	<0.29	<0.29	<0.20	<0.30
2-Chlorotoluene	NSE	NSE	--	--	<3.00	<0.15	<1.50	<1.50	<0.3	<0.6	<0.6	<0.6	<0.50	<0.50
4-Chlorotoluene	NSE	NSE	--	--	<3.00	<0.15	<1.50	<1.50	<0.3	<1.00	<1.00	<1.00	<0.20	<0.20
Chloroethylvinylether	NSE	NSE	<20	<2.0	--	--	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	--	--	<5.00	<0.25	<3.05	<3.05	<0.61	<1.30	<1.30	<1.30	<0.50	<0.50
1,2-Dibromoethane	0.05	0.005	--	--	<2.40	<0.12	<5.50	<5.50	<1.10	<1.10	<1.10	<1.10	<0.20	<0.20
1,2-Dichlorobenzene	600	60	<10	<1.0	<3.00	<0.15	<2.55	<2.55	<0.51	<0.6	<0.6	<1.10	<0.20	<0.20
1,3-Dichlorobenzene	1,250	125	<10	<1.0	<3.00	<0.15	<1.45	<1.45	<0.29	<0.5	<0.5	<0.3	<0.20	<0.20
1,4-Dichlorobenzene	75	15	<10	<1.0	<3.00	<0.15	<1.50	<1.50	<0.3	<0.6	<0.6	<0.6	<0.20	<0.50
Dichlorodifluoromethane	1,000	200	--	--	<5.00	<0.25	<2.30	<2.30	<0.46	<0.7	<0.7	<0.7	<0.50	<0.50
1,1-Dichloroethane	850	85	<10	<0.5	<3.00	<0.15	<1.80	<1.80	<0.36	<0.5	<0.5	<0.5	<0.50	<0.50
1,2-Dichloroethane	5.0	0.5	<10	<0.5	<3.00	<0.15	<0.85	<0.85	<0.17	<0.4	<0.4	<0.4	<0.50	<0.50
1,1-Dichloroethylene	7.0	0.7	<10	<1.0	<3.00	<0.15	<1.95	<1.95	<0.39	<0.5	<0.5	<0.5	<0.50	<0.50
cis-1,2-Dichloroethylene	70	7.0	<10	<1.0	<3.00	<0.15	<1.15	<1.15	<0.23	65.5	9.71	0.904 (J)	<0.50	<0.50
trans-1,2-Dichloroethylene	100	20	<10	<1.0	<3.00	<0.15	<1.95	<1.95	<0.39	1.52	<0.39	<0.39	<0.50	<0.50
1,2-Dichloropropane	5.0	0.5	<10	<1.0	<3.00	<0.15	<1.25	<1.25	<0.25	<0.4	<0.4	<0.4	<0.50	<0.50
1,3-Dichloropropane	NSE	NSE	<10	<1.0	<4.00	<0.2	<3.35	<3.35	<0.67	<0.9	<0.9	<0.9	<0.25	<0.25
2,2-Dichloropropane	NSE	NSE	--	--	<3.00	<0.15	<7.50	<7.50	<1.50	<1.50	<1.50	<1.50	<0.50	<0.50
Ethylbenzene	700	140	23	4.3	76.3	0.935	18.3	128	0.924 (J)	2.19	7.11	1.23 (J)	3.8	1.1 (J)

Table 1
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date											
			MW-1											
	ES	PAL	12/19/1990	2/4/1991	10/20/2000	1/8/2001	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Hexachlorobutadiene	NSE	NSE	--	--	<20.0	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50
Isopropylbenzene	NSE	NSE	--	--	12.4	0.278	5.05	14.8	<0.31	<0.31	3.16	<0.31	0.71	0.45 (J)
Isopropyl Ether	NSE	NSE	--	--	<5.00	<0.25	<2.30	<2.30	<0.46	<0.6	<0.6	<0.6	<0.50	<0.50
p-Isopropyltoluene	NSE	NSE	--	--	<4.00	<0.2	<1.60	<1.60	<0.32	<0.5	<0.5	<0.5	<0.20	1.1
Methyl tert Butyl Ether	60	12	<10	<1.0	<6.00	<0.3	<1.50	<1.50	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Methylene Chloride	5.0	0.5	<10	<1.0	<7.80	<0.39	<2.55	<2.55	<0.51	<0.5	<0.3	<0.3	<1.0	<1.0
Naphthalene	40	8.0	--	--	19.1	0.902	<4.0	29.3	<0.8	<0.8	<0.8	<0.8	0.36 (J)	<0.25
n-Propylbenzene	NSE	NSE	--	--	<3.00	<0.15	7.96	30.3	0.344 (J)	0.382 (J)	5.15	<0.3	0.89 (J)	0.71 (J)
Tetrachloroethylene	5.0	0.5	<10	<1.0	<3.00	<0.15	<1.60	<1.60	0.952 (J)	<0.45	<0.45	<0.45	<0.50	<0.50
1,1,2,2-Tetrachloroethane	0.2	0.02	<10	<1.0	<2.60	<0.13	<3.05	<3.05	<0.61	<0.61	<0.61	<0.61	<0.20	<0.20
Toluene	1,000	200	<10	2.4	<8.00	<0.4	<1.50	13.6	5.76	3.96	1.61	<0.3	3.9	<0.50
1,2,3-Trichlorobenzene	NSE	NSE	--	--	<10.0	<0.5	<1.65	<1.65	<0.33	<0.5	<0.5	<0.5	<0.25	<0.25
1,2,4-Trichlorobenzene	70	14	--	--	<10.0	<0.5	<2.35	<2.35	<0.47	<1.00	<1.00	<1.00	<0.25	<0.25
1,1,1-Trichloroethane	200	40	<10	<0.5	<3.00	<0.15	<2.10	<2.10	<0.42	<0.42	<0.42	<0.42	<0.50	<0.50
1,1,2-Trichloroethane	5.0	0.5	<10	<0.5	<2.80	<0.14	<2.50	<2.50	<0.5	<0.5	<0.3	<0.3	<0.25	<0.25
Trichloroethylene	5.0	0.5	<10	<1.0	<8.00	<0.4	<1.80	<1.80	<0.36	<0.5	<0.5	<0.5	<0.20	<0.20
Trichlorofluoromethane	NSE	NSE	--	--	<3.00	<0.15	<3.50	<3.50	<0.7	<1.00	<1.00	<1.00	<0.50	<0.50
Total Trimethylbenzenes	480	96	--	--	81.47	0.409	26.1	200.8	1.43	1.48	6.25	<0.35	1.74	11.2
Vinyl Chloride	0.2	0.02	<10	<0.5	<2.20	<0.11	<1.00	<1.00	<0.2	**45.6**	**8.3**	<0.2	**21**	<0.20
Total Xylenes	10,000	1,000	280	6.7	177.6	1.275	37.5	376.2	2.63 (J)	2.94	13.06	1.89 (J)	9.6	8.9
Lead (µg/l) EPA method 200.9	15	1.5	9.1	6.7	<1.00	--	1.33 (J)	3.75	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date											
			MW-2											
	ES	PAL	12/19/1990	2/4/1991	10/20/2000	1/8/2001	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Elevation Data														
Ground Surface	--	--	823.45	823.45	823.45	823.45	823.45	823.45	823.45	823.45	823.45	823.45	823.45	823.45
Top of PVC	--	--	823.09	823.09	823.09	823.09	823.09	823.09	823.09	823.09	823.09	823.09	823.09	823.09
Top of Screen	--	--	813.16	813.16	813.16	813.16	813.16	813.16	813.16	813.16	813.16	813.16	813.16	813.16
Bottom of Screen	--	--	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6
Groundwater	--	--	810.18	809.58	811.5	810.67	811.11	811.35	809.01	811.37	811.05	811.12	810.48	812.44
Field & NA Parameter Data														
Dissolved Oxygen (mg/l)	NSE	NSE	--	--	--	--	0.31	8.06	1.63	0.85	0.98	0.26	0.77	--
Temperature (°C)	NSE	NSE	--	--	--	--	12.28	18.86	10.61	11.08	10.02	11.98	10.66	8.2
ORP (mV)	NSE	NSE	--	--	--	--	-87	-117	-70	-111	-29	-185	-53	--
Conductivity (mS/m)	NSE	NSE	--	--	--	--	1.36	1.21	1.54	2.07	1.52	1.56	1.550	0.80
pH (mg/l)	NSE	NSE	--	--	--	--	6.45	6.28	6.99	6.67	6.90	6.08	7.10	6.57
Fe^{+2} (mg/l)	0.3	0.15	--	--	--	--	**18.6**	**15.0**	**27.2**	**58.6**	**48.4**	--	**57**	--
SO_4^{-2} (mg/l)	250	125	--	--	--	--	<1.00	2.12 (J)	15.8	**356**	120	--	112 (B)	--
NO_3^- (as N) (mg/l)	10	2.0	--	--	--	--	**39.6**	<0.1	<0.1	<0.1	<0.1	--	<0.1	--
Mn^{+2} (mg/l)	0.05	0.025	--	--	--	--	**0.12**	**0.906**	**0.71**	**1.16**	**0.46**	--	**0.59**	--
GRO (µg/l) WDNR Method	NSE	NSE	--	--	<50.0	<50.0	<50	<50	--	--	--	--	--	--
VOCs[1] (µg/l)														
Benzene	5.0	0.5	**29**	<20	2.43	2.99	1.84	1.97	2.64	4.57	1.63	2.17	1.7	<0.20
Bromobenzene	NSE	NSE	--	--	<0.15	<0.15	<0.41	<0.41	<0.41	<0.41	<2.05	<0.41	<0.20	<0.20
Bromodichloromethane	0.6	0.06	<20	<20	<0.13	<0.13	<0.83	<0.83	<0.83	<0.83	<1.50	<0.3	<0.20	<0.20
Bromoform	NSE	NSE	<20	<20	--	--	--	--	--	--	--	--	<0.20	<0.20
Bromomethane	NSE	NSE	<20	<10	--	--	--	--	--	--	--	--	<0.20	<0.50
n-Butylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.36	<0.36	<0.36	<0.36	<1.80	<0.36	<0.20	<0.20
sec-Butylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.33	<0.33	<0.33	<0.4	<2.00	<0.4	<0.25	<0.25
tert-Butylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.31	<0.31	<0.31	<0.4	<2.00	<0.4	<0.20	<0.20
Carbon Tetrachloride	5.0	0.5	<20	<10	<0.15	<0.15	<0.59	<0.59	<0.59	<0.5	<1.50	>0.3	<0.50	<0.50
Chlorobenzene	NSE	NSE	<20	<10	<0.15	<0.15	<0.31	<0.31	<0.31	<0.7	<3.50	<0.7	<0.20	<0.20
Chlorodibromomethane	NSE	NSE	<20	<10	<0.15	<0.15	<0.87	<0.87	<0.87	<0.87	<4.35	<0.87	<0.20	<0.20
Chloroethane	400	80	<20	<10	<0.15	<0.15	<0.44	<0.44	<0.44	<1.00	<5.00	<1.00	<1.0	<1.0
Chloroform	6.0	0.6	<20	<20	<0.14	<0.14	<0.27	<0.27	<0.27	<0.4	<1.00	<0.2	<0.20	2.1
Chloromethane	3.0	0.3	<20	<10	<0.15	<0.15	<0.29	<0.29	<0.29	<0.29	<1.45	<0.29	<0.20	<0.30
2-Chlorotoluene	NSE	NSE	--	--	<0.15	<0.15	<0.3	<0.3	<0.3	<0.6	<3.00	<0.6	<0.50	<0.50
4-Chlorotoluene	NSE	NSE	--	--	<0.15	<0.15	<0.3	<0.3	<0.3	<1.00	<5.00	<1.00	<0.20	<0.20
Chloroethylvinylether	NSE	NSE	<40	<40	--	--	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	--	--	<0.25	<0.25	<0.61	<0.61	<0.61	<1.30	<6.50	<1.30	<0.50	<0.50
1,2-Dibromoethane	0.05	0.005	--	--	<0.12	<0.12	<1.10	<1.10	<1.10	<1.10	<5.50	<1.10	<0.20	<0.20
1,2-Dichlorobenzene	600	60	<20	<20	<0.15	<0.15	<0.51	<0.51	<0.51	<0.6	<3.00	<0.6	<0.20	<0.20
1,3-Dichlorobenzene	1,250	125	<20	<20	<0.15	<0.15	<0.29	<0.29	<0.29	<0.5	<2.50	<0.5	<0.20	<0.20
1,4-Dichlorobenzene	75	15	<20	<20	<0.15	<0.15	<0.3	<0.3	<0.3	<0.6	<3.00	<0.6	<0.20	<0.50
Dichlorodifluoromethane	1,000	200	--	--	<0.25	<0.25	<0.46	<0.46	<0.46	<0.7	<3.50	<0.7	<0.50	<0.50
1,1-Dichloroethane	850	85	<20	<10	<0.15	<0.15	<0.36	<0.36	<0.36	<0.5	<2.50	<0.5	<0.50	<0.50
1,2-Dichloroethane	5.0	0.5	<20	<10	<0.15	<0.15	<0.17	<0.17	<0.17	<0.4	<2.00	<0.4	<0.50	<0.50
1,1-Dichloroethylene	7.0	0.7	<20	<20	<0.15	<0.15	<0.39	<0.39	<0.39	<0.5	<2.50	<0.5	<0.50	<0.50
cis-1,2-Dichloroethylene	70	7.0	<20	<20	0.608	<0.15	0.502 (J)	0.616 (J)	<0.23	**203**	32.1	27.3	<0.50	<0.50
trans-1,2-Dichloroethylene	100	20	<20	<20	0.413	<0.15	<0.39	<0.39	<0.39	6.16	<1.95	1.7	0.78 (J)	<0.50
1,2-Dichloropropane	5.0	0.5	<20	<20	<0.15	<0.15	<0.25	<0.25	<0.25	<0.4	<2.00	<0.4	<0.50	<0.50
1,3-Dichloropropane	NSE	NSE	<20	<20	<0.2	<0.2	<0.67	<0.67	<0.67	<0.9	<4.50	<0.9	<0.25	<0.25
2,2-Dichloropropane	NSE	NSE	--	--	<0.15	<0.15	<1.50	<1.50	<1.50	<1.50	<7.50	<1.50	<0.50	<0.50
Ethylbenzene	700	140	80	30	<0.5	<0.5	<0.5	<0.5	<0.5	1.88	<2.50	1.2 (J)	<0.50	<0.50

