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## Appendix C

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### **EDR Environmental Database Search**



## **The EDR Radius Map with GeoCheck<sup>®</sup>**

**Mountain Iron USX Site  
5520 County Road 102  
Mountain Iron, MN 55768**

**Inquiry Number: 621494.4s**

**April 19, 2001**

## ***The Source For Environmental Risk Management Data***

3530 Post Road  
Southport, Connecticut 06490

**Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

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

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

### TARGET PROPERTY INFORMATION

#### ADDRESS

5520 COUNTY ROAD 102  
MOUNTAIN IRON, MN 55768

#### COORDINATES

Latitude (North): 47.523000 - 47° 31' 22.8"  
Longitude (West): 92.620700 - 92° 37' 14.5"  
Universal Transverse Mercator: Zone 15  
UTM X (Meters): 528554.8  
UTM Y (Meters): 5263137.0

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 2447092-E5 VIRGINIA, MN  
Source: USGS 7.5 min quad index

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ( "reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

#### FEDERAL ASTM STANDARD

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System  
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned  
CORRACTS..... Corrective Action Report  
RCRIS-TSD..... Resource Conservation and Recovery Information System  
RCRIS-LQG..... Resource Conservation and Recovery Information System  
RCRIS-SQG..... Resource Conservation and Recovery Information System  
ERNS..... Emergency Response Notification System

#### STATE ASTM STANDARD

SHWS..... Superfund Permanent List of Priorities  
SWF/LF..... Permitted Solid Waste Disposal Facilities  
LUST..... Leak Sites  
UST..... Underground Storage Tank Database

## EXECUTIVE SUMMARY

### FEDERAL ASTM SUPPLEMENTAL

CONSENT.....	Superfund (CERCLA) Consent Decrees
ROD.....	Records Of Decision
Delisted NPL.....	National Priority List Deletions
FINDS.....	Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS.....	Hazardous Materials Information Reporting System
MLTS.....	Material Licensing Tracking System
MINES.....	Mines Master Index File
NPL Liens.....	Federal Superfund Liens
PADS.....	PCB Activity Database System
RAATS.....	RCRA Administrative Action Tracking System
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

### STATE OR LOCAL ASTM SUPPLEMENTAL

AST.....	Aboveground Storage Tanks
MN Spills.....	Spills Database
MN HWS Permit.....	Active TSD Facilities
MN Deleted SHWS.....	Premanent List of Priority Deletions
MN LCP.....	Closed Landfills Priority List
MN VIC.....	Voluntary Investigation and Cleanup Program
MN Enforcement.....	Generators Associated with Enforcement Logs
BULK.....	Bulk Facilities Database
MN AGSPILLS.....	Department of Agriculture Spills

### EDR PROPRIETARY DATABASES

Coal Gas.....	Former Manufactured Gas (Coal Gas) Sites
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### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

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

## EXECUTIVE SUMMARY

### STATE OR LOCAL ASTM SUPPLEMENTAL

**MN LS:** The List of Sites includes: Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), No Further Remedial Action Planned (NFRAP), National Priorities List (NPL), Permanent List of Priorities (PLP), Sites delisted from the Permanent List of Priorities (DPLP), Hazardous Waste Permit Unit Project Facilities (HW PERM), List of Permitted Solid Waste Facilities (SW PERM), 1980 Metropolitan Area Waste Disposal Site Inventory, 1980 Statewide Outstate Dump Inventory (ODI), Voluntary and Investigation Program (VIC), and Closed Landfill Sites Undergoing Cleanup (LCP). The List of Sites comes from Minnesota Pollution Control

A review of the MN LS list, as provided by EDR, has revealed that there is 1 MN LS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
MOUNTAIN IRON DUMP	"1/3 MI NE OF INTER OF	1/8 - 1/4 E	1	6

## EXECUTIVE SUMMARY

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

<u>Site Name</u>	<u>Database(s)</u>
MINNTAC LDFL US STEEL CORP - RAILROAD	CERC-NFRAP LUST, SWF/LF, MN Spills, UST LUST
EDWARDS OIL CHISHOLM LUCKY 7 US STEEL-MIN TAC LOCOMOTIVE BU	LUST LUST
USS - MINTAC US STEEL MINNTAC	LUST, MN Spills LUST, MN Spills
MINNTAC US STEEL/MINNTAC EAST PIT FUEL	LUST, MN Spills LUST
VIDMAR IRON WORKS MINTAC CORP	UST, LUST LUST, MN Spills
US STEEL LOCOMOTIVE REFUELING STATION	LUST, MN Spills LUST
US STEEL USX CORPORATION	LUST, MN Spills AST
MOUNTAIN IRON CITY OF EAST RANGE VOC COOP CTR	RCRIS-SQG, FINDS RCRIS-SQG, FINDS
LYLES AUTO BODY VIDMAR IRON WORKS INC	RCRIS-SQG, FINDS RCRIS-SQG, FINDS
MOUNTAIN IRON MOUNTAIN IRON	FINDS FINDS
MOUNTAIN IRON WTP MT IRON UTILITY	FINDS FINDS
UNNAMED DUMP - BUHL U.S. STEEL MINNTAC INDUSRTIAL	FINDS MN LS
ROUND LAKE DUMP - 3 ROUND LAKE DUMP 4	MN LS MN LS
IRON RANGE TOWING & AUTOMOTIVE USX MINNESOTA ORE	MN LS MN Enforcement
USX MINNESOTA ORR USX CORPORATION	MN Spills MN Spills MN Spills

# OVERVIEW MAP - 621494.4s - Wenck



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites (if requested)
- ▨ National Priority List Sites
- ▨ Landfill Sites

- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Wetlands



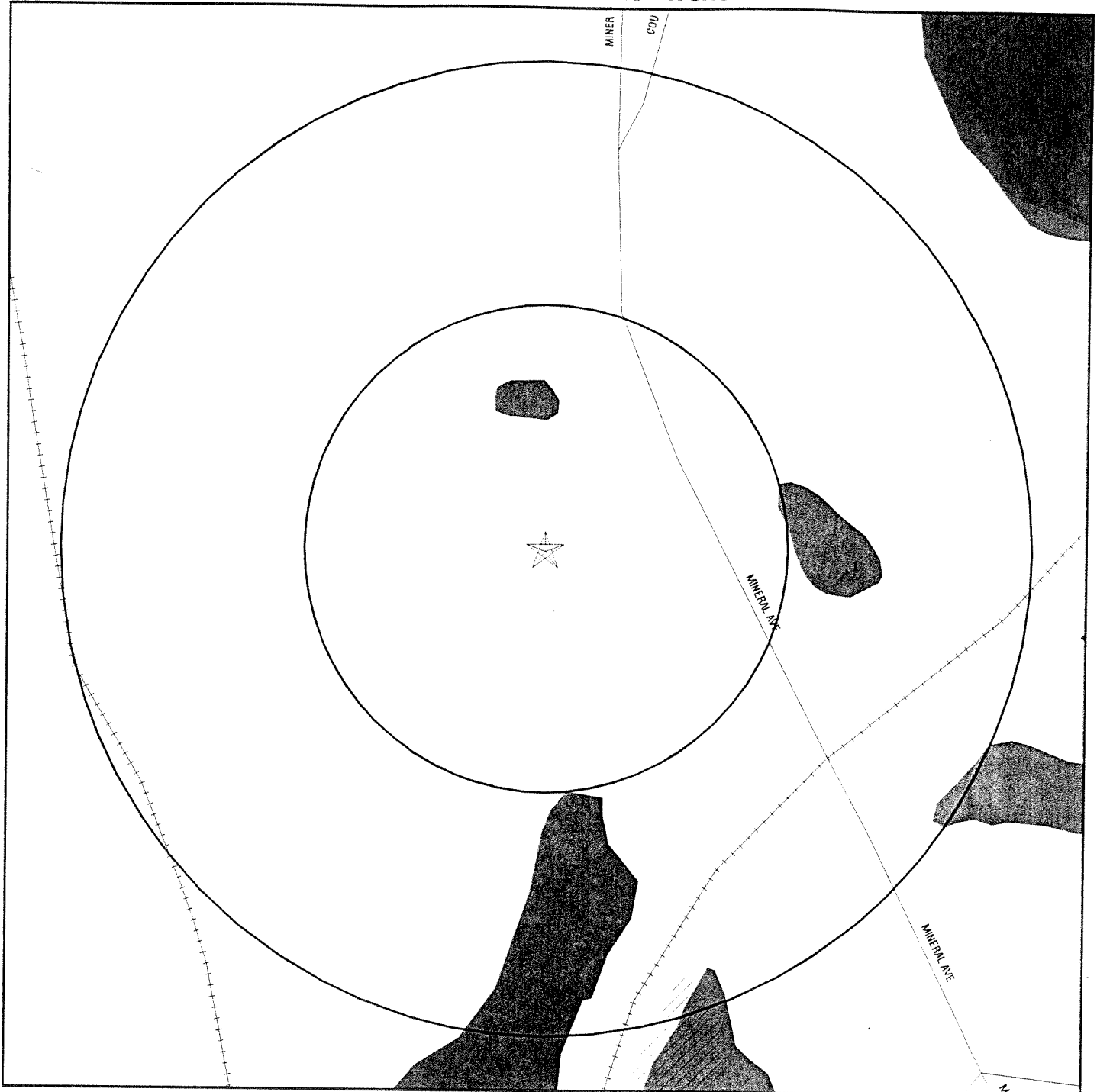
TARGET PROPERTY:	Mountain Iron USX Site	CUSTOMER:	Wenck
ADDRESS:	5520 County Road 102	CONTACT:	Brian T. Hayden
CITY/STATE/ZIP:	Mountain Iron MN 55768	INQUIRY #:	621494.4s
LAT/LONG:	47.5230 / 92.6207	DATE:	April 19, 2001 2:34 pm



## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
<b><u>FEDERAL ASTM STANDARD</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
<b><u>STATE ASTM STANDARD</u></b>								
State Haz. Waste		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
UST		0.250	0	0	NR	NR	NR	0
<b><u>FEDERAL ASTM SUPPLEMENTAL</u></b>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
<b><u>STATE OR LOCAL ASTM SUPPLEMENTAL</u></b>								
AST		TP	NR	NR	NR	NR	NR	0
MN Spills		TP	NR	NR	NR	NR	NR	0
MN HWS Permit		1.000	0	0	0	0	NR	0
MN Deleted SHWS		1.000	0	0	0	0	NR	0
MN LCP		0.500	0	0	0	NR	NR	0
MN LS		0.500	0	1	0	NR	NR	1
MN VIC		0.500	0	0	0	NR	NR	0
MN Enforcement		TP	NR	NR	NR	NR	NR	0
BULK		TP	NR	NR	NR	NR	NR	0
MN AGSPILLS		TP	NR	NR	NR	NR	NR	0
<b><u>EDR PROPRIETARY DATABASES</u></b>								
Coal Gas		1.000	0	0	0	0	NR	0

# DETAIL MAP - 621494.4s - Wenck



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites (if requested)
- ⚡ Sensitive Receptors
- ☐ National Priority List Sites
- ☑ Landfill Sites

- ⚡ Power transmission lines
- ⚡ Oil & Gas pipelines
- ☐ 100-year flood zone
- ☐ 500-year flood zone
- Wetlands



<p><b>TARGET PROPERTY:</b> Mountain Iron USX Site  <b>ADDRESS:</b> 5520 County Road 102  <b>CITY/STATE/ZIP:</b> Mountain Iron MN 55768  <b>LAT/LONG:</b> 47.5230 / 92.6207</p>	<p><b>CUSTOMER:</b> Wenck  <b>CONTACT:</b> Brian T. Hayden  <b>INQUIRY #:</b> 621494.4s  <b>DATE:</b> April 19, 2001 2:34 pm</p>
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## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
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AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

\* Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)      EDR ID Number  
EPA ID Number

**Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.**

**1  
East  
1/8-1/4  
823  
Higher**

**MOUNTAIN IRON DUMP  
"1/3 MI NE OF INTER OF US169 /  
MOUNTAIN IRON, MN 55768**

**MN LS    S100712213  
N/A**

MN LS:  
CERCLIS: No  
No Further Remedial Action Planned: No  
National Priorities List: No  
Delisted From PLP By MPCA: No  
Hazardous Waste Permit: No  
Solid Waste Permit: No  
Open Dump Inventory: Yes  
Voluntary Cleanup & Investigation: No  
HWIC: No  
RCRA Treatment Storage & Disposal: No  
METRO Dump Inventory: No  
No Further Action: No  
Entity Type: ODI  
MPCA ID: MNODI0001509  
County Code: 69  
EPA ID: Not reported  
PLP: No  
Facility Name 2: Not reported  
Link ID: 2593  
Method: C  
LCP: N  
Brown: N  
Area: 0.00000  
Perimeter: 0.00000  
MES All: 1966  
MES Id: 2593

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
BUHL	S104732127	UNNAMED DUMP - BUHL	APPROX. 1/4 MILE NE OF THE HWY	55768	MN LS	
CHISHOLM	S103462003	EDWARDS OIL CHISHOLM LUCKY 7	HWY 73	55768	LUST	
MOUNTAIN IRON	S103909812	US STEEL-MIN TAC LOCOMOTIVE BU	HWY 135 PO BOX 417	55768	LUST	
MOUNTAIN IRON	S104843642	IRON RANGE TOWING & AUTOMOTIVE	5205 HIGHWAY 25	55768	MN Enforcement	MNR000033050
MOUNTAIN IRON	S101280538	USX MINNESOTA ORE	PO BOX 417	55768	MN Spills	18558
MOUNTAIN IRON	100625171	US STEEL CORP - RAILROAD	PO BOX 417	55768	LUST, SWF/LF, MN Spills, UST	10128
MOUNTAIN IRON	S100056255	USS - MINTAC	PO BOX 417	55768	LUST, MN Spills	25825
MOUNTAIN IRON	1002758178	MOUNTAIN IRON	CITY HALL		FINDS	
MOUNTAIN IRON	S101280569	US STEEL MINNTAC	COLD STORAGE BUILDING	55768	LUST, MN Spills	135278
MOUNTAIN IRON	S101280539	USX MINNESOTA ORR	COUNTY ROAD 102	55768	MN Spills	15055
MOUNTAIN IRON	S101280648	MINNTAC	COUNTY ROAD 102	55768	LUST, MN Spills	20162
MOUNTAIN IRON	S103909860	US STEEL/MINNTAC EAST PIT FUEL	COUNTY RD 102	55768	LUST	
MOUNTAIN IRON	S101280529	USX CORPORATION	CO HWY 102	55768	MN Spills	9288
MOUNTAIN IRON	U001623162	VIDMAR IRON WORKS	8975 MAIN ST	55768	UST, LUST	18275
MOUNTAIN IRON	1000321922	MOUNTAIN IRON CITY OF	8878 MAIN ST	55768	RCRIS-SQG, FINDS	
MOUNTAIN IRON	S103854610	U.S. STEEL MINNTAC INDUSTRIAL	4 MILES NORTH-NORTHWEST OF US	55768	MN LS	
MOUNTAIN IRON	A100151979	USX CORPORATION	MINNESOTA ORE OPERATIONS	55768	AST	55900
MOUNTAIN IRON	S101280531	MINTAC CORP	P O BOX 417	55768	LUST, MN Spills	13206
MOUNTAIN IRON	1000321859	MINNTAC LDFL	OLD HWY 169	55768	CERC-NFRAP	
MOUNTAIN IRON	1000393610	EAST RANGE VOC COOP CTR	N ON HWY 53 TO MT IRON EXIT W	55768	RCRIS-SQG, FINDS	
MOUNTAIN IRON	S101280541	US STEEL	WEST PIT	55768	LUST, MN Spills	15394
MOUNTAIN IRON	1002948718	MOUNTAIN IRON	SEC 15 T58N R18W	55768	FINDS	
MOUNTAIN IRON	1002948174	MOUNTAIN IRON WTP	SEC 4 T58 R18	55768	FINDS	
MOUNTAIN IRON	S100699024	LOCOMOTIVE REFUELING STATION	US STEEL/MINNTAC	55768	LUST	
MOUNTAIN IRON	S101280558	US STEEL	TANK # 35/MIFA#86	55768	LUST, MN Spills	109698
MT IRON	1000888636	LYLES AUTO BODY	HWY 169 N 9105	55768	RCRIS-SQG, FINDS	
MT IRON	1002948659	MT IRON UTILITY	MOUNTAIN AVENUE	55768	FINDS	
MT IRON	1000867088	VIDMAR IRON WORKS INC	8925 MAIN ST	55768	RCRIS-SQG, FINDS	
NICHOLS	S102658062	ROUND LAKE DUMP - 3	1.5 MI NORTH OF HWY 18 / UNNAM	55768	MN LS	
NICHOLS	S100711468	ROUND LAKE DUMP 4	1/2MI NORTHWEST OF HWY 18 / UN	55768	MN LS	