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date											
			MW-2											
	ES	PAL	12/19/1990	2/4/1991	10/20/2000	1/8/2001	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Hexachlorobutadiene	NSE	NSE	--	--	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<0.50	<0.50
Isopropylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.31	<0.31	<0.31	<0.31	<1.55	<0.31	<0.20	<0.20
Isopropyl Ether	NSE	NSE	--	--	<0.25	<0.25	<0.46	<0.46	<0.46	<0.6	<3.00	<0.6	<0.50	<0.50
p-Isopropyltoluene	NSE	NSE	--	--	<0.2	<0.2	<0.32	<0.32	<0.32	<0.5	<2.50	<0.5	<0.20	<0.20
Methyl tert Butyl Ether	60	12	44	35	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.50	<0.3	<0.50	<0.50
Methylene Chloride	5.0	0.5	<10	<20	<0.39	<0.39	<0.51	<0.51	<0.51	<0.5	<1.50	<0.3	<1.0	<1.0
Naphthalene	40	8.0	--	--	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<4.00	<0.8	0.39 (J)	<0.25
n-Propylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.3	<0.3	<0.3	<0.3	<1.50	<0.3	<0.50	<0.50
Tetrachloroethylene	5.0	0.5	<10	<20	0.319	<0.15	0.437 (J)	0.818 (J)	<0.32	0.96 (J)	<2.25	2.98	0.74 (J)	1.2 (J)
1,1,2,2-Tetrachloroethane	0.2	0.02	<10	<20	<0.13	<0.13	<0.61	<0.61	<0.61	<0.61	<3.05	<0.61	<0.20	<0.20
Toluene	1,000	200	22	31	<0.4	<0.4	0.424 (J)	<0.3	0.708 (J)	9.28	<1.50	1.57	1.9	<0.50
1,2,3-Trichlorobenzene	NSE	NSE	--	--	<0.5	<0.5	<0.33	<0.33	<0.33	<0.5	<2.50	<0.5	<0.25	<0.25
1,2,4-Trichlorobenzene	70	14	--	--	<0.5	<0.5	<0.47	<0.47	<0.47	<1.00	<5.00	<1.00	<0.25	<0.25
1,1,1-Trichloroethane	200	40	<10	<10	<0.15	<0.15	<0.42	<0.42	<0.42	<0.42	<2.10	<0.42	<0.50	<0.50
1,1,2-Trichloroethane	5.0	0.5	<10	<10	<0.14	<0.14	<0.5	<0.5	<0.5	<0.5	<1.50	<0.3	<0.25	<0.25
Trichloroethylene	5.0	0.5	<10	<20	0.573	<0.4	<0.36	<0.36	<0.36	1.96	<2.50	2.25	<0.20	<0.20
Trichlorofluoromethane	NSE	NSE	--	--	<0.15	<0.15	<0.7	<0.7	<0.7	<1.00	<5.00	<1.00	<0.50	<0.50
Total Trimethylbenzenes	480	96	--	--	<0.4	<0.4	<0.4	<0.4	<0.4	1.48	<2.00	<0.4	0.43 (J)	<0.20
Vinyl Chloride	0.2	0.02	**2100**	**1500**	**3.14**	<0.11	**0.348 (J)**	**0.285 (J)**	<0.2	**236**	**113**	**57.4**	**13**	<0.20
Total Xylenes	10,000	1,000	<60	<60	0.782	1.239	<0.62	<0.62	<0.62	2.758 (J)	<3.10	<0.62	1.8	<0.50
Lead (µg/l) EPA method 200.9	15	1.5	**18**	**22**	--	--	<1.00	<1.00	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date											
			MW-3											
	ES	PAL	12/19/1990	2/4/1991	10/20/2000	1/8/2001	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Elevation Data														
Ground Surface	--	--	821.20	821.20	821.20	821.20	821.20	821.20	821.20	821.20	821.20	821.20	821.20	821.20
Top of PVC	--	--	820.35	820.35	820.35	820.35	820.35	820.35	820.35	820.35	820.35	820.35	820.35	820.35
Top of Screen	--	--	810.40	810.40	810.40	810.40	810.40	810.40	810.40	810.40	810.40	810.40	810.40	810.40
Bottom of Screen	--	--	800.40	800.40	800.40	800.40	800.40	800.40	800.40	800.40	800.40	800.40	800.40	800.40
Groundwater	--	--	806.21	805.64	807.07	807.24	807.58	807.37	807.29	809.13	807.9	809.57	807.51	806.78
Field & NA Parameter Data														
Dissolved Oxygen (mg/l)	NSE	NSE	--	--	--	--	1.40	3.34	1.18	2.16	1.62	0.51	1.03	--
Temperature (°C)	NSE	NSE	--	--	--	--	12.59	14.73	12.05	10.82	11.19	11.38	11.03	6.8
ORP (mV)	NSE	NSE	--	--	--	--	-49	117	-100	-146	4	-191	114	--
Conductivity (mS/m)	NSE	NSE	--	--	--	--	0.611	0.445	0.762	9.86	0.673	3.30	4.450	4.0
pH (mg/l)	NSE	NSE	--	--	--	--	6.44	6.32	6.73	6.74	6.86	5.74	6.91	6.39
Fe^{+2} (mg/l)	0.3	0.15	--	--	--	--	0.117	0.0201	**0.355**	0.0326	**0.834**	--	0.16	--
SO_4^{-2} (mg/l)	250	125	--	--	--	--	10.3	9.51	11.5	22.4	25.3	--	36.5 (B)	--
NO_3^- (as N) (mg/l)	10	2.0	--	--	--	--	5.87	6.22	4.46	3.72	1.23	--	0.51	--
Mn^{+2} (mg/l)	0.05	0.025	--	--	--	--	0.008	0.011	**0.195**	**0.027**	0.049	--	**0.15**	--
GRO (µg/l) WDNR Method	NSE	NSE	--	--	<50.0	<50.0	<50.0	<50.0	--	--	--	--	--	--
VOCs[1] (µg/l)														
Benzene	5.0	0.5	**130**	**200**	<0.15	<0.15	<0.31	<0.31	<0.31	1.1	0.484 (J)	<0.31	0.94	<0.20
Bromobenzene	NSE	NSE	--	--	<0.15	<0.15	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.20	<0.20
Bromodichloromethane	0.6	0.06	<2.0	<10	<0.13	<0.13	<0.83	<0.83	<0.83	<0.83	<0.3	<0.3	<0.20	<0.20
Bromoform	NSE	NSE	<2.0	<10	--	--	--	--	--	--	--	--	<0.20	<0.20
Bromomethane	NSE	NSE	<2.0	<5	--	--	--	--	--	--	--	--	<0.20	<0.50
n-Butylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.20	<0.20
sec-Butylbenzene	NSE	NSE	--	--	<0.15	0.208	<0.33	<0.33	<0.33	<0.4	<0.4	<0.4	<0.25	<0.25
tert-Butylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.31	<0.31	<0.31	<0.4	<0.4	<0.4	<0.20	<0.20
Carbon Tetrachloride	5.0	0.5	<2.0	<5	<0.15	<0.15	<0.59	<0.59	<0.59	<0.5	<0.3	<0.3	<0.50	<0.50
Chlorobenzene	NSE	NSE	<2.0	<5	<0.15	<0.15	<0.31	<0.31	<0.31	<0.7	<0.7	<0.7	<0.20	<0.20
Chlorodibromomethane	NSE	NSE	<2.0	<5	<0.15	<0.15	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.20	<0.20
Chloroethane	400	80	<2.0	<5	<0.15	<0.15	<0.44	<0.44	<0.44	<1.00	<1.00	<1.00	<1.0	<1.0
Chloroform	6.0	0.6	<2.0	<10	<0.14	<0.14	3.13	4.9	3.3	1.21	<0.2	<0.2	<0.20	<0.30
Chloromethane	3.0	0.3	<2.0	<5	<0.15	<0.15	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.20	<0.20
2-Chlorotoluene	NSE	NSE	--	--	<0.15	<0.15	<0.3	<0.3	<0.3	<0.6	<0.6	<0.6	<0.50	<0.50
4-Chlorotoluene	NSE	NSE	--	--	<0.15	<0.15	<0.3	<0.3	<0.3	<1.00	<1.00	<1.00	<0.20	<0.20
Chloroethylvinylether	NSE	NSE	<4.0	<20	--	--	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	--	--	<0.25	<0.25	<0.61	<0.61	<0.61	<1.30	<1.30	<1.30	<0.50	<0.50
1,2-Dibromoethane	0.05	0.005	--	--	<0.12	<0.12	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<0.20	<0.20
1,2-Dichlorobenzene	600	60	<2.0	<10	<0.15	<0.15	<0.51	<0.51	<0.51	<0.6	<0.6	<0.6	<0.20	<0.20
1,3-Dichlorobenzene	1,250	125	<2.0	<10	<0.15	<0.15	<0.29	<0.29	<0.29	<0.5	<0.5	<0.5	<0.20	<0.20
1,4-Dichlorobenzene	75	15	<2.0	<10	<0.15	<0.15	<0.3	<0.3	<0.3	<0.6	<0.6	<0.6	<0.20	<0.50
Dichlorodifluoromethane	1,000	200	--	--	<0.25	<0.25	<0.46	<0.46	<0.46	<0.7	<0.7	<0.7	<0.50	<0.50
1,1-Dichloroethane	850	85	<2.0	<5	<0.15	<0.15	<0.36	<0.36	<0.36	<0.5	<0.5	<0.5	<0.50	<0.50
1,2-Dichloroethane	5.0	0.5	<2.0	<5	<0.15	<0.15	<0.17	<0.17	<0.17	<0.4	<0.4	<0.4	<0.50	<0.50
1,1-Dichloroethylene	7.0	0.7	<2.0	<10	<0.15	<0.15	<0.39	<0.39	<0.39	<0.5	<0.5	<0.5	<0.50	<0.50
cis-1,2-Dichloroethylene	70	7.0	<2.0	<10	<0.15	<0.15	<0.32	0.284 (J)	<0.23	49.1	3.56	1.39	<0.50	<0.50
trans-1,2-Dichloroethylene	100	20	<2.0	<10	<0.15	<0.15	<0.39	<0.39	<0.39	0.971 (J)	<0.39	<0.39	<0.50	<0.50
1,2-Dichloropropane	5.0	0.5	<2.0	<10	<0.15	<0.15	<0.25	<0.25	<0.25	<0.4	<0.4	<0.4	<0.50	<0.50
1,3-Dichloropropane	NSE	NSE	<2.0	<10	<0.2	<0.2	<0.67	<0.67	<0.67	<0.9	<0.9	<0.9	<0.25	<0.25
2,2-Dichloropropane	NSE	NSE	--	--	<0.15	<0.15	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<0.50	<0.50
Ethylbenzene	700	140	2.8	42	<0.5	<0.5	<0.5	<0.5	<0.5	0.937 (J)	0.661 (J)	<0.31	1.9	<0.50

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date											
			MW-3											
	ES	PAL	12/19/1990	2/4/1991	10/20/2000	1/8/2001	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Hexachlorobutadiene	NSE	NSE	--	--	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50
Isopropylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.20	<0.20
Isopropyl Ether	NSE	NSE	--	--	<0.25	<0.25	<0.46	<0.46	<0.46	<0.6	<0.6	<0.6	<0.50	<0.50
p-Isopropyltoluene	NSE	NSE	--	--	<0.2	<0.2	<0.32	<0.32	<0.32	<0.5	<0.5	<0.5	<0.20	<0.20
Methyl tert Butyl Ether	60	12	<2.0	<10	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Methylene Chloride	5.0	0.5	<2.0	<10	<0.39	<0.39	<0.51	<0.51	<0.51	<0.5	<0.3	<0.3	<1.0	<1.0
Naphthalene	40	8.0	--	--	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	0.29 (J)	<0.25
n-Propylbenzene	NSE	NSE	--	--	<0.15	<0.15	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Tetrachloroethylene	5.0	0.5	<2.0	<10	**6.9**	**11.6**	0.865 (J)	0.779 (J)	0.638 (J)	<0.45	1.91	<0.45	2.8	3.4
1,1,2,2-Tetrachloroethane	0.2	0.02	<2.0	<10	<0.13	<0.13	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	<0.20	<0.20
Toluene	1,000	200	15	23	<0.4	<0.4	<0.3	<0.3	0.423 (J)	3.09	0.543 (J)	<0.3	2.2	<0.50
1,2,3-Trichlorobenzene	NSE	NSE	--	--	<0.5	<0.5	<0.33	<0.33	<0.33	<0.5	<0.5	<0.5	<0.25	<0.25
1,2,4-Trichlorobenzene	70	14	--	--	<0.5	<0.5	<0.47	<0.47	<0.47	<1.00	<1.00	<1.00	<0.25	<0.25
1,1,1-Trichloroethane	200	40	<2.0	<5	<0.15	<0.15	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.50	<0.50
1,1,2-Trichloroethane	5.0	0.5	<2.0	<5	<0.14	<0.14	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.25	<0.25
Trichloroethylene	5.0	0.5	<2.0	<10	0.446	<0.4	<0.36	<0.36	<0.36	<0.5	<0.5	<0.5	<0.20	0.23 (J)
Trichlorofluoromethane	NSE	NSE	--	--	<0.15	<0.15	<0.7	<0.7	<0.7	<1.00	<1.00	<1.00	<0.50	<0.50
Total Trimethylbenzenes	480	96	--	--	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.74	<0.20
Vinyl Chloride	0.2	0.02	<2.0	<5	<0.11	<0.11	<0.2	<0.2	<0.2	**29.1**	**2.87**	<0.2	**4.1**	<0.20
Total Xylenes	10,000	1,000	15	50	<0.4	<0.4	<0.62	<0.62	<0.62	1.077 (J)	<0.62	<0.62	4.7	<0.50
Lead (µg/l) EPA method 200.9	15	1.5	**51**	3.7	1.9	--	<1.00	<1.00	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date							
			MW-4							
	ES	PAL	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Elevation Data										
Ground Surface	--	--	829.38	829.38	829.38	829.38	829.38	829.38	829.38	829.38
Top of PVC	--	--	828.92	828.92	828.92	828.92	828.92	828.92	828.92	828.92
Top of Screen	--	--	814.52	814.52	814.52	814.52	814.52	814.52	814.52	814.52
Bottom of Screen	--	--	804.52	804.52	804.52	804.52	804.52	804.52	804.52	804.52
Groundwater	--	--	809.55	809.22	808.70	810.82	809.01	810.61	808.99	808.35
Field & NA Parameter Data										
Dissolved Oxygen (mg/l)	NSE	NSE	6.84	--	3.76	8.56	6.25	4.40	4.1	--
Temperature (°C)	NSE	NSE	15.49	14.65	13.60	12.83	12.59	13.36	13.23	10.2
ORP (mV)	NSE	NSE	-53	48	-30	-55	88	-104	132	--
Conductivity (mS/m)	NSE	NSE	2.99	1.60	1.97	3.41	0.617	2.30	2.900	2.09
pH (mg/l)	NSE	NSE	7.07	6.70	7.10	7.28	6.25	6.62	6.74	6.18
Fe^{+2} (mg/l)	0.3	0.15	0.023	<0.01	<0.01	0.01	0.025	--	<0.042	--
SO_4^{-2} (mg/l)	250	125	51.4	31.2	40.1	3.33	14.1	--	39.3 (B)	--
NO_3^- (as N) (mg/l)	10	2.0	**14.1**	**13.9**	**11.6**	0.33	5.39	--	8.5	--
Mn^{+2} (mg/l)	0.05	0.025	**0.086**	0.005	0.0038	0.002	0.014	--	<0.0018	--
GRO (µg/l) WDNR Method	NSE	NSE	<50	<50	--	--	--	--	--	--
VOCs[1] (µg/l)										
Benzene	5.0	0.5	<0.31	<0.31	<0.31	<0.31	<0.31	1.28	0.53 (J)	<0.20
Bromobenzene	NSE	NSE	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.20	<0.20
Bromodichloromethane	0.6	0.06	<0.83	<0.83	<0.83	<0.83	<0.3	<0.3	<0.20	<0.20
Bromoform	NSE	NSE	--	--	--	--	--	--	<0.20	<0.20
Bromomethane	NSE	NSE	--	--	--	--	--	--	<0.20	<0.50 (C)
n-Butylbenzene	NSE	NSE	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.20	<0.20
sec-Butylbenzene	NSE	NSE	<0.33	<0.33	<0.33	<0.4	<0.4	<0.4	<0.25	<0.25
tert-Butylbenzene	NSE	NSE	<0.31	<0.31	<0.31	<0.4	<0.4	<0.4	<0.20	<0.20
Carbon Tetrachloride	5.0	0.5	<0.59	<0.59	<0.59	<0.5	<0.3	<0.3	<0.50	<0.50
Chlorobenzene	NSE	NSE	<0.31	<0.31	<0.31	<0.7	<0.7	<0.7	<0.20	<0.20
Chlorodibromomethane	NSE	NSE	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.20	<0.20
Chloroethane	400	80	<0.44	<0.44	<0.44	<1.00	<1.00	<1.00	<1.0	<1.0
Chloroform	6.0	0.6	<0.27	<0.27	<0.27	<0.4	1.57	<0.2	<0.20	<0.20
Chloromethane	3.0	0.3	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.20	<0.30
2-Chlorotoluene	NSE	NSE	<0.3	<0.3	<0.3	<0.6	<0.6	<0.6	<0.50	<0.50
4-Chlorotoluene	NSE	NSE	<0.3	<0.3	<0.3	<1.00	<1.00	<1.00	<0.20	<0.20
Chloroethylvinylether	NSE	NSE	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	<0.61	<0.61	<0.61	<1.30	<1.30	<1.30	<0.50	<0.50
1,2-Dibromoethane	0.05	0.005	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<0.20	<0.20
1,2-Dichlorobenzene	600	60	<0.51	<0.51	<0.51	<0.6	<0.6	<0.6	<0.20	<0.20
1,3-Dichlorobenzene	1,250	125	<0.29	<0.29	<0.29	<0.5	<0.5	<0.5	<0.20	<0.20
1,4-Dichlorobenzene	75	15	<0.3	<0.3	<0.3	<0.6	<0.6	<0.6	<0.20	<0.50
Dichlorodifluoromethane	1,000	200	<0.46	<0.46	<0.46	<0.7	<0.7	<0.7	<0.50	<0.50
1,1-Dichloroethane	850	85	<0.36	<0.36	<0.36	<0.5	<0.5	<0.5	<0.50	<0.50
1,2-Dichloroethane	5.0	0.5	<0.17	<0.17	<0.17	<0.4	<0.4	<0.4	<0.50	<0.50
1,1-Dichloroethylene	7.0	0.7	<0.39	<0.39	<0.39	<0.5	<0.5	<0.5	<0.50	<0.50
cis-1,2-Dichloroethylene	70	7.0	<0.23	<0.23	<0.23	<0.4	<0.4	5.48	<0.50	<0.50
trans-1,2-Dichloroethylene	100	20	<0.39	<0.39	<0.39	<0.39	<0.39	0.765 (J)	<0.50	<0.50
1,2-Dichloropropane	5.0	0.5	<0.25	<0.25	<0.25	<0.4	<0.4	<0.4	<0.50	<0.50
1,3-Dichloropropane	NSE	NSE	<0.67	<0.67	<0.67	<0.9	<0.9	<0.9	<0.25	<0.25
2,2-Dichloropropane	NSE	NSE	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<0.50	<0.50
Ethylbenzene	700	140	<0.5	<0.5	<0.5	<0.5	<0.5	1.37 (J)	<0.50	<0.50