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

**Elapsed ASTM days:** Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

## FEDERAL ASTM STANDARD RECORDS

### **NPL:** National Priority List

Source: EPA

Telephone: N/A

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

Date of Government Version: 01/23/01

Date Made Active at EDR: 02/16/01

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/05/01

Elapsed ASTM days: 11

Date of Last EDR Contact: 02/05/01

### **Proposed NPL:** Proposed National Priority List Sites

Source: EPA

Telephone: N/A

Date of Government Version: 01/23/01

Date Made Active at EDR: 02/16/01

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/05/01

Elapsed ASTM days: 11

Date of Last EDR Contact: 02/05/01

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

Source: EPA

Telephone: 703-413-0223

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

Date of Government Version: 12/28/00

Date Made Active at EDR: 02/28/01

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/29/00

Elapsed ASTM days: 61

Date of Last EDR Contact: 03/26/01

### **CERCLIS-NFRAP:** CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 12/28/00

Date Made Active at EDR: 02/28/01

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/29/00

Elapsed ASTM days: 61

Date of Last EDR Contact: 03/26/01

### **CORRACTS:** Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/20/00  
Date Made Active at EDR: 08/01/00  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 06/12/00  
Elapsed ASTM days: 50  
Date of Last EDR Contact: 03/14/01

**RCRIS:** Resource Conservation and Recovery Information System

Source: EPA/NTIS  
Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 06/21/00  
Date Made Active at EDR: 07/31/00  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 07/10/00  
Elapsed ASTM days: 21  
Date of Last EDR Contact: 01/30/01

**ERNS:** Emergency Response Notification System

Source: EPA/NTIS  
Telephone: 202-260-2342

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

Date of Government Version: 08/08/00  
Date Made Active at EDR: 09/06/00  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 08/11/00  
Elapsed ASTM days: 26  
Date of Last EDR Contact: 02/02/01

**FEDERAL ASTM SUPPLEMENTAL RECORDS**

**BRS:** Biennial Reporting System

Source: EPA/NTIS  
Telephone: 800-424-9346

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

Date of Government Version: 12/31/97  
Database Release Frequency: Biennially

Date of Last EDR Contact: 03/19/01  
Date of Next Scheduled EDR Contact: 06/18/01

**CONSENT:** Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices  
Telephone: Varies

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

Date of Government Version: N/A  
Database Release Frequency: Varies

Date of Last EDR Contact: N/A  
Date of Next Scheduled EDR Contact: N/A

**ROD:** Records Of Decision

Source: NTIS  
Telephone: 703-416-0223

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

Date of Government Version: 09/30/99  
Database Release Frequency: Annually

Date of Last EDR Contact: 04/10/01  
Date of Next Scheduled EDR Contact: 07/09/01

**DELISTED NPL:** National Priority List Deletions

Source: EPA  
Telephone: N/A

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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/23/01  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/05/01  
Date of Next Scheduled EDR Contact: 05/07/01

**FINDS:** Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA  
Telephone: N/A

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

Date of Government Version: 07/07/00  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/09/01  
Date of Next Scheduled EDR Contact: 07/09/01

**HMIRS:** Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation  
Telephone: 202-366-4526

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

Date of Government Version: 05/31/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 01/23/01  
Date of Next Scheduled EDR Contact: 04/23/01

**MLTS:** Material Licensing Tracking System

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169

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

Date of Government Version: 01/30/01  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/09/01  
Date of Next Scheduled EDR Contact: 07/09/01

**MINES:** Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959

Date of Government Version: 08/01/98  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/02/01  
Date of Next Scheduled EDR Contact: 07/02/01

**NPL LIENS:** Federal Superfund Liens

Source: EPA  
Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 02/20/01  
Date of Next Scheduled EDR Contact: 05/21/01

**PADS:** PCB Activity Database System

Source: EPA  
Telephone: 202-260-3936

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

Date of Government Version: 01/01/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 02/12/01  
Date of Next Scheduled EDR Contact: 05/14/01



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **RAATS:** RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

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

Date of Government Version: 04/17/95

Date of Last EDR Contact: 03/13/01

Database Release Frequency: No Update Planned

Date of Next Scheduled EDR Contact: 06/11/01

## **TRIS:** Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-260-1531

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

Date of Government Version: 12/31/97

Date of Last EDR Contact: 03/26/01

Database Release Frequency: Annually

Date of Next Scheduled EDR Contact: 06/25/01

## **TSCA:** Toxic Substances Control Act

Source: EPA

Telephone: 202-260-1444

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

Date of Government Version: 12/31/98

Date of Last EDR Contact: 03/30/01

Database Release Frequency: Every 4 Years

Date of Next Scheduled EDR Contact: 06/12/01

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

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

Telephone: 202-564-2501

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

Date of Government Version: 08/30/00

Date of Last EDR Contact: 03/26/01

Database Release Frequency: Quarterly

Date of Next Scheduled EDR Contact: 06/25/01

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

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 08/10/00

Date of Last EDR Contact: 03/26/01

Database Release Frequency: Quarterly

Date of Next Scheduled EDR Contact: 06/25/01

## **STATE OF MINNESOTA ASTM STANDARD RECORDS**

### **SHWS:** Superfund Permanent List of Priorities

Source: Minnesota Pollution Control Agency

Telephone: 651-296-6139

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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/00  
Date Made Active at EDR: 04/06/00  
Database Release Frequency: Annually

Date of Data Arrival at EDR: 03/17/00  
Elapsed ASTM days: 20  
Date of Last EDR Contact: 03/15/01

## **SWF/LF: Permitted Solid Waste Disposal Facilities**

Source: Minnesota Pollution Control Agency  
Telephone: 651-296-1781

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

Date of Government Version: 12/01/00  
Date Made Active at EDR: 02/02/01  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 01/03/01  
Elapsed ASTM days: 30  
Date of Last EDR Contact: 03/05/01

## **LUST: Leak Sites**

Source: Minnesota Pollution Control Agency  
Telephone: 651-297-8563

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

Date of Government Version: 10/10/00  
Date Made Active at EDR: 11/30/00  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 10/17/00  
Elapsed ASTM days: 44  
Date of Last EDR Contact: 01/16/01

## **UST: Underground Storage Tank Database**

Source: Minnesota Pollution Control Agency  
Telephone: 651-297-8657

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

Date of Government Version: 10/13/99  
Date Made Active at EDR: 11/04/99  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 10/19/99  
Elapsed ASTM days: 16  
Date of Last EDR Contact: 01/16/01

## **STATE OF MINNESOTA ASTM SUPPLEMENTAL RECORDS**

### **AST: Aboveground Storage Tanks**

Source: Minnesota Pollution Control Agency  
Telephone: 651-296-0930

Registered Aboveground Storage Tanks.

Date of Government Version: 10/13/99  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/16/01  
Date of Next Scheduled EDR Contact: 04/16/01

### **SPILLS: Spills Database**

Source: Minnesota Pollution Control Agency  
Telephone: 651-297-8499

Date of Government Version: 12/29/00  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/06/01  
Date of Next Scheduled EDR Contact: 05/07/01

### **MN HWS PERMIT: Active TSD Facilities**

Source: Minnesota Pollution Control Agency  
Telephone: 651-297-8471  
Active TSD Facilities.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/17/01  
Database Release Frequency: Annually

Date of Last EDR Contact: 04/16/01  
Date of Next Scheduled EDR Contact: 07/16/01

**MN Deleted SHWS:** Premanent List of Priority Deletions

Source: Minnesota Pollution Control Agency  
Telephone: 651-296-6139

The PLP rules specify that to delist a site, either all response actions required at a site have been completed, or that the site no longer poses a threat to public health or welfare or the environment.

Date of Government Version: 09/01/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 03/15/01  
Date of Next Scheduled EDR Contact: 06/11/01

**LCP:** Closed Landfills Priority List

Source: Minnesota Pollution Control Agency  
Telephone: 651-296-6706

The Minnesota Legislature enacted a law to manage and clean up the state's closed Mixed Municipal Solid Waste Landfills. Under that law, the MPCA is required to create and periodically revise a priority list of qualified landfills, based on the relative health and environmental risks they present. The MPCA established the first such priority list in December, 1994.

Date of Government Version: 07/01/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 03/27/01  
Date of Next Scheduled EDR Contact: 06/25/01

**LS:** List of Sites

Source: Minnesota Pollution Control Agency  
Telephone: 651-297-2731

The List of Sites includes: Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), No Further Remedial Action Planned (NFRAP), National Priorities List (NPL), Permanent List of Priorities (PLP), sites delisted from the Permanent List of Priorities (DPLP), Hazardous Waste Permit Unit Project Facilities (HW PERM), List of Permitted Solid Waste Facilities (SW PERM), 1980 Metropolitan Area Waste Disposal Site Inventory (METRO), 1980 Statewide Outstate Dump Inventory (ODI), Voluntary and Investigation Program (VIC), and Closed Landfill Sites Undergoing Cleanup (LCP).

Date of Government Version: 12/01/00  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/13/01  
Date of Next Scheduled EDR Contact: 06/11/01

**VIC:** Voluntary Investigation and Cleanup Program

Source: Minnesota Pollution Control Agency  
Telephone: 651-296-8407

Voluntary Investigation and Cleanup (VIC) Program List.