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date							
			MW-4							
	ES	PAL	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Hexachlorobutadiene	NSE	NSE	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50
Isopropylbenzene	NSE	NSE	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.20	<0.20
Isopropyl Ether	NSE	NSE	<0.46	<0.46	<0.46	<0.6	<0.6	<0.6	<0.50	<0.50
p-Isopropyltoluene	NSE	NSE	<0.32	<0.32	<0.32	<0.5	<0.5	<0.5	<0.20	<0.20
Methyl tert Butyl Ether	60	12	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Methylene Chloride	5.0	0.5	<0.51	<0.51	<0.51	<0.5	<0.3	<0.3	<1.0	<1.0
Naphthalene	40	8.0	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	0.32 (J)	<0.25
n-Propylbenzene	NSE	NSE	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Tetrachloroethylene	5.0	0.5	**15.4**	**7.58**	**55.6**	**16**	2.89	**40.4**	**54**	**67**
1,1,2,2-Tetrachloroethane	0.2	0.02	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	<0.20	<0.20
Toluene	1,000	200	<0.3	0.65 (J)	0.79 (J)	1.20	0.316 (J)	1.61	2.4	<0.50
1,2,3-Trichlorobenzene	NSE	NSE	<0.33	<0.33	<0.33	<0.5	<0.5	<0.5	<0.25	<0.25
1,2,4-Trichlorobenzene	70	14	<0.47	<0.47	<0.47	<1.00	<1.00	<1.00	<0.25	<0.25
1,1,1-Trichloroethane	200	40	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.50	<0.50
1,1,2-Trichloroethane	5.0	0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.25	<0.25
Trichloroethylene	5.0	0.5	<0.36	<0.36	<0.36	<0.5	<0.5	0.573 (J)	0.40 (J)	0.46 (J)
Trichlorofluoromethane	NSE	NSE	<0.7	<0.7	<0.7	<1.00	<1.00	<1.00	<0.50	<0.50
Total Trimethylbenzenes	480	96	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.46 (J)	<0.20
Vinyl Chloride	0.2	0.02	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Total Xylenes	10,000	1,000	<0.62	<0.62	<0.62	<0.62	<0.62	1.58 (J)	2.0	<0.50
Lead (µg/l) EPA method 200.9	15	1.5	<1.00	<1.00	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date							
			MW-5							
	ES	PAL	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Elevation Data										
Ground Surface	--	--	822.73	822.73	822.73	822.73	822.73	822.73	822.73	822.73
Top of PVC	--	--	822.38	822.38	822.38	822.38	822.38	822.38	822.38	822.38
Top of Screen	--	--	813.10	813.10	813.10	813.10	813.10	813.10	813.10	813.10
Bottom of Screen	--	--	803.10	803.10	803.10	803.10	803.10	803.10	803.10	803.10
Groundwater	--	--	808.66	808.03	807.32	809.67	808.33	810.11	807.89	808.07
Field & NA Parameter Data										
Dissolved Oxygen (mg/l)	NSE	NSE	0.42	2.77	0.83	1.07	1.20	0.40	0.58	--
Temperature (°C)	NSE	NSE	13.78	18.05	8.98	10.65	11.28	10.18	10.22	4.9
ORP (mV)	NSE	NSE	-193	-166	-116	-123	-120	-206	-122	--
Conductivity (mS/m)	NSE	NSE	1.54	1.422	1.401	1.56	1.304	1.39	1.391	1.57
pH (mg/l)	NSE	NSE	6.36	6.22	6.89	6.78	6.87	6.13	6.98	6.47
Fe^{+2} (mg/l)	0.3	0.15	**28.6**	**29.6**	**24.2**	**27.6**	**26.1**	--	2.6	--
SO_4^{-2} (mg/l)	250	125	87.4	12.5	9.12	85.5	75.8	--	8.47 (B)	--
NO_3^- (as N) (mg/l)	10	2.0	<0.1	<0.1	0.17 (J)	<0.1	<0.1	--	<0.1	--
Mn^{+2} (mg/l)	0.05	0.025	**1.90**	**1.48**	**1.27**	**1.58**	**1.33**	--	**1.6**	--
GRO (µg/l) WDNR Method	NSE	NSE	1140	1560	--	--	--	--	--	--
VOCs[1] (µg/l)										
Benzene	5.0	0.5	**19.1**	<62	**49.2**	**62.2**	**123**	**141**	**310**	**44**
Bromobenzene	NSE	NSE	<8.20	<82.0	<2.05	<20.5	<82.0	<8.20	<16	<0.20
Bromodichloromethane	0.6	0.06	<16.6	<166	<4.15	<41.5	<60.0	<6.00	<16	<0.20
Bromoform	NSE	NSE	--	--	--	--	--	--	<16	<0.20
Bromomethane	NSE	NSE	--	--	--	--	--	--	<16	<0.50 (C)
n-Butylbenzene	NSE	NSE	<7.20	<72.0	3.84	<18.0	<72.0	<7.20	<16	<0.20
sec-Butylbenzene	NSE	NSE	<6.60	<66.0	<1.65	<20.0	<80.0	<8.00	<20	1.6
tert-Butylbenzene	NSE	NSE	<6.20	<62.0	<1.55	<20.0	<80.0	<8.00	<16	<0.20
Carbon Tetrachloride	5.0	0.5	<11.8	<118	<2.95	<25.0	<60.0	<6.00	<40	<0.50
Chlorobenzene	NSE	NSE	<6.20	<62.0	<1.55	<35.0	<140	<14.0	<16	<0.20
Chlorodibromomethane	NSE	NSE	<17.4	<174	<4.35	<43.5	<174	<17.4	<16	<0.20
Chloroethane	400	80	<8.80	<88.0	<2.20	<50.0	<200	<20.0	<80	<1.0
Chloroform	6.0	0.6	<5.40	<54.0	<1.35	<20.0	<40.0	<4.00	<16	<0.20
Chloromethane	3.0	0.3	<5.80	<58.0	<1.45	<14.5	<58.0	<5.80	<16	<0.30
2-Chlorotoluene	NSE	NSE	<6.00	<60.0	<1.50	<30.0	<120	<12.0	<40	<0.50
4-Chlorotoluene	NSE	NSE	<6.00	<60.0	<1.50	<50.0	<200	<20.0	<16	<0.20
Chloroethylvinylether	NSE	NSE	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	<12.2	<122	<3.05	<65.0	<260	<26.0	<40	<0.50
1,2-Dibromoethane	0.05	0.005	<22.0	<220	<5.50	<55.0	<220	<22.0	<16	<0.20
1,2-Dichlorobenzene	600	60	<10.2	<102	<2.55	<30.0	<120	<12.0	<16	<0.20
1,3-Dichlorobenzene	1,250	125	<5.80	<58.0	<1.45	<25.0	<100	<10.0	<16	<0.20
1,4-Dichlorobenzene	75	15	<6.00	<60.0	<1.50	<30.0	<120	<12.0	<16	0.74 (J)
Dichlorodifluoromethane	1,000	200	<9.20	<92.0	<2.30	<35.0	<140	<14.0	<40	<0.50
1,1-Dichloroethane	850	85	<7.20	<72.0	<1.80	<25.0	<100	<10.0	<40	<0.50
1,2-Dichloroethane	5.0	0.5	<3.40	<34.0	<0.85	<20.0	<80.0	<8.00	<40	<0.50
1,1-Dichloroethylene	7.0	0.7	<7.80	<78.0	<1.95	<25.0	<100	<10.0	<40	4.0
cis-1,2-Dichloroethylene	70	7.0	**1240**	**3810**	**1080**	**3930**	**2550**	**1080**	57 (J)	**530 (E1)**
trans-1,2-Dichloroethylene	100	20	49.7	83.5	**162**	61.9	80	**108**	59 (J)	44
1,2-Dichloropropane	5.0	0.5	<5.00	<50.0	<1.25	<20.0	<80.0	<8.00	<40	<0.50
1,3-Dichloropropane	NSE	NSE	<13.4	<134	<3.35	<45.0	<180	<18.0	<20	<0.25
2,2-Dichloropropane	NSE	NSE	<30.0	<300	<7.50	<75.0	<300	<30.0	<40	<0.50
Ethylbenzene	700	140	66.6	108	38.5	93.5	394	419	**900**	200 (E1)

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date							
			MW-5							
	ES	PAL	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Hexachlorobutadiene	NSE	NSE	<20.0	<200	<5.00	<50.0	<200	<20.0	<40	<0.50
Isopropylbenzene	NSE	NSE	<6.20	<62.0	<1.55	<15.5	<62.0	<6.20	38 (J)	15
Isopropyl Ether	NSE	NSE	<9.20	<92.0	<2.30	<30.0	<120	<12.0	<40	<0.50
p-Isopropyltoluene	NSE	NSE	<6.40	<64.0	<1.60	<25.0	<100	<10.0	<16	3.7
Methyl tert Butyl Ether	60	12	<6.0	<60.0	<1.50	<15.0	<60.0	<6.00	<40	<0.50
Methylene Chloride	5.0	0.5	<10.2	<102	<2.55	<25.0	<60.0	<6.00	<80	<1.0
Naphthalene	40	8.0	<16.0	<160	<4.00	<40.0	<160	<16.0	**42 (J)**	14
n-Propylbenzene	NSE	NSE	8.49	<60.0	2.52	<15.0	<60.0	40.6	71 (J)	33
Tetrachloroethylene	5.0	0.5	<6.40	<64.0	<1.60	<22.5	<90.0	<9.00	<40	**99**
1,1,2,2-Tetrachloroethane	0.2	0.02	<12.2	<122	<3.05	<30.5	<122	<12.2	<16	<0.20
Toluene	1,000	200	53.2	96.8	134	195	261	276	630	100
1,2,3-Trichlorobenzene	NSE	NSE	<6.60	<66.0	<1.65	<25.0	<100	<10.0	<20	<0.25
1,2,4-Trichlorobenzene	70	14	<9.40	<94.0	<2.35	<50.0	<200	<20.0	<20	<0.25
1,1,1-Trichloroethane	200	40	<8.40	<84.0	<2.10	<21.0	<84.0	<8.40	<40	<0.50
1,1,2-Trichloroethane	5.0	0.5	<10.0	<100	<2.50	<25.0	<60.0	<6.00	<20	<0.25
Trichloroethylene	5.0	0.5	<7.20	<72.0	<1.80	<25.0	<100	<10.0	<16	**84**
Trichlorofluoromethane	NSE	NSE	<14.0	<140	<3.50	<50.0	<200	<20.0	<40	<0.50
Total Trimethylbenzenes	480	96	30	<80.0	8.31	<20.0	151	189	**540**	148
Vinyl Chloride	0.2	0.02	**2440**	**4390**	**7080**	**3650**	**5760**	**7220**	**5800**	**1600 (E1)**
Total Xylenes	10,000	1,000	82	<124	142.3	120.4	501	489	2100	280
Lead (µg/l) EPA method 200.9	15	1.5	<1.00	<1.00	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date							
			MW-6							
	ES	PAL	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Elevation Data										
Ground Surface	--	--	814.75	814.75	814.75	814.75	814.75	814.75	814.75	814.75
Top of PVC	--	--	819.19	819.19	819.19	819.19	819.19	819.19	819.19	819.19
Top of Screen	--	--	807.09	807.09	807.09	807.09	807.09	807.09	807.09	807.09
Bottom of Screen	--	--	797.09	797.09	797.09	797.09	797.09	797.09	797.09	797.09
Groundwater	--	--	806.90	807.04	806.28	808.40	807.48	808.98	806.85	806.20
Field & NA Parameter Data										
Dissolved Oxygen (mg/l)	NSE	NSE	1.5	2.74	1.17	0.70	0.97	0.62	0.45	--
Temperature (°C)	NSE	NSE	12.51	13.61	9.14	10.95	10.51	10.97	12.15	4.6
ORP (mV)	NSE	NSE	-129	-25	-85	-140	-145	-147	-94	--
Conductivity (mS/m)	NSE	NSE	0.632	0.641	0.721	0.748	0.576	0.745	0.619	2.87
pH (mg/l)	NSE	NSE	6.12	5.92	6.62	6.57	6.77	5.93	7.19	6.45
Fe^{+2} (mg/l)	0.3	0.15	0.09	**14.7**	**14.9**	**18.3**	**13.7**	--	**23**	--
SO_4^{-2} (mg/l)	250	125	23.4	4.95	1.74 (J)	16.8	3.14 (J)	--	7.01 (B)	--
NO_3^- (as N) (mg/l)	10	2.0	2.51	0.15	<0.1	<0.1	<0.1	--	<0.1	--
Mn^{+2} (mg/l)	0.05	0.025	**2.38**	**1.51**	**1.58**	**1.65**	**1.28**	--	**1.2**	--
GRO (µg/l) WDNR Method	NSE	NSE	99	<50	--	--		--	--	--
VOCs[1] (µg/l)										
Benzene	5.0	0.5	<0.31	0.653 (J)	0.555 (J)	0.894 (J)	<0.31	<0.31	0.21 (J)	0.34 (J)
Bromobenzene	NSE	NSE	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.20	<0.20
Bromodichloromethane	0.6	0.06	<0.83	<0.83	<0.83	<0.83	<0.3	<0.3	<0.20	<0.20
Bromoform	NSE	NSE	--	--	--	--	--	--	<0.20	<0.20
Bromomethane	NSE	NSE	--	--	--	--	--	--	<0.20	<0.50 (C)
n-Butylbenzene	NSE	NSE	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.20	<0.20
sec-Butylbenzene	NSE	NSE	<0.33	<0.33	<0.33	<0.4	<0.4	<0.4	<0.25	<0.25
tert-Butylbenzene	NSE	NSE	<0.31	<0.31	<0.31	<0.4	<0.4	<0.4	<0.20	<0.20
Carbon Tetrachloride	5.0	0.5	<0.59	<0.59	<0.59	<0.5	<0.3	<0.3	<0.50	<0.50
Chlorobenzene	NSE	NSE	<0.31	<0.31	<0.31	<0.7	<0.7	<0.7	<0.20	<0.20
Chlorodibromomethane	NSE	NSE	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.20	<0.20
Chloroethane	400	80	<0.44	<0.44	<0.44	<1.00	<1.00	<1.00	<1.0	<1.0
Chloroform	6.0	0.6	<0.27	<0.27	<0.27	<0.4	<0.2	<0.2	<0.20	<0.20
Chloromethane	3.0	0.3	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.20	<0.30
2-Chlorotoluene	NSE	NSE	<0.3	<0.3	<0.3	<0.6	<0.6	<0.6	<0.50	<0.50
4-Chlorotoluene	NSE	NSE	<0.3	<0.3	<0.3	<1.00	<1.00	<1.00	<0.20	<0.20
Chloroethylvinylether	NSE	NSE	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	<0.61	<0.61	<0.61	<1.30	<1.30	<1.30	<0.50	<0.50
1,2-Dibromoethane	0.05	0.005	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<0.20	<0.20
1,2-Dichlorobenzene	600	60	<0.51	<0.51	<0.51	<0.6	<0.6	<0.6	<0.20	<0.20
1,3-Dichlorobenzene	1,250	125	<0.29	<0.29	<0.29	<0.5	<0.5	<0.5	<0.20	<0.20
1,4-Dichlorobenzene	75	15	<0.3	<0.3	<0.3	<0.6	<0.6	<0.6	<0.20	<0.50
Dichlorodifluoromethane	1,000	200	<0.46	<0.46	<0.46	<0.7	<0.7	<0.7	<0.50	<0.50
1,1-Dichloroethane	850	85	<0.36	<0.36	<0.36	<0.5	<0.5	<0.5	<0.50	<0.50
1,2-Dichloroethane	5.0	0.5	<0.17	<0.17	<0.17	<0.4	<0.4	<0.4	<0.50	<0.50
1,1-Dichloroethylene	7.0	0.7	<0.39	<0.39	<0.39	<0.5	<0.5	<0.5	<0.50	<0.50
cis-1,2-Dichloroethylene	70	7.0	<0.23	2.46	7.29	36.6	1.21 (J)	<0.4	<0.50	3.1 (A-01)
trans-1,2-Dichloroethylene	100	20	<0.39	<0.39	<0.39	0.748 (J)	<0.39	<0.39	<0.50	<0.50
1,2-Dichloropropane	5.0	0.5	<0.25	<0.25	<0.25	<0.4	<0.4	<0.4	<0.50	<0.50
1,3-Dichloropropane	NSE	NSE	<0.67	<0.67	<0.67	<0.9	<0.9	<0.9	<0.25	<0.25
2,2-Dichloropropane	NSE	NSE	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<0.50	<0.50
Ethylbenzene	700	140	<0.5	<0.5	<0.5	0.835 (J)	<0.5	<0.5	<0.50	0.55 (A-01, J)