Date of Government Version: 01/12/01  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/09/01  
Date of Next Scheduled EDR Contact: 07/09/01

**ENFORCEMENT:** Generators Associated with Enforcement Logs

Source: Minnesota Pollution Control Agency  
Telephone: 651-297-8332

Regulatory Compliance, Hazardous Waste Enforcement Log and Hazardous Waste Permit Unit Project Identification List.

Date of Government Version: 01/09/01  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/16/01  
Date of Next Scheduled EDR Contact: 07/16/01

**BULK:** Bulk Facilities Database

Source: Department of Agriculture  
Telephone: 651-297-5640

Facilities that use bulk pesticides and fertilizers

Date of Government Version: 12/01/00  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/12/01  
Date of Next Scheduled EDR Contact: 05/15/01

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**AG SPILLS:** Department of Agriculture Spills

Source: Department of Agriculture

Telephone: 651-297-5640

This data is a list of pesticied/fertilizer incidents reported to have occurred in Minnesota.

Date of Government Version: 01/02/01

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/08/01

Date of Next Scheduled EDR Contact: 05/15/01

## EDR PROPRIETARY DATABASES

**Former Manufactured Gas (Coal Gas) Sites:** The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

### **Disclaimer Provided by Real Property Scan, Inc.**

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

## HISTORICAL AND OTHER DATABASE(S)

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

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

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

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

## GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

MOUNTAIN IRON USX SITE  
5520 COUNTY ROAD 102  
MOUNTAIN IRON, MN 55768

### TARGET PROPERTY COORDINATES

Latitude (North):	47.522999 - 47° 31' 22.8"
Longitude (West):	92.620697 - 92° 37' 14.5"
Universal Tranverse Mercator:	Zone 15
UTM X (Meters):	528554.8
UTM Y (Meters):	5263137.0

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

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

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

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

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

## TOPOGRAPHIC INFORMATION

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

### **USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE**

Target Property: 2447092-E5 VIRGINIA, MN  
Source: USGS 7.5 min quad index

### **GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY**

Target Property: General South

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

## HYDROLOGIC INFORMATION

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

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

### **FEMA FLOOD ZONE**

Target Property County  
ST LOUIS, MN

FEMA Q3 Flood  
Data Electronic Coverage  
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 2704240002B / CBPP  
Additional Panels in search area: 2704240001B / CBPP

### **NATIONAL WETLAND INVENTORY**

NWI Quad at Target Property  
VIRGINIA

NWI Electronic  
Coverage  
YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

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

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

Search Radius: 2.0 miles  
 Status: Not found

**AQUIFLOW®**

Search Radius: 2.000 Miles.

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

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

**GROUNDWATER FLOW VELOCITY INFORMATION**

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

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

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

**GEOLOGIC AGE IDENTIFICATION**

**ROCK STRATIGRAPHIC UNIT**

Geologic Code: X  
 Era: Precambrian  
 System: Precambrian  
 Series: X metasedimentary rocks

Category: Stratified Sequence

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

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

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

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Component Name: PITS

Soil Surface Texture: unweathered bedrock

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Not reported

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

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 4 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	60 inches	unweathered bedrock	Not reported	Not reported	Max: 20.00 Min: 0.01	Max: 0.00 Min: 0.00

### OTHER SOIL TYPES IN AREA

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

Soil Surface Textures: gravelly - fine sandy loam  
gravelly - sandy loam

Surficial Soil Types: gravelly - fine sandy loam  
gravelly - sandy loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: gravelly - sandy loam

### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	473117092370701	1/8 - 1/4 Mile SE
B2	473116092371801	1/8 - 1/4 Mile SSW
C8	473117092365701	1/8 - 1/4 Mile ESE
E19	473059092365401	1/2 - 1 Mile SSE
27	473057092375001	1/2 - 1 Mile SW
G28	473159092371901	1/2 - 1 Mile North
I30	473058092363002	1/2 - 1 Mile SE
I31	473058092363001	1/2 - 1 Mile SE
33	473108092361801	1/2 - 1 Mile ESE
J34	473203092372701	1/2 - 1 Mile NNW
36	473110092382001	1/2 - 1 Mile WSW
L41	473159092380802	1/2 - 1 Mile NW
L42	473159092380801	1/2 - 1 Mile NW
43	473211092374201	1/2 - 1 Mile NNW
K45	473128092383002	1/2 - 1 Mile West

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
G24	MN1690035	1/2 - 1 Mile North

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

## STATE DATABASE WELL INFORMATION

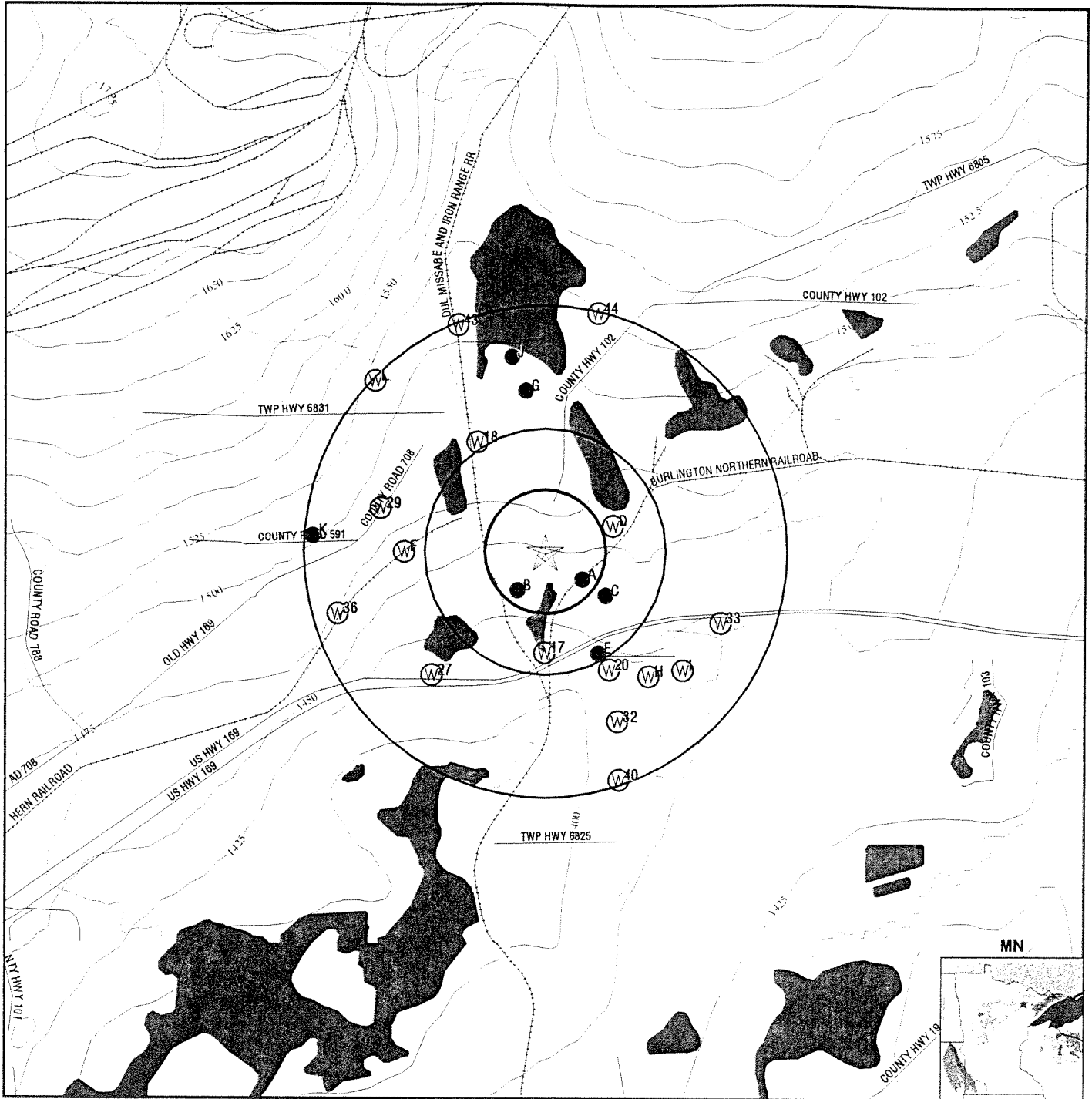
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A3	3069181614	1/8 - 1/4 Mile ESE
A4	3069181613	1/8 - 1/4 Mile ESE
A5	2023915469	1/8 - 1/4 Mile SE
A6	2023915369	1/8 - 1/4 Mile ESE
A7	2022916669	1/8 - 1/4 Mile SE
B9	2023915569	1/8 - 1/4 Mile SW
D10	2015052469	1/4 - 1/2 Mile ENE
D11	2015052669	1/4 - 1/2 Mile ENE
C12	2023915869	1/4 - 1/2 Mile SE
D13	3069174546	1/4 - 1/2 Mile ENE
D14	3069181612	1/4 - 1/2 Mile ENE

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C15	2023915669	1/4 - 1/2 Mile ESE
E16	2023915969	1/4 - 1/2 Mile SSE
17	2023915769	1/4 - 1/2 Mile South
18	3069168762	1/2 - 1 Mile NNW
20	2023809069	1/2 - 1 Mile SSE
F21	2023808369	1/2 - 1 Mile West
F22	2023808469	1/2 - 1 Mile West
G23	2022915269	1/2 - 1 Mile North
H25	2023965069	1/2 - 1 Mile SE
H26	2023965169	1/2 - 1 Mile SE
29	2023930169	1/2 - 1 Mile WNW
32	2023965269	1/2 - 1 Mile SSE
J35	2023915269	1/2 - 1 Mile North
K37	2023930369	1/2 - 1 Mile West
K38	2023929969	1/2 - 1 Mile West
K39	2023930469	1/2 - 1 Mile West
40	3069155419	1/2 - 1 Mile SSE
44	3069233047	1/2 - 1 Mile NNE

# PHYSICAL SETTING SOURCE MAP - 621494.4s



- ↖ Major Roads
- ⋮ Contour Lines
- ⊙ Water Wells
- ⊕ Public Water Supply Wells
- ↑ Groundwater Flow Direction
- ⊖ Indeterminate Groundwater Flow at Location
- ⊗ Groundwater Flow Varies at Location
- Cluster of Multiple Icons
- ⊙ Earthquake epicenter, Richter 5 or greater
- Ⓜ Closest Hydrogeological Data



TARGET PROPERTY:	Mountain Iron USX Site	CUSTOMER:	Wenck
ADDRESS:	5520 County Road 102	CONTACT:	Brian T. Hayden
CITY/STATE/ZIP:	Mountain Iron MN 55768	INQUIRY #:	621494.4s
LAT/LONG:	47.5230 / 92.6207	DATE:	April 19, 2001 2:35 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

<b>A1</b> <b>SE</b> <b>1/8 - 1/4 Mile</b> <b>Higher</b>	<b>FED USGS</b>	<b>473117092370701</b>
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**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1957	County:	St. Louis
Altitude:	1400.00 ft.	State:	Minnesota
Well Depth:	60.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Public supply

**B2**  
**SSW**  
**1/8 - 1/4 Mile**  
**Lower**

**FED USGS      473116092371801**

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Louis
Altitude:	1400.00 ft.	State:	Minnesota
Well Depth:	54.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

**A3**  
**ESE**  
**1/8 - 1/4 Mile**  
**Higher**

**MN WELLS      3069181614**

**Principal Well Information:**

Unique Well #:	181614	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	Not Reported
Subsection:	CA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	14
7.5 Minute Quadrangle:	Not Reported	Date drilled:	08/18/1981
Depth Drilled (in Ft.):	14	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	CITY OF MT. IRON	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:	Not Reported	Depth Cased (in Ft.):	14
Casing Diam (in):	2	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Yes
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Test Well	
Elevation Method:	Not Reported	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	10	Date Static Level measured:	08/18/1981
Static Water Level Data Source/Driller's License #:			69183

**A4**  
**ESE**  
 1/8 - 1/4 Mile  
 Higher

**MN WELLS 3069181613**

**Principal Well Information:**

Unique Well #:	181613	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	Not Reported
Subsection:	CA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	35
7.5 Minute Quadrangle:	Not Reported	Date drilled:	08/12/1981
Depth Drilled (in Ft.):	35	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	CITY OF MID. HOLE	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:			Not Reported
Potential Pollution Source Type:			Not Reported
Potential Pollution Source Distance (in Ft.):			Not Reported
Potential Pollution Source Direction:			Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Not Reported	
Elevation Method:	Not Reported	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	14	Date Static Level measured:	08/12/1981
Static Water Level Data Source/Driller's License #:			69183

**A5  
SE  
1/8 - 1/4 Mile  
Higher**

**MN WELLS 2023915469**

**Principal Well Information:**

Unique Well #:	239154	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	1424
Subsection:	CACC	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	67
7.5 Minute Quadrangle:	320D	Date drilled:	07/25/1956
Depth Drilled (in Ft.):	67	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	U.S. GEO. SURVEY	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:		Not Reported:	
Casing Diam (in):	Not Reported	Depth Cased (in Ft.):	Not Reported
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	Not Reported	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Not Reported
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Test Well	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**A6**  
**ESE**  
 1/8 - 1/4 Mile  
 Higher

MN WELLS 2023915369

**Principal Well Information:**

Unique Well #:	239153	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1425
Subsection:	CACA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	70
7.5 Minute Quadrangle:	320D	Date drilled:	06/04/1956
Depth Drilled (in Ft.):	70	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	OLIVER IRON CO.	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	56
Casing Diam (in):	12	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	PEVR	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	QUUU	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	70		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	
Use:	Test Well		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

**Well Address Information:**

Well Address: Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### Coliform/Nitrate/Static Water Level Information:

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	11	Date Static Level measured:	06/04/1956
Static Water Level Data Source/Driller's License #:			Not Reported

A7

SE

1/8 - 1/4 Mile

Higher

MN WELLS 2022916669

### Principal Well Information:

Unique Well #:	229166	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	1440
Subsection:	CACC	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	54
7.5 Minute Quadrangle:	320D	Date drilled:	1957
Depth Drilled (in Ft.):	54	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	IRON MT., VILLAGE OF	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	39
Casing Diam (in):	20	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Pleistocene, clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		
Use:	Domestic		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:	Not Reported		
Indicator that an entry for this well exists in the State Water Use Data System:	Not Reported		
Data exist for this well in the PCA Integrated Ground-Water Information System:	Not Reported		
Indicator of the availability of cuttings, core or downhole geophysical data for this well:	Not Reported		
Indicator of the existence of a digitized UTM location for this well:	Not Reported		

### Well Address Information:

Well Address: Not Reported



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	30	Date Static Level measured:	Not Reported
Static Water Level Data Source/Driller's License #:			Not Reported

**C8**  
**ESE**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS 473117092365701**

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Louis
Altitude:	1450.00 ft.	State:	Minnesota
Well Depth:	115.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

**B9**  
**SW**  
**1/8 - 1/4 Mile**  
**Lower**

**MN WELLS 2023915569**

**Principal Well Information:**

Unique Well #:	239155	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1423
Subsection:	DDAA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	57
7.5 Minute Quadrangle:	320D	Date drilled:	Not Reported
Depth Drilled (in Ft.):	57	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	OLIVER IRON CO.	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:			Not Reported
Casing Diam (in):	Not Reported	Depth Cased (in Ft.):	Not Reported
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	Not Reported	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Not Reported
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Not Reported	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

D10  
ENE  
1/4 - 1/2 Mile  
Higher

MN WELLS    2015052469

**Principal Well Information:**

Unique Well #:	150524		
Township:	58	County:	ST. LOUIS
Range:	18	Section:	10
Subsection:	BDDA	Elevation (in Ft.):	1455
Location Method	Not Reported	Locator:	Not Reported
7.5 Minute Quadrangle:	320D	Depth Completed (in Ft.):	395
Depth Drilled (in Ft.):	395	Date drilled:	10/19/1981
Status:	Active	Date of Last Update:	08/18/1991
Geographic Coordinates Method:			Not Reported
Well Name:	MT. IRON, CITY OF	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:			Not Reported
Casing Diam (in):	12	Depth Cased (in Ft.):	160
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	PEBI	Wellhead Protection Area:	Not Reported
Open Interval-Top:	Not Reported	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Yes
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	BIWABIK IRON-FORMATION		
Depth to Bedrock (Ft.):	160		
Any other Unused, Abandoned Well on Property ?:			Not Reported
Potential Pollution Source Type:			Not Reported
Potential Pollution Source Distance (in Ft.):			1000
Potential Pollution Source Direction:			Not Reported
Use:	Municipal		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

**Well Address Information:**

Well Address: Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### Coliform/Nitrate/Static Water Level Information:

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	47	Date Static Level measured:	Not Reported
Static Water Level Data Source/Driller's License #:			48038

D11  
ENE  
1/4 - 1/2 Mile  
Higher

MN WELLS 2015052669

### Principal Well Information:

Unique Well #:	150526	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	1455
Subsection:	BDDA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	425
7.5 Minute Quadrangle:	320D	Date drilled:	10/03/1981
Depth Drilled (in Ft.):	425	Date of Last Update:	08/18/1991
Status:	Active	Not Reported:	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	MT. IRON, CITY OF	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported:	
Data Source/Driller's License #:		Depth Cased (in Ft.):	160
Casing Diam (in):	12	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	PEBI	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Yes
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	BIWABIK IRON-FORMATION		
Depth to Bedrock (Ft.):	160		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		1000	
Potential Pollution Source Direction:		Not Reported	
Use:	Municipal		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported	
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported	
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported	
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported	
Indicator of the existence of a digitized UTM location for this well:		Not Reported	