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date							
			MW-6							
	ES	PAL	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Hexachlorobutadiene	NSE	NSE	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50
Isopropylbenzene	NSE	NSE	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.20	<0.20
Isopropyl Ether	NSE	NSE	<0.46	<0.46	<0.46	<0.6	<0.6	<0.6	<0.50	<0.50
p-Isopropyltoluene	NSE	NSE	43.1	<0.32	<0.32	<0.5	<0.5	<0.5	<0.20	<0.20
Methyl tert Butyl Ether	60	12	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Methylene Chloride	5.0	0.5	<0.51	<0.51	<0.51	<0.5	<0.3	<0.3	<1.0	<1.0
Naphthalene	40	8.0	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.25	0.30 (J)
n-Propylbenzene	NSE	NSE	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Tetrachloroethylene	5.0	0.5	**16.3**	**9.2**	1.57	1.02 (J)	0.941 (J)	<0.45	3.0	**5.0**
1,1,2,2-Tetrachloroethane	0.2	0.02	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	<0.20	<0.20
Toluene	1,000	200	0.708 (J)	<0.3	0.851 (J)	2.43	<0.3	<0.3	0.49 (J)	<0.50
1,2,3-Trichlorobenzene	NSE	NSE	<0.33	<0.33	<0.33	<0.5	<0.5	<0.5	<0.25	<0.25
1,2,4-Trichlorobenzene	70	14	<0.47	<0.47	<0.47	<1.00	<1.00	<1.00	<0.25	<0.25
1,1,1-Trichloroethane	200	40	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.50	<0.50
1,1,2-Trichloroethane	5.0	0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.25	<0.25
Trichloroethylene	5.0	0.5	0.413 (J)	0.539 (J)	<0.36	<0.5	<0.5	<0.5	0.82	1.3
Trichlorofluoromethane	NSE	NSE	<0.7	<0.7	<0.7	<1.00	<1.00	<1.00	<0.50	<0.50
Total Trimethylbenzenes	480	96	2.97	<0.4	<0.4	<0.4	<0.4	<0.4	0.24 (J)	0.24 (J)
Vinyl Chloride	0.2	0.02	<0.2	**1.54**	**10.5**	**10.6**	<0.2	<0.2	**0.22 (J)**	**4.8 (A-01)**
Total Xylenes	10,000	1,000	<0.62	<0.62	<0.62	0.957 (J)	<0.62	<0.62	1.2 (J)	0.53 (J)
Lead (µg/l) EPA method 200.9	15	1.5	<1.00	<1.00	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date									
			AW-1									
	ES	PAL	8/21/1990	2/6/1991	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Elevation Data												
Ground Surface	--	--	822.43	822.43	822.43	822.43	822.43	822.43	822.43	822.43	822.43	822.43
Top of PVC	--	--	822.11	822.11	822.11	822.11	822.11	822.11	822.11	822.11	822.11	822.11
Top of Screen	--	--	813.50	813.50	813.50	813.50	813.50	813.50	813.50	813.50	813.50	813.50
Bottom of Screen	--	--	798.50	789.50	789.50	789.50	789.50	789.50	789.50	789.50	789.50	789.50
Groundwater	--	--	809.74	806.71	806.96	806.86	806.67	808.76	807.32	809.31	807.16	806.25
Field & NA Parameter Data												
Dissolved Oxygen (mg/l)	NSE	NSE	--	--	0.91	2.46	2.38	2.68	4.45	0.48	1.60	--
Temperature (°C)	NSE	NSE	--	--	12.97	15.09	9.31	11.11	11.17	12.06	11.84	5.6
ORP (mV)	NSE	NSE	--	--	-33	17	-81	-120	62	-116	138	--
Conductivity (mS/m)	NSE	NSE	--	--	1.67	1.8	1.83	1.55	1.89	1.67	1.600	1.85
pH (mg/l)	NSE	NSE	--	--	6.23	6.1	6.80	6.54	6.91	5.97	7.16	6.76
Fe^{+2} (mg/l)	0.3	0.15	--	--	0.013	0.0132	0.034	0.0154	0.031	--	<0.042	--
SO_4^{-2} (mg/l)	250	125	--	--	74.1	51.1	54.9	53.8	47.2	--	31.0 (B)	--
NO_3^- (as N) (mg/l)	10	2.0	--	--	4.16	2.83	2.82	3.78	3.92	--	3.1	--
Mn^{+2} (mg/l)	0.05	0.025	--	--	**0.356**	**0.548**	**0.559**	0.042	**0.324**	--	0.016	--
GRO (µg/l) WDNR Method	NSE	NSE	--	--	<50	56.7	--	--		--	--	--
VOCs[1] (µg/l)												
Benzene	5.0	0.5	<5	**130**	<0.31	<1.55	0.75 (J)	0.554 (J)	<0.31	<0.31	0.30 (J)	<0.20
Bromobenzene	NSE	NSE	--	--	<0.41	<2.05	<0.41	<0.41	<0.41	<0.41	<0.20	<0.20
Bromodichloromethane	0.6	0.06	<5	<50	<0.83	<4.15	<0.83	<0.83	<0.3	<0.3	<0.20	<0.20
Bromoform	NSE	NSE	<5	<50	--	--	--	--	--	--	<0.20	<0.20
Bromomethane	NSE	NSE	<10	<50	--	--	--	--	--	--	<0.20	<0.50
n-Butylbenzene	NSE	NSE	--	--	<0.36	<1.80	<0.36	<0.36	<0.36	<0.36	<0.20	<0.20
sec-Butylbenzene	NSE	NSE	--	--	<0.33	<1.65	<0.33	<0.4	<0.4	<0.4	<0.25	<0.25
tert-Butylbenzene	NSE	NSE	--	--	<0.31	<1.55	<0.31	<0.4	<0.4	<0.4	<0.20	<0.20
Carbon Tetrachloride	5.0	0.5	<5	<50	<0.59	<2.95	<0.59	<0.5	<0.3	<0.3	<0.50	<0.50
Chlorobenzene	NSE	NSE	<5	<50	<0.31	<1.55	<0.31	<0.7	<0.7	<0.7	<0.20	<0.20
Chlorodibromomethane	NSE	NSE	<5	<50	<0.87	<4.35	<0.87	<0.87	<0.87	<0.87	<0.20	<0.20
Chloroethane	400	80	<10	<50	<0.44	<2.20	<0.44	<1.00	<1.00	<1.00	<1.0	<1.0
Chloroform	6.0	0.6	<5	<50	<0.27	<1.35	<0.27	<0.4	<0.2	<0.2	<0.20	<0.20
Chloromethane	3.0	0.3	<10	<50	<0.29	<1.45	<0.29	<0.29	<0.29	<0.29	<0.20	<0.30
2-Chlorotoluene	NSE	NSE	--	--	<0.3	<1.50	<0.3	<0.6	<0.6	<0.6	<0.50	<0.50
4-Chlorotoluene	NSE	NSE	--	--	<0.3	<1.50	<0.3	<1.00	<1.00	<1.00	<0.20	<0.20
Chloroethylvinylether	NSE	NSE	--	--	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	--	--	<0.61	<3.05	<0.61	<1.30	<1.30	<1.30	<0.50	<0.50
1,2-Dibromoethane	0.05	0.005	--	--	<1.10	<5.50	<1.10	<1.10	<1.10	<1.10	<0.20	<0.20
1,2-Dichlorobenzene	600	60	--	<50	<0.51	<2.55	<0.51	<0.6	<0.6	<0.6	<0.20	<0.20
1,3-Dichlorobenzene	1,250	125	--	<50	<0.29	<1.45	<0.29	<0.5	<0.5	<0.5	<0.20	<0.20
1,4-Dichlorobenzene	75	15	--	<50	<0.3	<1.50	<0.3	<0.6	<0.6	<0.6	<0.20	<0.50
Dichlorodifluoromethane	1,000	200	--	<50	<0.46	<2.30	<0.46	<0.7	<0.7	<0.7	<0.50	<0.50
1,1-Dichloroethane	850	85	<5	<50	<0.36	<1.80	<0.36	<0.5	<0.5	<0.5	<0.50	<0.50
1,2-Dichloroethane	5.0	0.5	<5	<50	<0.17	<0.85	<0.17	<0.4	<0.4	<0.4	<0.50	<0.50
1,1-Dichloroethylene	7.0	0.7	<5	<50	<0.39	<1.95	<0.39	<0.5	<0.5	<0.5	<0.50	<0.50
cis-1,2-Dichloroethylene	70	7.0	--	<50	20.1	29.5	58.5	21.9	67	12.6	2.3	0.85 (J)
trans-1,2-Dichloroethylene	100	20	<5	<50	0.419 (J)	<1.95	2.67	<0.39	1.91	1.91	<0.50	<0.50
1,2-Dichloropropane	5.0	0.5	<5	<50	<0.25	<1.25	<0.25	<0.4	<0.4	<0.4	<0.50	<0.50
1,3-Dichloropropane	NSE	NSE	--	--	<0.67	<3.35	<0.67	<0.9	<0.9	<0.9	<0.25	<0.25
2,2-Dichloropropane	NSE	NSE	--	--	<1.50	<7.50	<1.50	<1.50	<1.50	<1.50	<0.50	<0.50
Ethylbenzene	700	140	<5	<50	<0.5	<2.50	0.622 (J)	0.825 (J)	<0.5	<0.5	0.90 (J)	<0.50