### Well Address Information:

Well Address: Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	46	Date Static Level measured:	Not Reported
Static Water Level Data Source/Driller's License #:			48038

**C12**

**SE**

1/4 - 1/2 Mile

Higher

**MN WELLS 2023915869**

**Principal Well Information:**

Unique Well #:	239158	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	1455
Subsection:	CDAB	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	120
7.5 Minute Quadrangle:	320D	Date drilled:	06/14/1956
Depth Drilled (in Ft.):	120	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	OLIVER IRON CO.	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	
Use:	Test Well		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported	
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported	
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported	
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported	
Indicator of the existence of a digitized UTM location for this well:		Not Reported	

**Well Address Information:**

Well Address: Not Reported

**D13**

**ENE**

1/4 - 1/2 Mile

Higher

**MN WELLS 3069174546**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**Principal Well Information:**

Unique Well #:	174546	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	Not Reported
Subsection:	Not Reported	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	325
7.5 Minute Quadrangle:	Not Reported	Date drilled:	01/20/1981
Depth Drilled (in Ft.):	325	Date of Last Update:	08/25/1992
Status:	Not Reported	Not Reported:	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	MOUNTAIN IRON	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	69183	
Data Source/Driller's License #:		Depth Cased (in Ft.):	107
Casing Diam (in):	6	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	
Use:	Test Well		
Elevation Method:	Not Reported		
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported	
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported	
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported	
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported	
Indicator of the existence of a digitized UTM location for this well:		Not Reported	

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	7	Date Static Level measured:	01/20/1981
Static Water Level Data Source/Driller's License #:		69183	

D14  
ENE  
1/4 - 1/2 Mile  
Higher

MN WELLS 3069181612

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**Principal Well Information:**

Unique Well #:	181612	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	Not Reported
Subsection:	Not Reported	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	40
7.5 Minute Quadrangle:	Not Reported	Date drilled:	08/17/1981
Depth Drilled (in Ft.):	40	Date of Last Update:	08/25/1992
Status:	Not Reported	Geographic Coordinates Method:	Not Reported
Well Name:	MOUNTAIN IRON	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:			69183
Casing Diam (in):	2	Depth Cased (in Ft.):	40
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	Not Reported	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Not Reported
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:			Not Reported
Potential Pollution Source Type:			Not Reported
Potential Pollution Source Distance (in Ft.):			Not Reported
Potential Pollution Source Direction:			Not Reported
Use:	Test Well		
Elevation Method:	Not Reported		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	22.5	Date Static Level measured:	08/17/1981
Static Water Level Data Source/Driller's License #:			69183

C15  
ESE  
1/4 - 1/2 Mile  
Higher

\*  
MN WELLS    2023915669

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### Principal Well Information:

Unique Well #:	239156	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	1450
Subsection:	CDAA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	115
7.5 Minute Quadrangle:	320D	Date drilled:	Not Reported
Depth Drilled (in Ft.):	115	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	OLIVER IRON CO.	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	
Use:	Not Reported		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported	
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported	
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported	
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported	
Indicator of the existence of a digitized UTM location for this well:		Not Reported	

### Well Address Information:

Well Address: Not Reported

E16  
SSE  
1/4 - 1/2 Mile  
Lower

MN WELLS 2023915969

### Principal Well Information:

Unique Well #:	239159	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	1420
Subsection:	CDCD	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	70
7.5 Minute Quadrangle:	320D	Date drilled:	07/25/1956
Depth Drilled (in Ft.):	70	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	U.S. GEO. SURVEY	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing Diam (in):	Not Reported	Depth Cased (in Ft.):	Not Reported
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	Not Reported	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Not Reported
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	
Use:	Test Well		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

**Well Address Information:**

Well Address: Not Reported

17  
 South  
 1/4 - 1/2 Mile  
 Lower

MN WELLS 2023915769

**Principal Well Information:**

Unique Well #:	239157	County:	ST. LOUIS
Township:	58	Section:	10
Range:	18	Elevation (in Ft.):	1400
Subsection:	CCDC	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	58
7.5 Minute Quadrangle:	320D	Date drilled:	07/30/1957
Depth Drilled (in Ft.):	58	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	U.S. GEO. SURVEY	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:			
Casing Diam (in):	Not Reported	Depth Cased (in Ft.):	Not Reported
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	Not Reported	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Not Reported
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use: Test Well  
 Elevation Method: 7.5-minute Topographic Map (+ or - 5 Feet)  
 Data for this well are contained in the DNT Observation Well Network Data base: Not Reported  
 Indicator that an entry for this well exists in the State Water Use Data System: Not Reported  
 Data exist for this well in the PCA Integrated Ground-Water Information System: Not Reported  
 Indicator of the availability of cuttings, core or downhole geophysical data for this well: Not Reported  
 Indicator of the existence of a digitized UTM location for this well: Not Reported

**Well Address Information:**

Well Address: Not Reported

18  
 NNW  
 1/2 - 1 Mile  
 Higher

MN WELLS 3069168762

**Principal Well Information:**

Unique Well #:	168762	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	Not Reported
Subsection:	AA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	135
7.5 Minute Quadrangle:	Not Reported	Date drilled:	08/21/1979
Depth Drilled (in Ft.):	135	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	HINES, THOMAS	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	114
Casing Diam (in):	6	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	100		
Potential Pollution Source Direction:	Not Reported		
Use:	Domestic		
Elevation Method:	Not Reported		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

**Well Address Information:**

Well Address: Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count: Not Reported	Detection Limit Flag: Not Reported
Coliform Sampling Date: Not Reported	Coliform Analysis Source: Not Reported
Colif. Analys. Reliability: Not Reported	Bacteria Analysis Technique: Not Reported
Nitrate Count (mg/l): Not Reported	Nitrate Detection Limit Flag: Not Reported
Nitrate Sampling Date: Not Reported	Nitrate Analysis Source: Not Reported
Nit. Analys. Reliability: Not Reported	Nit. Analysis Technique: Not Reported
Static Water Lev. (in Ft.): 25	Date Static Level measured: 08/21/1979
Static Water Level Data Source/Driller's License #:	48038

**Remarks:**

VILLAGE OF MOUNTAIN IRON

E19  
SSE  
1/2 - 1 Mile  
Lower

FED USGS 473059092365401

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Louis
Altitude:	1415.00 ft.	State:	Minnesota
Well Depth:	16.52 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	11.18 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	07201959	Prim. Use of Water:	Domestic

20  
SSE  
1/2 - 1 Mile  
Lower

MN WELLS 2023809069

**Principal Well Information:**

Unique Well #:	238090	County:	ST. LOUIS
Township:	58	Section:	15
Range:	18	Elevation (in Ft.):	1422
Subsection:	BAAA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	17
7.5 Minute Quadrangle:	320D	Date drilled:	Not Reported
Depth Drilled (in Ft.):	17	Date of Last Update:	08/18/1991
Status:	Active	Not Reported:	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	KOLVUNEN, HJALMER	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported:	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	10	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Pleistocene, clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Domestic	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	13	Date Static Level measured:	07/20/1959
Static Water Level Data Source/Driller's License #:			Not Reported

F21  
West  
1/2 - 1 Mile  
Higher

MN WELLS 2023808369

**Principal Well Information:**

Unique Well #:	238083	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1462
Subsection:	DBBD	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	53
7.5 Minute Quadrangle:	320C	Date drilled:	Not Reported
Depth Drilled (in Ft.):	53	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	BERGANINI, FRED	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	30	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	QWTA	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Pleistocene,clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Domestic	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	53	Date Static Level measured:	09/17/1958
Static Water Level Data Source/Driller's License #:			Not Reported

**F22**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**MN WELLS 2023808469**

**Principal Well Information:**

Unique Well #:	238084	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1473
Subsection:	DBBB	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	32
7.5 Minute Quadrangle:	320C	Date drilled:	1935
Depth Drilled (in Ft.):	32	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	MERRITT, BERT	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	32	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Pleistocene,clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Domestic	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	25	Date Static Level measured:	09/17/1958
Static Water Level Data Source/Driller's License #:			Not Reported

**G23**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**MN WELLS 2022915269**

**Principal Well Information:**

Unique Well #:	229152	County:	ST. LOUIS
Township:	58	Section:	3
Range:	18	Elevation (in Ft.):	1476
Subsection:	CCCD	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	230
7.5 Minute Quadrangle:	320D	Date drilled:	1915
Depth Drilled (in Ft.):	250	Date of Last Update:	08/18/1991
Status:	Active	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	MOUNTAIN IRON	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	PEBI	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	BIWABIK IRON-FORMATION		
Depth to Bedrock (Ft.):	20		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Municipal	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	100	Date Static Level measured:	Not Reported
Static Water Level Data Source/Driller's License #:			Not Reported

**G24  
North  
1/2 - 1 Mile  
Higher**

**FRDS PWS    MN1690035**

PWS ID:	MN1690035	PWS Status:	Not Reported
Date Initiated:	Not Reported	Date Deactivated:	Not Reported
PWS Name:	MOUNTAIN IRON CITY OF MOUNTAIN IRON MOUNTAIN IRON, MN 55768		

Treatment Objective: DISINFECTION  
 Treatment Process: GASEOUS CHLORINATION, POST  
 Source: Ground water

Addressee / Facility: System Owner/Responsible Party  
 MOUNTAIN IRON MUNC WATER SUPPL  
 C/O ADMINISTRATOR  
 BOX 505  
 MT IRON, MN 55758

Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	Not Reported		
Treatment Class:	Treated	Population:	3621

PWS currently has or had major violation(s) or enforcement: Yes

**VIOLATIONS INFORMATION:**

Violation ID:	9300054	Source ID:	Not Reported	PWS Phone:	2187358267
Vio. beginning Date:	01/01/93	Vio. end Date:	01/31/93	Vio. Period:	1 Month
Num required Samples:	Not Reported	Number of Samples Taken:			Not Reported
Analysis Result:	Not Reported	Maximum Contaminant Level:			Not Reported
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Routine Major (TCR)				
Contaminant:	COLIFORM (TCR)				
Vio. Awareness Date:	Not Reported				

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

<b>H25</b> <b>SE</b> 1/2 - 1 Mile Lower	<b>MN WELLS</b>	<b>2023965069</b>
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**Principal Well Information:**

Unique Well #:	239650	County:	ST. LOUIS
Township:	58	Section:	15
Range:	18	Elevation (in Ft.):	1425
Subsection:	ABAC	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	48
7.5 Minute Quadrangle:	320D	Date drilled:	07/26/1956
Depth Drilled (in Ft.):	48	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	TEST WELL	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:	Not Reported	Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		
Use:	Test Well		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

**Well Address Information:**

Well Address:                      Not Reported

**H26**  
**SE**  
1/2 - 1 Mile  
Lower

**MN WELLS      2023965169**

**Principal Well Information:**

Unique Well #:	239651	County:	ST. LOUIS
Township:	58	Section:	15
Range:	18	Elevation (in Ft.):	1425
Subsection:	ABAC	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	45
7.5 Minute Quadrangle:	320D	Date drilled:	07/26/1956
Depth Drilled (in Ft.):	45	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well Name: U.S. GEO. SURVEY	Owner's Name: Not Reported
Local Identifier: Not Reported	Local Identifier Type: Not Reported
Data Source/Driller's License #: Not Reported	Depth Cased (in Ft.): Not Reported
Casing Diam (in): Not Reported	Permit Type: Not Reported
Permit #: Not Reported	Wellhead Protection Area: Not Reported
First Bedrock: Not Reported	Open Interval-Bottom Unit: Not Reported
Open Interval-Top: Not Reported	Well Grouted?: Not Reported
DNR Application #: Not Reported	Date Well Abandoned: Not Reported
Well Sealed?: Not Reported	
Aquifer: Not Reported	
Depth to Bedrock (Ft.): Not Reported	
Any other Unused, Abandoned Well on Property?: Not Reported	
Potential Pollution Source Type: Not Reported	
Potential Pollution Source Distance (in Ft.): Not Reported	
Potential Pollution Source Direction: Not Reported	
Use: Test Well	
Elevation Method: 7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base: Not Reported	
Indicator that an entry for this well exists in the State Water Use Data System: Not Reported	
Data exist for this well in the PCA Integrated Ground-Water Information System: Not Reported	
Indicator of the availability of cuttings, core or downhole geophysical data for this well: Not Reported	
Indicator of the existence of a digitized UTM location for this well: Not Reported	

**Well Address Information:**

Well Address: Not Reported

27  
SW  
1/2 - 1 Mile  
Lower

FED USGS 473057092375001

**BASIC WELL DATA**

Site Type: Single well, other than collector or Ranney type	
Year Constructed: 1967	County: St. Louis
Altitude: 1424.00 ft.	State: Minnesota
Well Depth: 30.00 ft.	Topographic Setting: Not Reported
Depth to Water Table: Not Reported	Prim. Use of Site: Not Reported
Date Measured: Not Reported	Prim. Use of Water: Not Reported

G28  
North  
1/2 - 1 Mile  
Higher

FED USGS 473159092371901

**BASIC WELL DATA**

Site Type: Single well, other than collector or Ranney type	
Year Constructed: 1915	County: St. Louis
Altitude: 1480.00 ft.	State: Minnesota
Well Depth: 230.00 ft.	Topographic Setting: Not Reported
Depth to Water Table: 100.00 ft.	Prim. Use of Site: Withdrawal of water
Date Measured: Not Reported	Prim. Use of Water: Public supply

29  
WNW  
1/2 - 1 Mile  
Higher

MN WELLS 2023930169



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

## Principal Well Information:

Unique Well #:	239301	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1500
Subsection:	BDAD	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	42
7.5 Minute Quadrangle:	320C	Date drilled:	09/17/1958
Depth Drilled (in Ft.):	42	Date of Last Update:	08/18/1991
Status:	Inactive	Not Reported	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	U.S. STEEL CORP.	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	48	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	QUUU	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Pleistocene, clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		
Use:	Abandoned		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

## Well Address Information:

Well Address: Not Reported

## Coliform/Nitrate/Static Water Level Information:

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	38	Date Static Level measured:	09/17/1958
Static Water Level Data Source/Driller's License #:		Not Reported	

I30  
SE  
1/2 - 1 Mile  
Lower

FED USGS 473058092363002

## BASIC WELL DATA

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1967	County:	St. Louis
Altitude:	1420.00 ft.	State:	Minnesota
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Test
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

131  
 SE  
 1/2 - 1 Mile  
 Lower  
 FED USGS      473058092363001

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1968	County:	St. Louis
Altitude:	1420.00 ft.	State:	Minnesota
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Test
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

32  
 SSE  
 1/2 - 1 Mile  
 Lower

MN WELLS      2023965269

**Principal Well Information:**

Unique Well #:	239652	County:	ST. LOUIS
Township:	58	Section:	15
Range:	18	Elevation (in Ft.):	1420
Subsection:	ACBB	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	36
7.5 Minute Quadrangle:	320D	Date drilled:	08/09/1956
Depth Drilled (in Ft.):	36	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	U.S. GEO. SURVEY	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:	Not Reported	Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		
Use:	Test Well		
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)		
Data for this well are contained in the DNT Observation Well Network Data base:			Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:			Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:			Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:			Not Reported
Indicator of the existence of a digitized UTM location for this well:			Not Reported

**Well Address Information:**

Well Address:      Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

33  
ESE  
1/2 - 1 Mile  
Lower

FED USGS      473108092361801

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Louis
Altitude:	1430.00 ft.	State:	Minnesota
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

J34  
NNW  
1/2 - 1 Mile  
Higher

FED USGS      473203092372701

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1915	County:	St. Louis
Altitude:	1475.00 ft.	State:	Minnesota
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	171.20 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Public supply

J35  
North  
1/2 - 1 Mile  
Higher

MN WELLS      2023915269

**Principal Well Information:**

Unique Well #:	239152	County:	ST. LOUIS
Township:	58	Section:	3
Range:	18	Elevation (in Ft.):	1500
Subsection:	CCBB	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	360
7.5 Minute Quadrangle:	320D	Date drilled:	Not Reported
Depth Drilled (in Ft.):	360	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	OLIVER IRON CO.	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:	Not Reported	Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Not Reported	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

36  
WSW  
1/2 - 1 Mile  
Higher

FED USGS 473110092382001

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Louis
Altitude:	1423.00 ft.	State:	Minnesota
Well Depth:	57.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

K37  
West  
1/2 - 1 Mile  
Higher

MN WELLS 2023930369

**Principal Well Information:**

Unique Well #:	239303	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1500
Subsection:	BCDD	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	30
7.5 Minute Quadrangle:	320C	Date drilled:	09/17/1958
Depth Drilled (in Ft.):	30	Date of Last Update:	08/18/1991
Status:	Inactive	Geographic Coordinates Method:	Not Reported
Well Name:	U.S. STEEL CORP.	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:			Not Reported
Casing Diam (in):	30	Depth Cased (in Ft.):	Not Reported
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	QUUU	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted?:	Not Reported
Well Sealed?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Pleistocene, clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property?:	Not Reported		
Potential Pollution Source Type:	Not Reported		
Potential Pollution Source Distance (in Ft.):	Not Reported		
Potential Pollution Source Direction:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use: Abandoned  
 Elevation Method: 7.5-minute Topographic Map (+ or - 5 Feet)  
 Data for this well are contained in the DNT Observation Well Network Data base: Not Reported  
 Indicator that an entry for this well exists in the State Water Use Data System: Not Reported  
 Data exist for this well in the PCA Integrated Ground-Water Information System: Not Reported  
 Indicator of the availability of cuttings, core or downhole geophysical data for this well: Not Reported  
 Indicator of the existence of a digitized UTM location for this well: Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	24	Date Static Level measured:	09/17/1958
Static Water Level Data Source/Driller's License #:			Not Reported