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date									
			AW-1									
	ES	PAL	8/21/1990	2/6/1991	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009
Hexachlorobutadiene	NSE	NSE	--	--	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50
Isopropylbenzene	NSE	NSE	--	--	<0.31	<1.55	<0.31	<0.31	<0.31	<0.31	<0.20	<0.20
Isopropyl Ether	NSE	NSE	--	--	<0.46	<2.30	<0.46	<0.6	<0.6	<0.6	<0.50	<0.50
p-Isopropyltoluene	NSE	NSE	--	--	<0.32	<1.60	<0.32	<0.5	<0.5	<0.5	<0.20	<0.20
Methyl tert Butyl Ether	60	12	--	--	<0.3	<1.50	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Methylene Chloride	5.0	0.5	<5	<50	<0.51	<2.55	<0.51	<0.5	<0.3	<0.3	<1.0	<1.0
Naphthalene	40	8.0	--	--	<0.8	<4.00	<0.8	<0.8	<0.8	<0.8	<0.25	<0.25
n-Propylbenzene	NSE	NSE	--	--	<0.3	<1.50	<0.3	<0.3	<0.3	<0.3	<0.50	<0.50
Tetrachloroethylene	5.0	0.5	**19**	**3500**	**43.7**	**23.7**	**20.9**	**6.11**	**16.7**	**13**	**11**	4.6
1,1,2,2-Tetrachloroethane	0.2	0.02	<5	<50	<0.61	<3.05	<0.61	<0.61	<0.61	<0.61	<0.20	<0.20
Toluene	1,000	200	<5	<50	0.419 (J)	<1.50	1.84	2.26	0.308 (J)	<0.3	0.96	<0.50
1,2,3-Trichlorobenzene	NSE	NSE	--	--	<0.33	<1.65	<0.33	<0.5	<0.5	<0.5	<0.25	<0.25
1,2,4-Trichlorobenzene	70	14	--	--	<0.47	<2.35	<0.47	<1.00	<1.00	<1.00	<0.25	<0.25
1,1,1-Trichloroethane	200	40	<5	<50	<0.42	<2.10	<0.42	<0.42	<0.42	<0.42	<0.50	<0.50
1,1,2-Trichloroethane	5.0	0.5	<5	<50	<0.5	<2.50	<0.5	<0.5	<0.3	<0.3	<0.25	<0.25
Trichloroethylene	5.0	0.5	<5	**190**	1.62	3.49	3.96	<0.5	3.74	2.04	0.62 (J)	1.1
Trichlorofluoromethane	NSE	NSE	--	--	<0.7	<3.50	<0.7	<1.00	<1.00	<1.00	<0.50	<0.50
Total Trimethylbenzenes	480	96	--	--	<0.4	<2.00	<0.4	<0.4	<0.4	<0.4	0.43 (J)	<0.20
Vinyl Chloride	0.2	0.02	**17**	**1400**	**0.507 (J)**	**6.3**	**66.5**	**3.63**	**4.81**	<0.2	**0.24 (J)**	**1.2**
Total Xylenes	10,000	1,000	<5	<150	<0.62	<3.10	1.435 (J)	1.139 (J)	<0.62	<0.62	2.5	<0.50
Lead (µg/l) EPA method 200.9	15	1.5	--	--	<1.00	<1.00	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date										Well No./Sampling Date	
			AW-2										AW-3	
	ES	PAL	8/21/1990	2/6/1991	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009	8/21/1990	2/6/1991
Elevation Data														
Ground Surface	--	--	822.17	822.17	822.17	822.17	822.17	822.17	822.17	822.17	822.17	822.17	816.94	816.94
Top of PVC	--	--	821.5	821.5	821.5	821.5	821.5	821.5	821.5	821.5	821.5	821.5	820.03	820.03
Top of Screen	--	--	812.07	812.07	812.07	812.07	812.07	812.07	812.07	812.07	812.07	812.07	810.44	810.44
Bottom of Screen	--	--	795.07	795.07	795.07	795.07	795.07	795.07	795.07	795.07	795.07	795.07	800.44	800.44
Groundwater	--	--	809.83	805.36	807.26	807.05	806.87	808.98	807.72	809.41	807.29	806.62	--	--
Field & NA Parameter Data														
Dissolved Oxygen (mg/l)	NSE	NSE	--	--	0.83	6.15	0.80	0.4	1.42	0.51	1.16	--	--	--
Temperature (°C)	NSE	NSE	--	--	12.64	13.14	11.88	11.29	11.72	12.28	13.39	5.2	--	--
ORP (mV)	NSE	NSE	--	--	-24	-41	-84	-154	58	-135	125	--	--	--
Conductivity (mS/m)	NSE	NSE	--	--	2.15	1.76	1.65	1.92	1.66	1.52	2.030	2.62	--	--
pH (mg/l)	NSE	NSE	--	--	6.45	6.28	6.81	6.6	6.89	6.00	7.30	6.63	--	--
Fe^{+2} (mg/l)	0.3	0.15	--	--	0.048	0.194	**1.83**	0.0218	0.03	--	<0.042	--	--	--
SO_4^{-2} (mg/l)	250	125	--	--	74.8	33.8	48.7	42.9	46.3	--	28.4 (B)	--	--	--
NO_3^- (as N) (mg/l)	10	2.0	--	--	5.61	1.12	2.46	2.9	2.54	--	3.5	--	--	--
Mn^{+2} (mg/l)	0.05	0.025	--	--	**0.499**	**4.32**	**3.93**	**1.8**	**1.02**	--	**4.9**	--	--	--
GRO (µg/l) WDNR Method	NSE	NSE	--	--	113	241	--	--	--	--	--	--	--	--
VOCs[1] (µg/l)														
Benzene	5.0	0.5	<5	<1.0	3.08	**12.6**	1.13	<6.20	<3.10	1.5	0.78	0.31 (J)	<5	1.1
Bromobenzene	NSE	NSE	--	--	<0.41	<8.20	<0.41	<8.20	<4.10	<0.41	<0.20	<0.20	--	--
Bromodichloromethane	0.6	0.06	<5	<1.0	<0.83	<16.6	<0.83	<16.6	<3.00	<0.3	<0.20	<0.20	<5	<1.0
Bromoform	NSE	NSE	<5	<1.0	--	--	--	--	--	--	<0.20	<0.20	<5	<1.0
Bromomethane	NSE	NSE	<10	<1.0	--	--	--	--	--	--	<0.20	<0.20	<10	<1.0
n-Butylbenzene	NSE	NSE	--	--	<0.36	<7.20	<0.36	<7.20	<3.60	<0.36	<0.20	<0.20	--	--
sec-Butylbenzene	NSE	NSE	--	--	<0.33	<6.60	<0.33	<8.00	<4.00	<0.4	<0.25	<0.25	--	--
tert-Butylbenzene	NSE	NSE	--	--	<0.31	<6.20	<0.31	<8.00	<4.00	<0.4	<0.20	<0.20	--	--
Carbon Tetrachloride	5.0	0.5	**95**	<1.0	<0.59	<11.8	<0.59	<10.0	<3.00	<0.3	<0.50	<0.50	<5	<1.0
Chlorobenzene	NSE	NSE	<5	<1.0	0.824 (J)	<6.20	0.982 (J)	<14.0	<7.00	<0.7	<0.20	<0.20	<5	<1.0
Chlorodibromomethane	NSE	NSE	<5	<1.0	<0.87	<17.4	<0.87	<17.4	<8.70	<0.87	<0.20	<0.20	<5	<1.0
Chloroethane	400	80	<10	<1.0	<0.44	<8.80	<0.44	<20.0	<10.0	<1.00	<1.0	<1.0	<10	<1.0
Chloroform	6.0	0.6	<5	<1.0	<0.27	<5.40	<0.27	<8.00	<2.00	<0.2	<0.20	<0.20	<5	<1.0
Chloromethane	3.0	0.3	<10	<1.0	<0.29	<5.80	<0.29	<5.80	<2.90	0.535 (J)	<0.20	<0.20	<10	**3.4**
2-Chlorotoluene	NSE	NSE	--	--	<0.3	<6.00	<0.3	<12.0	<6.00	<0.6	<0.50	<0.50	--	--
4-Chlorotoluene	NSE	NSE	--	--	<0.3	<6.00	<0.3	<20.0	<10.0	<1.00	<0.20	<0.20	--	--
Chloroethylvinylether	NSE	NSE	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloropropane	0.2	0.02	--	--	<0.61	<12.2	<0.61	<26.0	<13.0	<1.30	<0.50	<0.50	--	--
1,2-Dibromoethane	0.05	0.005	--	--	<1.10	<22.0	<1.10	<22.0	<11.0	<1.10	<0.20	<0.20	--	--
1,2-Dichlorobenzene	600	60	--	<1.0	<0.51	<10.2	<0.51	<12.0	<6.00	<0.6	<0.20	<0.20	--	<1.0
1,3-Dichlorobenzene	1,250	125	--	<1.0	<0.29	<5.80	<0.29	<10.0	<5.00	<0.5	<0.20	<0.20	--	<1.0
1,4-Dichlorobenzene	75	15	--	<1.0	<0.3	<6.00	<0.3	<12.0	<6.00	<0.6	<0.20	<0.20	--	<1.0
Dichlorodifluoromethane	1,000	200	--	<1.0	<0.46	<9.20	<0.46	<14.0	<7.00	<0.7	<0.50	<0.50	--	<1.0
1,1-Dichloroethane	850	85	<5	<1.0	<0.36	<7.20	<0.36	<10.0	<5.00	<0.5	<0.50	<0.50	<5	<1.0
1,2-Dichloroethane	5.0	0.5	**6**	<1.0	<0.17	<3.40	<0.17	<8.00	<4.00	<0.4	<0.50	<0.50	<5	<1.0
1,1-Dichloroethylene	7.0	0.7	<5	<1.0	<0.39	<7.80	<0.39	<10.0	<5.00	<0.5	<0.50	<0.50	<5	<1.0
cis-1,2-Dichloroethylene	70	7.0	--	<1.0	**174**	**466**	**152**	**384**	**114**	**219**	18	9.2	--	<1.0
trans-1,2-Dichloroethylene	100	20	29	<1.0	12.8	15.4	10.2	8.11	5.17	16.2	<0.50	0.58 (J)	<5	<1.0
1,2-Dichloropropane	5.0	0.5	<5	<1.0	<0.25	<5.00	<0.25	<8.00	<4.00	<0.4	<0.50	<0.50	<5	<1.0
1,3-Dichloropropane	NSE	NSE	--	--	<0.67	<13.4	<0.67	<18.0	<9.00	<0.9	<0.25	<0.25	--	--
2,2-Dichloropropane	NSE	NSE	--	--	<1.50	<30.0	<1.50	<30.0	<15.0	<1.50	<0.50	<0.50	--	--
Ethylbenzene	700	140	5.5	<1.0	<0.5	<10.0	<0.5	<10.0	<5.00	<0.5	1.5 (J)	<0.50	<5	<1.0

Table 1 (Continued)
Groundwater Analytical Results

Analytical Parameters	NR 140 Standards		Well No./Sampling Date										Well No./Sampling Date	
			AW-2										AW-3	
	ES	PAL	8/21/1990	2/6/1991	6/11/2003	9/23/2003	1/27/2004	5/3/2004	5/19/2005	4/11/2006	4/18/2007	3/3/2009	8/21/1990	2/6/1991
Hexachlorobutadiene	NSE	NSE	--	--	<1.00	<20.0	<1.00	<20.0	<10.0	<1.00	<0.50	<0.50	--	--
Isopropylbenzene	NSE	NSE	--	--	<0.31	<6.20	<0.31	<6.20	<3.10	<0.31	<0.20	<0.20	--	--
Isopropyl Ether	NSE	NSE	--	--	<0.46	<9.20	<0.46	<12.0	<6.00	<0.6	<0.50	<0.50	--	--
p-Isopropyltoluene	NSE	NSE	--	--	<0.32	<6.40	<0.32	<10.0	<5.00	<0.5	<0.20	<0.20	--	--
Methyl tert Butyl Ether	60	12	--	--	<0.3	<6.00	<0.3	<6.00	<3.00	<0.3	<0.50	<0.50	--	--
Methylene Chloride	5.0	0.5	<5	<1.0	<0.51	<10.2	<0.51	<10.0	<3.00	<0.3	<1.0	<1.0	<5	<1.0
Naphthalene	40	8.0	--	--	<0.8	<16.0	<0.8	<16.0	<8.00	<0.8	<0.25	<0.25	--	--
n-Propylbenzene	NSE	NSE	--	--	<0.3	<6.00	<0.3	<6.00	<3.00	<0.3	<0.50	<0.50	--	--
Tetrachloroethylene	5.0	0.5	**360**	**96**	**15.4**	**137**	**218**	**43.2**	**208**	**396**	**290**	**160**	<5	**18**
1,1,2,2-Tetrachloroethane	0.2	0.02	<5	<1.0	<0.61	<12.2	<0.61	<12.2	<6.10	<0.61	<0.20	<0.20	<5	<1.0
Toluene	1,000	200	<5	<1.0	0.416 (J)	0.416	0.45 (J)	<6.00	<3.00	<0.3	1.9	<0.50	<5	<1.0
1,2,3-Trichlorobenzene	NSE	NSE	--	--	<0.33	<6.60	<0.33	<10.0	<5.00	<0.5	<0.25	<0.25	--	--
1,2,4-Trichlorobenzene	70	14	--	--	<0.47	<9.40	<0.47	<20.0	<10.0	<1.00	<0.25	<0.25	--	--
1,1,1-Trichloroethane	200	40	<5	<1.0	<0.42	<8.40	<0.42	<8.40	<4.20	<0.42	<0.50	<0.50	<5	<1.0
1,1,2-Trichloroethane	5.0	0.5	<5	<1.0	<0.5	<10.0	<0.5	<10.0	<3.00	<0.3	<0.25	<0.25	<5	<1.0
Trichloroethylene	5.0	0.5	**150**	**12**	0.932 (J)	**8.67**	1.62	<10.0	<5.00	**13.8**	**5.9**	**5.8**	<5	<1.0
Trichlorofluoromethane	NSE	NSE	--	--	<0.7	<14.0	<0.7	<20.0	<10.0	<1.00	<0.50	<0.50	--	--
Total Trimethylbenzenes	480	96	--	--	<0.4	<8.00	<0.4	<8.00	<4.00	<0.4	0.55 (J)	<0.20	--	--
Vinyl Chloride	0.2	0.02	**550**	**9**	**84.5**	**481**	**134**	**158**	<2.00	**102**	**1.9**	**5.6**	<10	<1.0
Total Xylenes	10,000	1,000	61	<3.0	<0.62	<12.4	<0.62	<12.4	<6.20	<0.62	4.2	<0.50	<5	<3.0
Lead (µg/l) EPA method 200.9	15	1.5	--	--	<1.00	<1.00	--	--	--	--	--	--	--	--

NSE = No standard established
NA = Natural Attenuation
-- = Not analyzed for indicated parameter
[1] = Samples analyzed in 1990 and 1991 were analyzed by GC method 601/602. Samples analyzed during subsequent rounds of sampling were analyzed by EPA method 8021 or 8260.
(J) = Estimated concentration below laboratory quantitation level
(B) = The method blank associated with this sample contains 4.83 mg/l of this analyte
(A-01) = Carryover from previous sample.
(C) = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
(E1) = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
201 = Exceeds ch. NR 140 Enforcement Standard (ES)
3.36 = Exceeds ch. NR 140 Preventive Action Limit (PAL)
Toluene was detected in the trip blank during the May 19, 2005 groundwater monitoring event at a concentration above the limit of detection, but below the quantitation level.
Compiled by: MFR Checked by: KEA

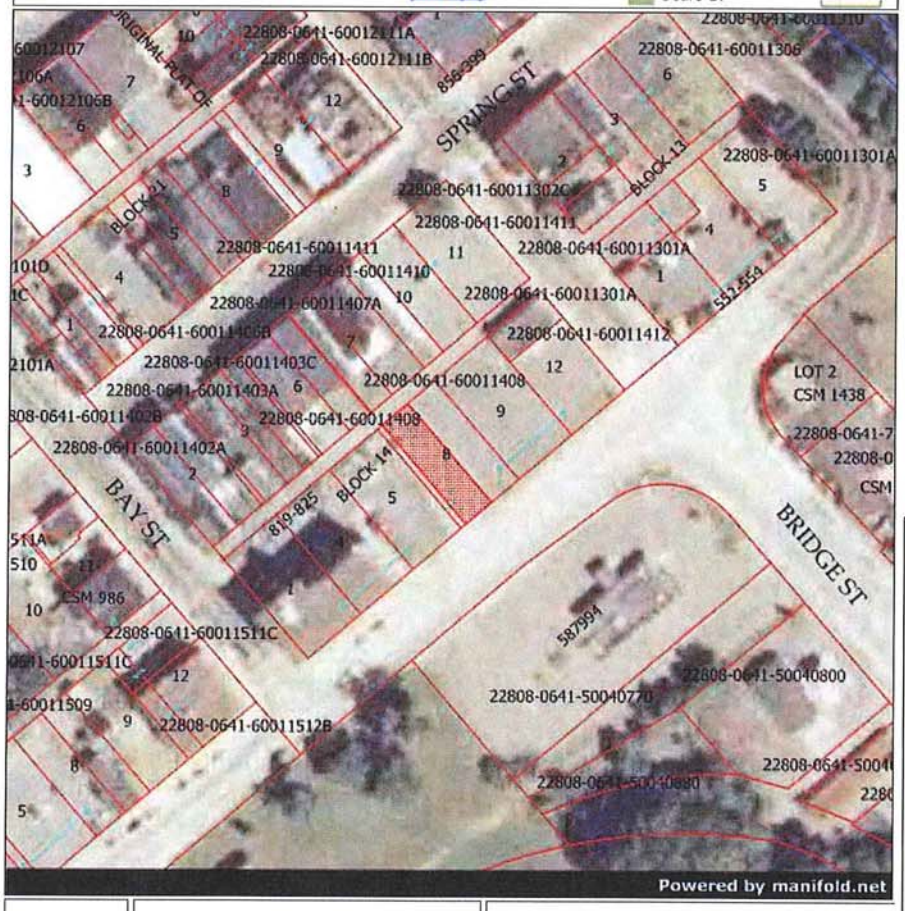
OFF-SOURCE
A
PROPERTY

28 Range 08

Township 28 Range 08

Disclaimer: This drawing is a compilation of records as they appear in the Chippewa County offices affecting the area shown and is to be used only for reference purposes.

(tool tips) Scale 1: Scale 1: GoTo



Info	91°23.491' W:44°56.090' N	267 Feet

To save **Query Results** click and drag to highlight, copy, then paste into a spreadsheet program

AREA	3967.7
PINGIS	22808-0641-60011405
ZONEDIST	
ACRES	0.1
LAST_NAME	CITY OF CHIPPEWA FA
FIRST_NAME	
ADDRESS_1	30 W CENTRAL ST
ADDRESS_2	
CITY_STATE	CHIPPEWA FALLS WI
ZIPCODE	54729
LOCATED_AT	
MUNI_NUM	211
COMP_NUM	47
SECTION	06
TOWNSHIP	28N
RANGE	08W
DOC_1	679-344
DOC_2	743-143
DOC_3	799-415
DESC_1	ORIGINAL PLAT MAP 6-3
DESC_2	LOT 5 EX THE W 60' & THE
DESC_3	W 32' OF LOT 8 BLK 14

Find Information

Last Name
LASTNAME Find

Parcel Number
22808-0111-0000000(Find

Advanced SQL

(click here for direction)

SQL Submit

Zoom to Select Features

Clear Selection

Find

Layers

- Section Numbers
- Road Name
- Water Name
- Plat Labels
- Parcel Numbers
- Deed References
- Misc Labels
- Section Lines
- Forty Lines
- Property Lines
- Water
- Leaders
- Misc Lines
- Parcels
- Photo

Apply

Queries

Views

RIGHT-OF-WAY

"Rick Rubenzer" <rrubenzer@chippewafalls-wi.gov>
08/07/2009 08:13 AM

To "Kevin Accola" <kaccola@sehinc.com>
cc "Rob Krejci" <rkrejci@chippewafalls-wi.gov>
bcc
Subject RE: Notification of Contamination in the Right-of-way at former Chieftain Oil, 10 W. River Street - WDNR BRRTS #03-09-000245

Kevin: I have received this notification.

Richard J. Rubenzer, PE
Director Of Public Works, City Engineer, Utilities Manager
City of Chippewa Falls
30 west Central Street
Chippewa Falls, WI 54729
715 726-2736 Office,
715 726-2756 Facsimile,
715 577-4917 Cell

-----Original Message-----
From: Kevin Accola [mailto:kaccola@sehinc.com]
Sent: Thursday, August 06, 2009 6:21 PM
To: Rick Rubenzer
Cc: Jayson Smith
Subject: Notification of Contamination in the Right-of-way at former Chieftain Oil, 10 W. River Street - WDNR BRRTS #03-09-000245

Rick,

SEH is providing this email as notification that residual soil and groundwater contamination remains in the Bridge Street and River Street right-of-way (ROW) adjacent to the referenced site. The site has received case closure and is required to be included on the Wisconsin Department of Natural Resources (WDNR) Geographical Information System (GIS) registry of contaminated sites before final case closure will be granted. The GIS registry checklist requires notification, as a condition of final case closure, to the governmental unit that is responsible for maintenance of the public street within the contaminated area. Petroleum soil contamination is expected to be encountered in the Bridge Street and River Street ROW adjacent to the referenced site at depths of approximately 5 to
12 feet below ground surface (bgs) and groundwater containing petroleum and chlorinated compounds can be expected in the ROW at depths ranging from 10 to 15 feet bgs. The attached figures show the estimated extent of residual soil contamination and the approximate location of the contaminated groundwater plume. The City will need to properly manage contaminated soil and groundwater that are encountered during future subsurface excavation activities within the contaminated areas. Please forward this email to the appropriate departments at the City. Please also send a reply email to me with your acknowledgement that the City has received this notification.

(See attached file: Figure 3 - estimated extent of residual GW contamination.pdf)(See attached file: Figure 2 - estimated extent of residual soil contamination.pdf)

Kevin E. Accola, CHMM | Associate
Sr. Environmental Scientist
SEH
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Chippewa Falls, WI 54729
715.720.6224
715.720.6300 (fax)

RIGHT-OF-WAY

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