**K38**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**MN WELLS 2023929969**

**Principal Well Information:**

Unique Well #:	239299	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1497
Subsection:	CBAA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	28
7.5 Minute Quadrangle:	320C	Date drilled:	07/21/1959
Depth Drilled (in Ft.):	28	Date of Last Update:	08/18/1991
Status:	Inactive	Geographic Coordinates Method:	Not Reported
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	U.S. STEEL CORP.	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	12	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	QUUU	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Pleistocene, clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Abandoned	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	10	Date Static Level measured:	07/21/1959
Static Water Level Data Source/Driller's License #:			Not Reported

**K39**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**MN WELLS    2023930469**

**Principal Well Information:**

Unique Well #:	239304	County:	ST. LOUIS
Township:	58	Section:	9
Range:	18	Elevation (in Ft.):	1509
Subsection:	BCDD	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	30
7.5 Minute Quadrangle:	320C	Date drilled:	09/17/1958
Depth Drilled (in Ft.):	30	Date of Last Update:	08/18/1991
Status:	Inactive	Geographic Coordinates Method:	Not Reported
Well Name:	U.S. STEEL CORP.	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:			Not Reported
Casing Diam (in):	30	Depth Cased (in Ft.):	Not Reported
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	QUUU	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Not Reported
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Pleistocene, clay + sand + silt - pebble free		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use:	Abandoned	
Elevation Method:	7.5-minute Topographic Map (+ or - 5 Feet)	
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported
Indicator of the existence of a digitized UTM location for this well:		Not Reported

**Well Address Information:**

Well Address: Not Reported

**Coliform/Nitrate/Static Water Level Information:**

Coliform Bacteria Count:	Not Reported	Detection Limit Flag:	Not Reported
Coliform Sampling Date:	Not Reported	Coliform Analysis Source:	Not Reported
Colif. Analys. Reliability:	Not Reported	Bacteria Analysis Technique:	Not Reported
Nitrate Count (mg/l):	Not Reported	Nitrate Detection Limit Flag:	Not Reported
Nitrate Sampling Date:	Not Reported	Nitrate Analysis Source:	Not Reported
Nit. Analys. Reliability:	Not Reported	Nit. Analysis Technique:	Not Reported
Static Water Lev. (in Ft.):	23	Date Static Level measured:	09/17/1958
Static Water Level Data Source/Driller's License #:			Not Reported

40  
SSE  
1/2 - 1 Mile  
Lower

MN WELLS    3069155419

**Principal Well Information:**

Unique Well #:	155419	County:	ST. LOUIS
Township:	58	Section:	15
Range:	18	Elevation (in Ft.):	Not Reported
Subsection:	Not Reported	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	125
7.5 Minute Quadrangle:	Not Reported	Date drilled:	11/14/1978
Depth Drilled (in Ft.):	125	Date of Last Update:	08/18/1991
Status:	Active	Geographic Coordinates Method:	Not Reported
Well Name:	MCDONALD, JOHN	Owner's Name:	Not Reported
Local Identifier:	Not Reported	Local Identifier Type:	Not Reported
Data Source/Driller's License #:			Not Reported
Casing Diam (in):	4	Depth Cased (in Ft.):	125
Permit #:	Not Reported	Permit Type:	Not Reported
First Bedrock:	Not Reported	Wellhead Protection Area:	Not Reported
Open Interval-Top:	Not Reported	Open Interval-Bottom Unit:	Not Reported
DNR Application #:	Not Reported	Well Grouted ?:	Not Reported
Well Sealed ?:	Not Reported	Date Well Abandoned:	Not Reported
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:			Not Reported
Potential Pollution Source Type:			Not Reported
Potential Pollution Source Distance (in Ft.):			Not Reported
Potential Pollution Source Direction:			Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Use: Domestic  
 Elevation Method: Not Reported  
 Data for this well are contained in the DNT Observation Well Network Data base: Not Reported  
 Indicator that an entry for this well exists in the State Water Use Data System: Not Reported  
 Data exist for this well in the PCA Integrated Ground-Water Information System: Not Reported  
 Indicator of the availability of cuttings, core or downhole geophysical data for this well: Not Reported  
 Indicator of the existence of a digitized UTM location for this well: Not Reported

**Well Address Information:**

Well Address: Not Reported

**L41**  
**NW**  
**1/2 - 1 Mile**  
**Higher**  
FED USGS 473159092380802

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1935	County:	St. Louis
Altitude:	1475.00 ft.	State:	Minnesota
Well Depth:	32.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	25.00 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Domestic

**L42**  
**NW**  
**1/2 - 1 Mile**  
**Higher**  
FED USGS 473159092380801

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Louis
Altitude:	1461.00 ft.	State:	Minnesota
Well Depth:	53.01 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	51.59 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	09171958	Prim. Use of Water:	Domestic

**43**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**  
FED USGS 473211092374201

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1919	County:	St. Louis
Altitude:	1622.00 ft.	State:	Minnesota
Well Depth:	38.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	34.00 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	07201959	Prim. Use of Water:	Domestic

**44**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**  
MN WELLS 3069233047



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**Principal Well Information:**

Unique Well #:	233047	County:	ST. LOUIS
Township:	58	Section:	3
Range:	18	Elevation (in Ft.):	Not Reported
Subsection:	CA	Locator:	Not Reported
Location Method:	Not Reported	Depth Completed (in Ft.):	283
7.5 Minute Quadrangle:	Not Reported	Date drilled:	01/27/1975
Depth Drilled (in Ft.):	283	Date of Last Update:	08/18/1991
Status:	Active	Not Reported:	
Geographic Coordinates Method:		Owner's Name:	Not Reported
Well Name:	MINNTAC	Local Identifier Type:	Not Reported
Local Identifier:	Not Reported	Not Reported:	
Data Source/Driller's License #:		Depth Cased (in Ft.):	Not Reported
Casing Diam (in):	Not Reported	Permit Type:	Not Reported
Permit #:	Not Reported	Wellhead Protection Area:	Not Reported
First Bedrock:	Not Reported	Open Interval-Bottom Unit:	Not Reported
Open Interval-Top:	Not Reported	Well Grouted ?:	Not Reported
DNR Application #:	Not Reported	Date Well Abandoned:	Not Reported
Well Sealed ?:	Not Reported		
Aquifer:	Not Reported		
Depth to Bedrock (Ft.):	Not Reported		
Any other Unused, Abandoned Well on Property ?:		Not Reported	
Potential Pollution Source Type:		Not Reported	
Potential Pollution Source Distance (in Ft.):		Not Reported	
Potential Pollution Source Direction:		Not Reported	
Use:	Not Reported		
Elevation Method:	Not Reported		
Data for this well are contained in the DNT Observation Well Network Data base:		Not Reported	
Indicator that an entry for this well exists in the State Water Use Data System:		Not Reported	
Data exist for this well in the PCA Integrated Ground-Water Information System:		Not Reported	
Indicator of the availability of cuttings, core or downhole geophysical data for this well:		Not Reported	
Indicator of the existence of a digitized UTM location for this well:		Not Reported	

**Well Address Information:**

Well Address: Not Reported

K45  
West  
1/2 - 1 Mile  
Higher

FED USGS 473128092383002

**BASIC WELL DATA**

Site Type:	Single well, other than collector or Ranney type	County:	St. Louis
Year Constructed:	1949	State:	Minnesota
Altitude:	1508.00 ft.	Topographic Setting:	Not Reported
Well Depth:	30.00 ft.	Prim. Use of Site:	Withdrawal of water
Depth to Water Table:	23.00 ft.	Prim. Use of Water:	Domestic
Date Measured:	09171958		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

Federal EPA Radon Zone for ST LOUIS County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Zip Code: 55768

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	3.300 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> Information System**

Source: EDR proprietary database of groundwater flow information

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

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

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

### **STATSGO: State Soil Geographic Database**

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

## ADDITIONAL ENVIRONMENTAL RECORD SOURCES

### **FEDERAL WATER WELLS**

#### **PWS: Public Water Systems**

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF: Public Water Systems Violation and Enforcement Data**

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

**USGS Water Wells:** In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STATE RECORDS

### Minnesota Groundwater Database

Source: Minnesota Geological Survey County Water Well Index (CWI)  
Telephone: 612-627-4780

## RADON

**Area Radon Information:** The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

**EPA Radon Zones:** Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## OTHER

**Epicenters:** World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration