Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

EPA ID Number

CITY GARAGE - DPW (Continued)

U000252556

Contact: CHAD GAMBLE Contact Phone: (517) 543-2750

Impressed Device:No

Install Date: Apr 1 1980

Release Detection:

Tank: Not reported Pipe: Not reported

Facility ID: 00008302
Facility Status: CLOSED
Tank ID: DPW-3

Owner: City Of Charlotte

Owner Country: USA

Owner Contact: Not reported

Owner Address: 111 E Lawrence Ave

Charlotte, MI 48813

Owner Phone: (517) 543-2750

Product: Diesel Capacity: 10000

Tank Status: Removed from Ground

Remove Date: Oct 23 1995

Constr Material: Asphalt Coated or Bare Steel

Piping Material: Unknown
Piping Type: Not reported
Contact: CHAD GAMBLE
Contact Phone: (517) 543-2750

Impressed Device:No
Install Date: Apr 1 1966

Release Detection:

Tank: Not reported Pipe: Not reported

Facility ID: 00008302
Facility Status: CLOSED
Tank ID: DPW-4

Owner: City Of Charlotte

Owner Country: USA

Owner Contact: Not reported

Owner Address: 111 E Lawrence Ave

Charlotte, MI 48813

Owner Phone: (517) 543-2750

Product: Used Oil Capacity: 500

Tank Status: Removed from Ground

Remove Date: Jul 23 1990

Constr Material: Asphalt Coated or Bare Steel

Piping Material: Galvanized Steel
Piping Type: Not reported
Contact: CHAD GAMBLE
Contact Phone: (517) 543-2750

Impressed Device:No

Install Date: Apr 1 1966

Release Detection:

Tank: Not reported Pipe: Not reported

Facility ID: 00008302

MAP FINDINGS Map ID

Direction Distance Distance (ft.)

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

CITY GARAGE - DPW (Continued)

U000252556

Facility Status: **CLOSED** Tank ID: DPW-5

City Of Charlotte Owner:

Owner Country: USA Owner Contact: Not reported 111 E Lawrence Ave Owner Address: Charlotte, MI 48813

(517) 543-2750

Owner Phone: Product: **FUEL FOR CONSUMPTIVE**

Capacity: 500

Tank Status: Removed from Ground

Jun 29 1990 Remove Date:

Constr Material: Asphalt Coated or Bare Steel

Piping Material: Unknown Piping Type: Not reported Contact: CHAD GAMBLE Contact Phone: (517) 543-2750

Impressed Device:No

Install Date: Apr 1 1966

Release Detection:

Tank: Not reported Pipe: Not reported

CHARLOTTE DPW, CITY OF А3 RCRA-SQG 1004724808 West **301 TIRRELL HWY FINDS** MIR000014324

< 1/8 503 ft. CHARLOTTE, MI 48813 Site 2 of 3 in cluster A

Relative: Higher

RCRAInfo:

CITY OF CHARLOTTE Owner: EPA ID: MIR000014324

Actual: 899 ft.

Contact: **ROBERT VANSPLINTERN**

(517) 543-2753

Classification: Conditionally Exempt Small Quantity Generator

TSDF Activities: Not reported Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

Α4 UST U000252565 **TIRRELL LIFT STATION** N/A

West 313 TIRRELL HWY CHARLOTTE, MI 48813 < 1/8 534 ft.

Actual:

899 ft.

Site 3 of 3 in cluster A

Relative: UST: Higher

Facility ID: 00008304 Facility Status: **ACTIVE** Tank ID: TIRRELL-1

City Of Charlotte Owner:

Owner Country: USA Owner Contact: Not reported Owner Address: 111 E Lawrence Ave

Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

EPA ID Number

EPA ID Number

TIRRELL LIFT STATION (Continued)

iuea)

Owner Phone: (517) 543-2750

Product: Diesel Capacity: 1000

Tank Status: Currently In Use Remove Date: Not reported

Constr Material: Fiberglass Reinforced plastic, Lined Interier

Charlotte, MI 48813

Piping Material: FLEXIBLE PLAST
Piping Type: Suction: No Valve At Tank
Contact: ROBERT M GRANGER

Contact Phone: (517) 543-8860 Impressed Device No

Install Date: Apr 1 1980

Release Detection:

Tank: Inventory Control Pipe: Not reported

B5 ADMIRAL PETROLEUM #115 LUST

North 702 S COCHRAN 1/4-1/2 CHARLOTTE, MI 48813

1/4-1/2 CHARLOTTE, MI 48813 2598 ft.

Site 1 of 2 in cluster B Relative:

Higher

LUST:

Facility ID: 00017323

Actual: Release Number: Closed

908 ft. Release Date: Jan 11 1995

Facility Status: CLOSED

District: Lansing District Office

Closed Date: Feb 17 1995

Owner Contact : Not reported

Owner Name : Admiral Petroleum Co Owner Address : Po Box 198 13 Randall St

Coopersville, MI 49404

Country: USA

Owner Phone : (616) 837-6218
Contact : Dennis E Lemmen
Facility Phone : 616-837-6218
Leak Number: C-0051-95

Facility ID: 00017323
Release Number: Closed
Release Date: Nov 17 1992
Facility Status: CLOSED

District: Lansing District Office

Closed Date: Mar 28 2003 Owner Contact: Not reported

Owner Name: Admiral Petroleum Co
Owner Address: Po Box 198 13 Randall St

Coopersville, MI 49404

Country: USA

Owner Phone : (616) 837-6218
Contact : Dennis E Lemmen
Facility Phone : 616-837-6218
Leak Number: C-2070-92

UST:

Facility ID: 00017323
Facility Status: ACTIVE

U000252565

U002301065

N/A

UST

Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

Database(s)

EPA ID Number

ADMIRAL PETROLEUM #115 (Continued)

Tank ID:

Owner: Admiral Petroleum Co

Owner Country: USA

Owner Contact: Not reported

Owner Address: Po Box 198 13 Randall St

Coopersville, MI 49404

Owner Phone: (616) 837-6218 Product: Gasoline Capacity: 8000

Tank Status: Removed from Ground

Remove Date: Apr 18 1994

Constr Material: Asphalt Coated or Bare Steel

Piping Material: Galvanized Steel
Piping Type: Not reported
Contact: Dennis E Lemmen
Contact Phone: 616-837-6218

Impressed Device:No

Install Date: May 6 1974

Release Detection:

Tank: Not reported Pipe: Not reported

Facility ID: 00017323 Facility Status: ACTIVE

Tank ID: 2

Owner: Admiral Petroleum Co

Owner Country: USA
Owner Contact: Not reported

Owner Address: Po Box 198 13 Randall St

Coopersville, MI 49404

Owner Phone: (616) 837-6218
Product: Gasoline
Capacity: 12000

Tank Status: Removed from Ground

Remove Date: Apr 18 1994

Constr Material: Asphalt Coated or Bare Steel

Piping Material: Galvanized Steel
Piping Type: Not reported
Contact: Dennis E Lemmen
Contact Phone: 616-837-6218

Impressed DeviceNo

Install Date: May 6 1974

Release Detection:

Tank: Not reported Pipe: Not reported

Facility ID: 00017323 Facility Status: ACTIVE

Tank ID:

Owner: Admiral Petroleum Co

Owner Country: USA
Owner Contact: Not reported

Owner Address: Po Box 198 13 Randall St

Coopersville, MI 49404

Owner Phone: (616) 837-6218
Product: Gasoline
Capacity: 1000

TC1461870.2s Page 11

U002301065

Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

Database(s)

EPA ID Number

ADMIRAL PETROLEUM #115 (Continued)

Tank Status: Removed from Ground

Remove Date: Jan 11 1995

Constr Material: Cathodically Protected Steel

Piping Material: Galvanized Steel Piping Type: Pressure

Contact: Dennis E Lemmen Contact Phone: 616-837-6218

Impressed Device:No

Install Date: Aug 1 1988

Release Detection:

Tank: Not reported Pipe: Not reported

Facility ID: 00017323 Facility Status: ACTIVE Tank ID: 4

Owner: Admiral Petroleum Co

Owner Country: USA
Owner Contact: Not reported

Owner Address: Po Box 198 13 Randall St

Coopersville, MI 49404

Owner Phone: (616) 837-6218

Product: Diesel Capacity: 1000

Tank Status: Removed from Ground

Remove Date: Jan 11 1995

Constr Material: Cathodically Protected Steel

Piping Material: Galvanized Steel
Piping Type: Pressure
Contact: Dennis E Lemmen
Contact Phone: 616-837-6218

Impressed Device:No

Install Date: Aug 1 1988

Release Detection:

Tank: Not reported Pipe: Not reported

Facility ID: 00017323
Facility Status: ACTIVE
Tank ID: 5

Owner: Admiral Petroleum Co

Owner Country: USA
Owner Contact: Not reported

Owner Address: Po Box 198 13 Randall St Coopersville, MI 49404

Owner Phone: (616) 837-6218
Product: UNKNOWN

Product: UNKNOWN
Capacity: Not reported

Tank Status: Removed from Ground

Remove Date: Jun 25 1995
Constr Material: Unknown
Piping Material: Unknown
Piping Type: Not reported
Contact: Dennis E Lemmen
Contact Phone: 616-837-6218

Impressed Device:No

Install Date: Not reported

U002301065

MAP FINDINGS Map ID

Direction Distance Distance (ft.)

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

ADMIRAL PETROLEUM #115 (Continued)

U002301065

Release Detection:

Not reported Tank: Pipe: Not reported

Facility ID: 00017323 Facility Status: **ACTIVE** Tank ID:

Owner: Admiral Petroleum Co

Owner Country: USA Owner Contact: Not reported

Po Box 198 13 Randall St Owner Address:

Coopersville, MI 49404

(616) 837-6218 Owner Phone: Product: Gasoline Capacity: 15000 Tank Status: Currently In Use

Not reported Remove Date:

Constr Material: Composite(Steel w/Fiberglass), Double Walled Piping Material: Double Walled, Fiberglass reinforced plastic

Piping Type: Pressure

Dennis E Lemmen Contact: Contact Phone: 616-837-6218 Impressed Device:No

Install Date: Jan 13 1995

Release Detection:

Automatic Tank Gauging, Inter Monitoring Double Walled Tank Tank: Pipe: Automatic Line Leak Detectors, Line Tightness Testing

702 S. COCHRAN S105768417 **B6** BEA North 702 S. COCHRAN N/A

1/4-1/2 **CHARLOTTE, MI**

2598 ft.

Site 2 of 2 in cluster B

Relative: Higher

BEA:

BEA Number: 697 Actual: District: Lansing

908 ft. Date Received: 2002-12-23 00:59:00 Admiral Petroleum Submitter Name: Petition Determination: No Request

> Category: Same Hazardous Substance(s)

Determination 20107A: No Request Reviewer: lamrouem

Division Assigned: Storage Tank Division

Secondary Address: Not reported

JOHNSON IRON INDUSTRIES CERCLIS 1000704612 NNW MID006023022 615 W SHEPARD RCRA-SQG

1/2-1 CHARLOTTE, MI 46023 **FINDS** 3083 ft. **CORRACTS**

CERCLIS Classification Data: Relative:

Site incident category.Not reported Federal Facility: Not a Federal Facility Higher

Non NPL Status: Referred to Removal - Further Assessment Needed

Actual: NPL Status: Not on the NPL Ownership Status: Not reported 900 ft. Contact: ROBERT BUCKLEY Contact Tel: (734) 692-7662

> Contact Title: Not reported

Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

Database(s)

EPA ID Number

JOHNSON IRON INDUSTRIES (Continued)

1000704612

Contact: MATTHEW MANKOWSKI Contact Tel: (312) 886-1842

Contact Title: Not reported CERCLIS Assessment History:

DISCOVERY 07/01/1987 Assessment: Completed: Assessment: PRELIMINARY ASSESSMENT Completed: 10/07/1988 Completed: Assessment: SITE INSPECTION 08/16/1990 **EXPANDED SITE INSPECTION** Completed: 09/21/1993 Assessment: **REMOVAL** Completed: Assessment: 07/31/1995 **ENGINEERING EVAL/COST ANALYSIS** Completed: 06/02/1998 Assessment: Assessment: ADMIN ORDER ON CONSENT Completed: 03/15/1999

Assessment: CERCLIS Site Status:

Cleaned up

CORRACTS Data:

EPA ld: MID006023022

Region: 5

Area Name: ENTIRE FACILITY
Actual Date: 05/26/1995

REMOVAL

Corrective Action: CA210SF - CA Responsibility Referred To A Non-RCRA Federal Authority, Corrective

Action at the facility or area referred to CERCLA

2002 NAICS Title: Remediation Services

EPA Id: MID006023022

Region: 5

Area Name: ENTIRE FACILITY
Actual Date: 09/30/1993

Corrective Action: CA225YE - Stabilization Measures Evaluation, This facility, is amenable to

stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and

Completed:

09/29/2002

administrative considerations

2002 NAICS Title: Remediation Services

EPA ld: MID006023022

Region:

Area Name: ENTIRE FACILITY

Actual Date: 06/30/1993

Corrective Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective

action priority

2002 NAICS Title: Remediation Services

RCRAInfo Corrective Action Summary:

Event: CA Responsibility Referred To A Non-RCRA Federal Authority, Corrective

Action at the facility or area referred to CERCLA.

Event Date: 05/26/1995

Event: Stabilization Measures Evaluation, This facility is amenable to stabilization

activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and

administrative considerations.

Event Date: 09/30/1993

Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

EPA ID Number

JOHNSON IRON INDUSTRIES (Continued)

1000704612

Event: CA Prioritization, Facility or area was assigned a high corrective action

priority.

Event Date: 06/30/1993

RCRAInfo:

Contact: DONALD JOHNSON

(312) 886-4448

Classification: Small Quantity Generator

TSDF Activities: Not reported Violation Status: Violations exist

Regulation Violated: Not reported

Area of Violation: TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS

Date Violation Determined: 09/23/1992
Actual Date Achieved Compliance: 01/11/1994
Regulation Violated: Not reported

Area of Violation: TSD-CLOSURE/POST-CLOSURE REQUIREMENTS

Date Violation Determined: 08/28/1992
Actual Date Achieved Compliance: 01/11/1994
Regulation Violated: Not reported

Area of Violation: TSD-GOUNDWATER MONITORING REQUIREMENTS

Date Violation Determined: 02/28/1991 Actual Date Achieved Compliance: 01/11/1994

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/25/1989
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 06/18/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/31/1990
Penalty Type: Not reported
Regulation Violated: Not reported

Area of Violation: TSD-CLOSURE/POST-CLOSURE REQUIREMENTS

Date Violation Determined: 02/28/1991 Actual Date Achieved Compliance: 01/11/1994

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/25/1989
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 06/18/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/31/1990
Penalty Type: Not reported
Regulation Violated: Not reported

Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)

Date Violation Determined: 07/24/1990 Actual Date Achieved Compliance: 12/28/1990

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/25/1989

Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

EPA ID Number

JOHNSON IRON INDUSTRIES (Continued)

1000704612

Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 06/18/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/31/1990
Penalty Type: Not reported
Regulation Violated: Not reported

Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)

Date Violation Determined: 06/11/1990 Actual Date Achieved Compliance: 12/28/1990

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/25/1989
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 06/18/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/31/1990
Penalty Type: Not reported

Regulation Violated: Not reported

Area of Violation: FORMAL ENFORCEMENT AGREEMENT

Date Violation Determined: 07/14/1989 Actual Date Achieved Compliance: 01/11/1994

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/25/1989
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 06/18/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/31/1990
Penalty Type: Not reported
Regulation Violated: Not reported

Area of Violation: TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE

Date Violation Determined: 07/14/1989 Actual Date Achieved Compliance: 01/11/1994

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/25/1989
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 06/18/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/31/1990
Penalty Type: Not reported

Regulation Violated: Not reported

Area of Violation: FORMAL ENFORCEMENT AGREEMENT

Date Violation Determined: 07/14/1989 Actual Date Achieved Compliance: 01/11/1994 MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

Database(s)

EPA ID Number

JOHNSON IRON INDUSTRIES (Continued)

1000704612

Date of

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/25/1989
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 06/18/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 07/31/1990
Penalty Type: Not reported
Regulation Violated: Not reported

Area of Violation: TSD-GOUNDWATER MONITORING REQUIREMENTS

Date Violation Determined: 06/23/1987
Actual Date Achieved Compliance: 08/13/1988
Regulation Violated: Not reported

Area of Violation: TSD-CLOSURE/POST-CLOSURE REQUIREMENTS

Date Violation Determined: 06/23/1987 Actual Date Achieved Compliance: 12/01/1988

Penalty Summary:

There are 11 violation record(s) reported at this site:

Evaluation	Area of Violation	Compliance
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19940111
Compliance Evaluation Inspection	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
Compliance Evaluation Inspection	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Compliance Schedule Evaluation	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Compliance Schedule Evaluation	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Compliance Schedule Evaluation	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228

Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

EPA ID Number

JOHNSON IRON INDUSTRIES (Continued)		1000704612
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Compliance Evaluation Inspection	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Sampling Inspection	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Non-Financial Record Review	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Compliance Evaluation Inspection	TSD-GOUNDWATER MONITORING REQUIREMENTS	19940111
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	19940111
	FORMAL ENFORCEMENT AGREEMENT	19940111
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
New Fire wiel Beread Barian	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19901228
Non-Financial Record Review	TSD-GOUNDWATER MONITORING REQUIREMENTS	19880813
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19881201

FINDS:

Other Pertinent Environmental Activity Identified at Site:

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND INFORMATION SYSTEM

INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL COMPLIANCE DATABASE SYSTEM

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

8 JOHNSON IRON INDUSTRIES

1/2-1 3446 ft.

Lower

NW

3446 ft.

Relative: SHWS:

615 W SHEPHARD ST

CHARLOTTE, MI 48813

Facility ID: 23000007

Facility Status: Interim Response conducted - No further activities anticipated

Actual: Source: Gray Iron Foundries 886 ft. Pollutant(s): Benzene: Ethylben:

Pollutant(s): Benzene; Ethylbenzene; Pb; Ni; PCB's; Toluene; Xylenes

SAM Score: 32

SAM Score Date: 2004-02-12 16:49:23.883

Township: 02N Range: 05W Section: 24 Quarter: NW Quarter/Quarter: NE

SHWS

1003837781

N/A

MAP FINDINGS

Direction Distance Distance (ft.)

Map ID

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

RES WELLS ORIOLE DR SHWS S105143986 9 SE **1919 ORIOLE DRIVE** N/A

CHARLOTTE, MI Onull 1/2-1

3793 ft.

SHWS: Relative:

Facility ID: 23000013 Higher

Facility Status: Inactive - no actions taken to address contamination

Source: Actual: Unknown 910 ft. Pollutant(s): CI; Na SAM Score: 27

> SAM Score Date: 1991-02-20 00:00:00.0

02N Township: Range: 04W Section: 19 SW Quarter: Quarter/Quarter: NE

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHARLOTTE	U003135745	WILSON ROAD TRAVEL CENTER	RT 5, BOX 928-X	48813	UST
CHARLOTTE	S100069404	CHARLOTTE SANITARY LANDFILL	HALL ST	48813	HIST LF
CHARLOTTE	1006830288	CHARLOTTE SANITARY LANDFILL	HALL ST	48813	FINDS
CHARLOTTE	1003871381	CHARLOTTE MUNI AIRPORT	ISLAND HWY	48813	CERC-NFRAP
CHARLOTTE	1000364609	CHARLOTTE MUNICIPAL AIRPORT	ISLAND HWY	48813	SHWS
CHARLOTTE	S103595322	CONSUMERS ENERGY	RAILROAD STREET	48813	SHWS, BEA
CHARLOTTE	S105143993	AE HOOVER PROPERTY	SHEPARD STREET	48813	SHWS, BROWNFIELDS
CHARLOTTE	1006836928	CHARLOTTE DISPOSAL LANDFILL	STINE ROAD-VALLEY HWY	48813	FINDS
CHARLOTTE	1006835046	CHARLOTTE DISPOSAL SERVICE	446 STINE RD	48813	FINDS
CHARLOTTE	1003871110	CHARLOTTE DISPOSAL INC	446 STINE RD	48813	SHWS, CERC-NFRAP
CHARLOTTE	1000364608	CHARLOTTE DISPOSAL LANDFILL	STINE ROAD-VALLEY HWY	48813	HIST LF
CHARLOTTE	1004725675	MI DEPT/TRANSPORTATION BRIDGE J16-23061	I-69 UNDER 5 POINT HWY, J16 OF	48813	RCRA-SQG, FINDS
EATON TOWNSHIP	1001232590	MI DEPT/TRANSPORTATION BRIDGE J13-23061	I-69 UNDER ISLAND HIGHWAY	48813	RCRA-SQG, FINDS
VERMONTVILLE	U003211607	EATON COUNTY ROAD COMMISSION	8893 W VERMONTVILLE HWY	48813	LUST, UST

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) and regional EPA offices.

Date of Government Version: 04/28/05 Date Made Active at EDR: 05/16/05

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/04/05

Elapsed ASTM days: 12

Date of Last EDR Contact: 05/04/05

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

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

EPA Region 3 EPA Region 8

Telephone 215-814-5418 Telephone: 303-312-6774

EPA Region 4

Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Source: EPA Telephone: N/A

Date of Government Version: 04/27/05 Date of Data Arrival at EDR: 05/04/05

Date Made Active at EDR: 05/16/05 Elapsed ASTM days: 12

Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/04/05

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: 02/15/05 Date Made Active at EDR: 04/06/05

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/22/05

Elapsed ASTM days: 15

Date of Last EDR Contact: 03/22/05

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: 03/22/05 Date Made Active at EDR: 04/06/05 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 04/01/05 Elapsed ASTM days: 5 Date of Last EDR Contact: 04/01/05

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/29/05 Date of Data Arrival at EDR: 04/11/05

Date Made Active at EDR: 05/16/05 Elapsed ASTM days: 35

Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/07/05

RCRA: Resource Conservation and Recovery Act Information

Source: EPA

Telephone: 800-424-9346

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 05/20/05 Date Made Active at EDR: 06/09/05 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 05/24/05 Elapsed ASTM days: 16 Date of Last EDR Contact: 05/24/05

Parabase Notation Parabase Programmes

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

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

Substances.

Date of Government Version: 12/31/04 Date Made Active at EDR: 03/24/05 Database Release Frequency: Annually Date of Data Arrival at EDR: 01/27/05

Elapsed ASTM days: 56

Date of Last EDR Contact: 04/25/05

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: 12/01/01 Database Release Frequency: Biennially Date of Last EDR Contact: 04/15/05 Date of Next Scheduled EDR Contact: 06/13/05

CONSENT: Superfund (CERCLA) Consent Decrees Source: Department of Justice, Consent Decree Library

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: 12/14/04 Date of Last EDR Contact: 04/26/05

Database Release Frequency: Varies Date of Next Scheduled EDR Contact: 07/25/05

ROD: Records Of Decision

Source: EPA

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: 03/07/05 Date of Last EDR Contact: 04/04/05

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 07/04/05

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.

Date of Government Version: 04/28/05 Date of Last EDR Contact: 05/04/05

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 08/01/05

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: 04/11/05 Date of Last EDR Contact: 04/04/05

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 07/04/05

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

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

Date of Government Version: 12/31/04 Date of Last EDR Contact: 04/19/05

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 07/18/05

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: 04/14/05 Date of Last EDR Contact: 04/04/05

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 07/04/05

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

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

violation information.

Date of Government Version: 02/11/05 Date of Last EDR Contact: 03/30/05

Database Release Frequency: Semi-Annually Date of Next Scheduled EDR Contact: 06/27/05

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

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 Date of Last EDR Contact: 02/22/05

Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: 05/23/05

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

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: 03/30/05 Date of Last EDR Contact: 05/10/05

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 08/08/05

DOD: Department of Defense Sites

Source: USGS

Telephone: 703-692-8801

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

Date of Government Version: 10/01/03 Date of Last EDR Contact: 02/08/05

Database Release Frequency: Semi-Annually Date of Next Scheduled EDR Contact: 05/09/05

UMTRA: Uranium Mill Tailings Sites Source: Department of Energy Telephone: 505-845-0011

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized. In 1978, 24 inactive uranium mill tailings sites in Oregon, Idaho, Wyoming, Utah, Colorado, New Mexico, Texas, North Dakota, South Dakota, Pennsylvania, and on Navajo and Hopi tribal lands, were targeted for cleanup by the Department of Energy.

Date of Government Version: 12/29/04 Date of Last EDR Contact: 03/22/05

Database Release Frequency: Varies Date of Next Scheduled EDR Contact: 06/20/05

ODI: Open Dump Inventory

Source: Environmental Protection Agency

Telephone: 800-424-9346

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

Subtitle D Criteria.

Date of Government Version: 06/30/85

Date of Last EDR Contact: 05/23/95

Date of Next Scheduled EDR Contact: N/A

FUDS: Formerly Used Defense Sites Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers

is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/03 Date of Last EDR Contact: 04/04/05

Date of Next Scheduled EDR Contact: 07/04/05 Database Release Frequency: Varies

INDIAN RESERV: Indian Reservations

Source: USGS

Telephone: 202-208-3710

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

than 640 acres.

Date of Government Version: 10/01/03 Date of Last EDR Contact: 02/08/05

Database Release Frequency: Semi-Annually Date of Next Scheduled EDR Contact: 05/09/05

US ENG CONTROLS: Engineering Controls Sites List

Source: Environmental Protection Agency

Telephone: 703-603-8867

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building

foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental

media or effect human health.

Date of Government Version: 01/10/05 Date of Last EDR Contact: 04/04/05

Database Release Frequency: Varies Date of Next Scheduled EDR Contact: 07/04/05

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: 03/07/05

Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: 06/06/05

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-566-0250

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: 12/31/02 Date of Last EDR Contact: 03/22/05

Date of Next Scheduled EDR Contact: 06/20/05 Database Release Frequency: Annually

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

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

Date of Government Version: 12/31/02 Date of Last EDR Contact: 04/05/05

Database Release Frequency: Every 4 Years Date of Next Scheduled EDR Contact: 06/06/05

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

Source: EPA

Telephone: 202-566-1667

Date of Last EDR Contact: 03/21/05 Date of Government Version: 04/13/05

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 06/20/05

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-4203

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

Date of Government Version: 12/31/03 Date of Last EDR Contact: 04/19/05

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 07/18/05

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: 202-566-1667

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

Agency on a quarterly basis.

Date of Government Version: 04/13/05 Date of Last EDR Contact: 03/21/05

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 06/20/05

STATE OF MICHIGAN ASTM STANDARD RECORDS

SHWS: Contaminated Sites

Source: Department of Environmental Quality

Telephone: 517-373-9541

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

Date of Government Version: 05/20/05 Date Made Active at EDR: 06/21/05

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/24/05

Elapsed ASTM days: 28

Date of Last EDR Contact: 05/24/05

SWF/LF: Solid Waste Facilities Database

Source: Department of Environmental Quality

Telephone: 517-335-4035

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: 03/01/05 Date Made Active at EDR: 04/08/05

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 03/15/05

Elapsed ASTM days: 24

Date of Last EDR Contact: 04/25/05

LUST: Leaking Underground Storage Tank Sites Source: Department of Environmental Quality

Telephone: 517-373-8168

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: 03/14/05 Date Made Active at EDR: 04/08/05

Database Release Frequency: Annually

Date of Data Arrival at EDR: 03/15/05

Elapsed ASTM days: 24

Date of Last EDR Contact: 03/15/05

UST: Underground Storage Tank Facility List Source: Department of Environmental Quality

Telephone: 517-373-8168

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: 03/14/05 Date Made Active at EDR: 04/12/05

Database Release Frequency: Annually

Date of Data Arrival at EDR: 03/15/05

Elapsed ASTM days: 28

Date of Last EDR Contact: 03/15/05

BEA: BASELINE ENVIRONMENTAL ASSESSMENT DATABASE

Source: DEPT. OF ENVIRONMENTAL QUALITY

Telephone: 517-373-9541

Date of Government Version: 06/15/05 Date of Data Arrival at EDR: 06/15/05

Date Made Active at EDR: 06/29/05 Elapsed ASTM days: 14

Database Release Frequency: Semi-Annually Date of Last EDR Contact: 06/13/05

INDIAN UST: Underground Storage Tanks on Indian Land

Source: EPA Region 5 Telephone: 312-886-6136

Date of Government Version: 12/02/04 Date of Data Arrival at EDR: 12/29/04

Date Made Active at EDR: 02/04/05 Elapsed ASTM days: 37

Database Release Frequency: Varies Date of Last EDR Contact: 02/22/05

HIST LF: Inactive Solid Waste Facilities

Source: Department of Environmental Quality

Telephone: 517-335-4034

The database contains historical information and is no longer updated.

Date of Government Version: 03/01/97 Date of Data Arrival at EDR: 02/28/03

Date Made Active at EDR: 03/06/03 Elapsed ASTM days: 6

Database Release Frequency: No Update Planned Date of Last EDR Contact: 02/28/03

STATE OF MICHIGAN ASTM SUPPLEMENTAL RECORDS

AST: Aboveground Tanks

Source: Department of Environmental Quality

Telephone: 517-373-8168

 $\label{thm:conditional} \textbf{Registered Above ground Storage Tanks}.$

Date of Government Version: 04/11/05 Date of Last EDR Contact: 03/14/05

Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: 06/13/05

DEL SHWS: Delisted List of Contaminated Sites Source: Department of Environmental Quality

Telephone: 517-373-9541

Sites that have been delisted or deleted from the List of Contaminated Sites. The available documentation for

the site does not support it's listing or the site no longer meets criteria specified in rules.

Date of Government Version: 05/26/05 Date of Last EDR Contact: 05/23/05

Database Release Frequency: Varies Date of Next Scheduled EDR Contact: 08/22/05

PEAS: Pollution Emergency Alerting System Source: Department of Environmental Quality

Telephone: 517-373-8427

Environmental pollution emergencies reported to the Department of Environmental Quality such as tanker accidents,

pipeline breaks, and release of reportable quantities of hazardous substances.

Date of Government Version: 03/30/05 Date of Last EDR Contact: 04/05/05

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 07/04/05

DRYCLEANERS: Drycleaning Establishments Source: Department of Environmental Quality

Telephone: 517-335-4586

A listing of drycleaning facilities in Michigan.

Date of Government Version: 05/23/05 Database Release Frequency: Varies

Date of Last EDR Contact: 05/16/05 Date of Next Scheduled EDR Contact: 08/15/05

EDR PROPRIETARY HISTORICAL 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.

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BROWNFIELDS DATABASES

US BROWNFIELDS: A Listing of Brownfields Sites Source: Environmental Protection Agency

Telephone: 202-566-2777

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

Date of Government Version: 01/10/05 Database Release Frequency: Semi-Annually Date of Last EDR Contact: 03/14/05 Date of Next Scheduled EDR Contact: 06/13/05

BROWNFIELDS: Brownfields and USTfield Site Database

Source: Department of Environmental Quality

Telephone: 517-373-4805

All state funded Part 201 and 213 sites, as well as LUST sites that have been redeveloped by private entities using the BEA process.

Date of Government Version: 05/24/05 Date of Last EDR Contact: 05/23/05 Database Release Frequency: Varies Date of Next Scheduled EDR Contact: 08/22/05

US INST CONTROL: Sites with Institutional Controls

Source: Environmental Protection Agency

Telephone: 703-603-8867

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

Date of Government Version: 01/10/05 Database Release Frequency: Varies

Date of Last EDR Contact: 04/04/05

Date of Next Scheduled EDR Contact: 07/04/05

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

Electric Power Transmission Line Data

Source: PennWell Corporation Telephone: (800) 823-6277

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fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

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

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

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

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

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

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

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

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

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

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

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

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

Daycare Centers: Day Care Centers, Group & Family Homes

Source: Bureau of REgulatory Services

Telephone: 517-373-8300

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 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 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CHARLOTTE ARMORY 1310 SOUTH COCHRAN STREET CHARLOTTE, MI 48813

TARGET PROPERTY COORDINATES

Latitude (North): 42.546200 - 42° 32' 46.3" Longitude (West): 84.835800 - 84° 50' 8.9"

Universal Tranverse Mercator: Zone 16 UTM X (Meters): 677701.6 UTM Y (Meters): 4712478.5

Elevation: 894 ft. above sea level

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.

GROUNDWATER FLOW DIRECTION INFORMATION

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

TOPOGRAPHIC INFORMATION

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

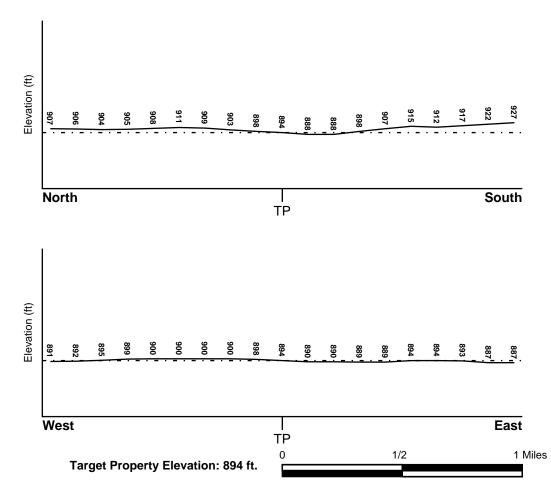
TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 42084-E7 CHARLOTTE, MI

General Topographic Gradient: General SSE

Source: USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



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

HYDROLOGIC INFORMATION

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

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

FEMA FLOOD ZONE

FEMA Flood Electronic Data

Target Property County EATON, MI Electronic Dai Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
CHARLOTTE

NWI Electronic
Data Coverage
Not Available

HYDROGEOLOGIC INFORMATION

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

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

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

 MAP ID
 FROM TP
 GROUNDWATER FLOW

 Not Reported
 GROUNDWATER FLOW

GROUNDWATER FLOW VELOCITY INFORMATION

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

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

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

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era: Paleozoic Category: Stratifed Sequence

System: Pennsylvanian

Series: Atokan and Morrowan Series

Code: PP1 (decoded above as Era, System & Series)

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

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

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

Soil Component Name: CAPAC
Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly. Soils commonly have a layer with low hydraulic

conductivity, wet state high in profile, etc. Depth to water table is

1 to 3 feet.

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

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

Soil Layer Information							
	Bou	ındary		Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	8 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.60
2	8 inches	35 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
3	35 inches	60 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 8.40 Min: 7.40

OTHER SOIL TYPES IN AREA

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

Soil Surface Textures: loamy fine sand

muck sandy loam fine sandy loam

sand loamy sand

Surficial Soil Types: loamy fine sand

muck sandy loam fine sandy loam

sand loamy sand

Shallow Soil Types: loamy sand

loamy very fine sand

sand

Deeper Soil Types: fine sand

clay loam stratified sandy loam loamy fine sand

muck sand

gravelly - sand

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.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B4	USGS2318223	0 - 1/8 Mile SE
H27	USGS2318212	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

No PWS System Found

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

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	MI00092231	0 - 1/8 Mile North
A2	MI00092066	0 - 1/8 Mile SE
B3	MI00092000	0 - 1/8 Mile SE
5	MI00092159	1/8 - 1/4 Mile East
C6	MI00091695	1/8 - 1/4 Mile South
C7	MI00091696	1/8 - 1/4 Mile South
8	MI00091245	1/4 - 1/2 Mile South
9	MI00091666	1/4 - 1/2 Mile WSW
D10	MI00090828	1/4 - 1/2 Mile South
D11	MI00090758	1/2 - 1 Mile South
12	MI00090831	1/2 - 1 Mile SSW
D13	MI00090584	1/2 - 1 Mile South
E14	MI00090694	1/2 - 1 Mile SSE

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

LOCATION

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	FROM TP
E15	MI00090603	1/2 - 1 Mile SSE
16	MI00090531	1/2 - 1 Mile SSE
F17	MI00092062	1/2 - 1 Mile East
F18	MI00091992	1/2 - 1 Mile East
19	MI00090687	1/2 - 1 Mile SE
20	MI00090113	1/2 - 1 Mile South
21	MI00090821	1/2 - 1 Mile SW
22	MI00089978	1/2 - 1 Mile South
23	MI00094450	1/2 - 1 Mile NNW
24	MI00090893	1/2 - 1 Mile WSW
G25	MI00090539	1/2 - 1 Mile SE
G26	MI00090540	1/2 - 1 Mile SE
H28	MI00089569	1/2 - 1 Mile South
G29	MI00090542	1/2 - 1 Mile SE
30	MI00089513	1/2 - 1 Mile South
31	MI00093477	1/2 - 1 Mile ENE
32	MI00089483	1/2 - 1 Mile South

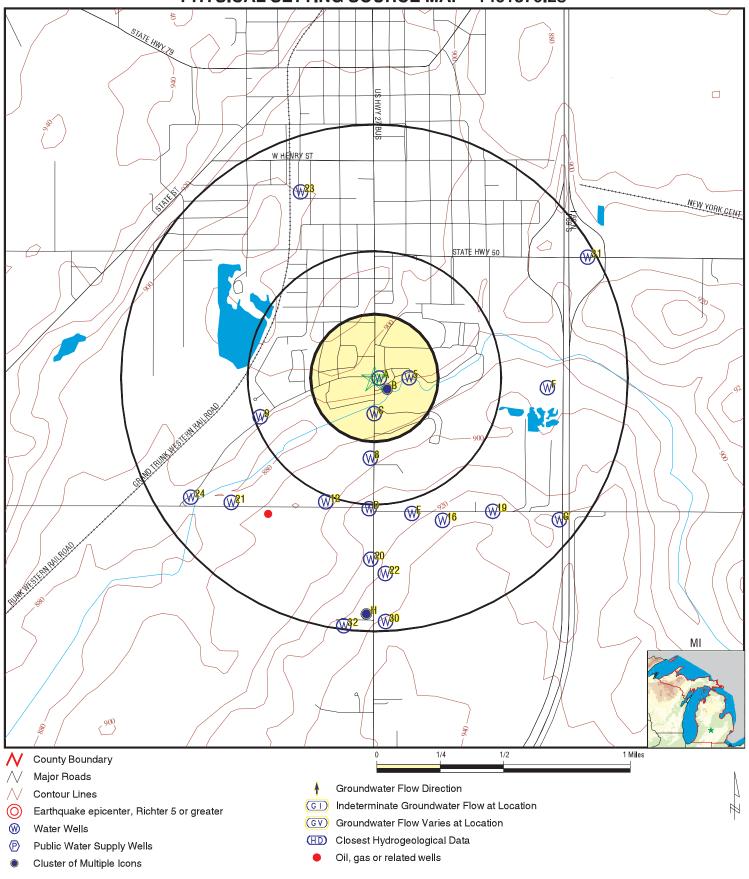
STATE OIL/GAS WELL INFORMATION

DISTANCE FROM TP (Miles)

1/2 - 1 Mile SW

DISTANCE FROM TP (Miles)

PHYSICAL SETTING SOURCE MAP - 1461870.2s



TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP: LAT/LONG: Charlotte Armory 1310 South Cochran Street Charlotte MI 48813 42.5462 / 84.8358 CUSTOMER: Altech Env.
CONTACT: Manasi Koushik
INQUIRY #: 1461870.2s
DATE: July 08, 2005 1:42 pm

Map ID Direction Distance

Elevation Database EDR ID Number

1686

Steel-black

23020419302

Eaton

A1 North 0 - 1/8 Mile

MI WELLS MI00092231

Higher

Wellid: 23000007993 Import id: Not Reported County: Township: Eaton Eaton 02N 04W Town range: Section: 19

CITY OF CHARLOTTE Well addr: 1311 COCHRAN ROAD Owner name:

Well depth:

Well type: Type I public 1340 Wssn: Well num: Not Reported

Driller id: 2001-12-12 00:00:00.000 Const date: Case type:

Case dia: 30 Case depth: 54 Screen frm: 66 Screen to: 96 Swl: 21 Test depth: 38.27 Test hours: 72

1507 Test rate: Test methd: Test Pump

Grout: Was grouted Pmp cpcity:

Latitude: 42.54659379 -84.83579674 Longitude: Methd coll: Interpolation-Map

Elevation:

Not Reported Elev methd:

Wellid: 23000007993 Segno:

Topsoil Primlith: Lithmod: Not Reported

Depth: 6 Thickness: 6 Aqtype: D

NA Class: 0

Effect:

Lower

MI WELLS MI00092066 0 - 1/8 Mile

Import id:

Township:

Section:

Wellid: 23000000052 County: Eaton 02N 04W Town range:

CHARLOTTE WELL #3 Owner name: CITY OF CHARLOTTE Well addr:

Well depth: 95.5 Well type: Type I public

1340 Wssn:

CHARLOTTE WELL #3 Well num:

Driller id: n Const date: Not Reported Case type: Unknown

Case dia: 50 Case depth: 0 Screen frm: 0 0 Screen to: Swl: 18 Test depth: 0 Test hours: 0

Test rate: 0 Test methd: Unknown Was not grouted Grout: Pmp cpcity: 0

Latitude: 42.5457935566

Longitude: -84.8350440937 Methd coll: Interpolation-Map

Elevation:

Elev methd: Topographoc Map Interpolation

Wellid: 23000000052 Seqno: Primlith: Sand Gravel Clay Lithmod: W/Silt

Depth: 95.5

95.5 Thickness:

D MAQ Class: Aqtype:

0 Effect:

B3 SE **MI WELLS** MI00092000

0 - 1/8 Mile Lower

> 23020419303 Wellid: 23000000053 Import id: County: Eaton Township: Eaton Town range: 02N 04W Section: 19

CHARLOTTE WELL #1 Owner name: CITY OF CHARLOTTE Well addr:

Well depth: 93.5

Well type: Type I public 1340 Wssn:

Well num: CHARLOTTE WELL #1

Driller id: Not Reported Const date: Case type: Unknown

Case dia: 50 Case depth: 0 0 Screen frm: Screen to: 0 Swl: 17

0 Test depth: Test hours: 0

Test rate: 0 Test methd: Unknown Grout: Was not grouted Pmp cpcity: 0

42.5455353826 Latitude: -84.8349036717 Longitude: Methd coll: Interpolation-Map

Elevation:

Elev methd: Topographoc Map Interpolation

23000000053 Wellid: Segno: Primlith: Sand Gravel Clay Lithmod: W/Silt

Depth: 93.5 Thickness: 93.5

D Aqtype: Class: MAQ

Effect: 0

B4 SE **FED USGS** USGS2318223 0 - 1/8 Mile

Lower

Site no:

423244084500501

Agency cd: USGS

Site name: 02N 04W 19CBBC 01

Latitude: 423244 Longitude: 0845005

 Longitude:
 0845005
 Dec lat:
 42.54559247

 Dec lon:
 -84.83470977
 Coor meth:
 M

 Dec Ion.
 -64.63470977
 Cool filetti.
 M

 Coor accr:
 F
 Latlong datum:
 NAD27

 Dec latlong datum:
 NAD83
 District:
 26

 State:
 26
 County:
 045

Country: US Land net: S19T02NR04WM Location map: Not Reported Map scale: Not Reported Altitude: 890 Altitude method: M

Altitude accuracy: 5. Altitude datum: NGVD29

Hydrologic: Kalamazoo. Michigan. Area = 2030 sq.mi.

Topographic: Not Reported

Site type: Ground-water other than Spring Date construction: Not Reported

Date inventoried: Not Reported Mean greenwich time offset: EST

Local standard time flag: Y Type of ground water site: Single well, other than collector or Ranney type

Aquifer Type: Not Reported Aquifer: OUTWASH

Well depth: 25.0 Hole depth: Not Reported Source of depth data: Not Reported Project number: 440013100 Real time data flag: 0 Daily flow data begin date: 0000-00-00

Daily flow data end date: 0000-00-00 Daily flow data count: 0

Peak flow data begin date: 0000-00-00 Peak flow data count: 0 Peak flow data end date: 0000-00-00 Water quality data begin date: 1959-04-10

Water quality data end date:1986-07-08 Water quality data count: 2

Ground water data begin date: 1947-03-01 Ground water data end date: 1947-03-01

Ground water data count: 1

Ground-water levels, Number of Measurements: 1

Feet below Feet to
Date Surface Sealevel

1947-03-01 15.00

Lower

5 East MI WELLS MI00092159 1/8 - 1/4 Mile

 Wellid:
 2300000051
 Import id:
 23020419301

 County:
 Eaton
 Township:
 Eaton

 Town range:
 02N 04W
 Section:
 19

Owner name: CITY OF CHARLOTTE Well addr: CHARLOTTE WELL #5

Well depth: 114

Well type: Type I public

Wssn: 1340

 Well num:
 CHARLOTTE WELL #5
 Driller id:
 1997

 Const date:
 1971-11-05 00:00:00.000
 Case type:
 Unknown

 Case dia:
 36

 Case depth:
 60

 Screen frm:
 92

 Screen to:
 112

 Swl:
 20.5

 Test depth:
 36

 Test hours:
 24

 Test rate:
 3511

Test rate: 3511 Test methd: Unknown

Grout: Was grouted Pmp cpcity: 0

Latitude: 42.5462102714

Longitude: -84.8331096486 Methd coll: Interpolation-Map

Elevation:

Topographoc Map Interpolation Elev methd:

Wellid: 23000000051 Seqno:

Primlith: Sand & Gravel Lithmod: Not Reported

Depth: 22

Thickness: 22

D AQ Class: Aqtype:

0 Effect:

C6 South 1/8 - 1/4 Mile **MI WELLS** MI00091695

Lower

23000007512 Not Reported Wellid: Import id: County: Eaton Township: Eaton Town range: 02N 04W Section:

Owner name: Central Michigan Builders Well addr: 1500 N. Cochran

Well depth: 180

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 2227 2001-09-20 00:00:00.000 **PVC Plastic** Const date: Case type:

Case dia: Case depth: 98 0 Screen frm: Screen to: 0 Swl: 7 Test depth: 180

Test hours: 0

Test rate: 15 Test methd: Air Grout: Was grouted Pmp cpcity: 12

42.54415728 Latitude: -84.83581181 Longitude:

Methd coll: Address Matching-House Number

Elevation:

Elev methd: Topographoc Map Interpolation

23000007512 Wellid: Segno:

Primlith: Clay & Gravel Lithmod: Not Reported

Depth: 55 Thickness: 35

D PCM Aqtype: Class:

Effect: 0

C7 South MI WELLS MI00091696

1/8 - 1/4 Mile Lower

TC1461870.2s Page A-12

Wellid: 23000007898 Not Reported Import id: County: Eaton Township: Eaton

Town range: 02N 04W Section: CENTRAL MICHIGAN BUILDERSWell addr:

180 Well depth: Well type: Household

Wssn:

Owner name:

Well num: Not Reported Driller id: 2227 2001-09-20 00:00:00.000 **PVC Plastic** Const date: Case type:

Case dia: 98 Case depth: Screen frm: 0 Screen to: 0 Swl: 7 Test depth: 180 Test hours: 0

Test rate: 20 Test methd: Air Was grouted 12 Grout: Pmp cpcity:

42.54415728 Latitude: -84.83581181 Longitude:

Methd coll: Address Matching-House Number

Elevation:

Elev methd: Topographoc Map Interpolation

23000007898 Wellid: Segno:

Primlith: Sand & Clay Lithmod: Not Reported

Depth: 20 Thickness: 20

D Aqtype: Class: **PCM**

Effect: 0

MI WELLS MI00091245

South 1/4 - 1/2 Mile Higher

23000007087 Wellid: Import id: Not Reported Carmel County: Eaton Township: Section: Town range: 02N 05W

Owner name: MIKE BUMSTEAD Well addr: 1871 N COCHRAN RD

Well depth: 50 Well type: Household

Wssn:

Well num: Not Reported Driller id: 2287 Const date: 2000-04-19 10:42:17.000 Case type: **PVC Plastic**

Case dia: 5 Case depth: 42 Screen frm: 42 Screen to: 50 16 Swl: 0 Test depth: Test hours: 0

Test rate: 20 Test methd: Air Grout: Was grouted Pmp cpcity: 10

Latitude: 42.54160939 Longitude: -84.83610722

Methd coll: Address Matching-House Number

Elevation:

Elev methd: Topographoc Map Interpolation 1500 N COCHRAN

Wellid: 23000007087 Seqno:

Primlith: Sand Lithmod: Not Reported

Depth: 50 20 Thickness: D

Aqtype: Class: AQ 0 Effect:

wsw **MI WELLS** MI00091666

1/4 - 1/2 Mile Lower

> Wellid: 23000007469 Import id: Not Reported County: Eaton Township: Carmel Town range: 02N 05W Section: 24

700 Tirrell Road Owner name: **Duane Tirrell** Well addr:

Well depth: 160 Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 2287

Const date: 2000-08-30 00:00:00.000 Case type: **PVC Plastic**

Case dia: 5 Case depth: 80 Screen frm: 0 Screen to: 0 Swl: 9 Test depth: 0 Test hours: 0

Test rate: 25 Test methd: Air Grout: Was grouted Pmp cpcity: 10

42.54398003 Latitude: -84.84461954 Longitude: Methd coll: Interpolation-Map

Elevation:

Elev methd: Not Reported

Wellid: 23000007469 Seqno:

Primlith: Not Reported Topsoil Lithmod:

Depth: 2 Thickness: 2 D Aqtype:

NA Class: 0 Effect:

D10 South 1/4 - 1/2 Mile Higher MI WELLS MI00090828

Wellid: 23000008528 Import id: Not Reported Township: Carmel County: Eaton 02N 05W Section: Town range: 24

Owner name: **ERNEST WOOFTER** Well addr: 200 WEST KALAMO HWY

Well depth: 68

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 2287 Const date: 2003-04-23 00:00:00.000 Case type: **PVC Plastic**

Case dia: 5 Case depth: 60 Screen frm: 60

 Screen to:
 68

 Swl:
 17

 Test depth:
 20

 Test hours:
 .5

Test rate: 35 Test methd: Air Grout: Was grouted Pmp cpcity: 10

Latitude: 42.53909812 Longitude: -84.83642572

Methd coll: Address Matching-House Number

Elevation: 0

Elev methd: Not Reported

Wellid: 23000008528 Segno: 1

Primlith: Clay Lithmod: Not Reported

Depth: 5
Thickness: 5

Aqtype: D Class: CM

Effect: 0

D11

South 1/2 - 1 Mile Higher

Wellid:2300008372Import id:Not ReportedCounty:EatonTownship:CarmelTown range:02N 05WSection:25

Owner name: LEON WELLS Well addr: 2342 SOUTH COCHRAN ROAD

Well depth: 80

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 2287

Const date: 2003-01-06 00:00:00.000 Case type: PVC Plastic

 Case dia:
 5

 Case depth:
 53

 Screen frm:
 0

 Screen to:
 0

 Swl:
 27

 Test depth:
 32

 Test hours:
 .5

Test rate: 20 Test methd: Air Grout: Was grouted Pmp cpcity: 10

Latitude: 42.53882604 Longitude: -84.8358905

Methd coll: Address Matching-House Number

Elevation: 0

Elev methd: Not Reported

Wellid: 23000008372 Seqno: 2

Primlith: Sand Lithmod: Not Reported

Depth: 24 Thickness: 13

Aqtype: D Class: AQ

Effect: 0

MI00090758

MI WELLS

Map ID Direction Distance

Elevation Database EDR ID Number 12 SSW **MI WELLS** MI00090831 1/2 - 1 Mile Higher

Wellid: 23000003229 Import id: 23020524004 County: Township: Carmel Eaton 02N 05W Town range: Section: 24

BRIAN STULTS Well addr: 250 W KALAMO Owner name: Well depth: 96

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 107

1993-06-28 00:00:00.000 **PVC Plastic** Const date: Case type:

Case dia: 5 Case depth: 92 Screen frm: 92 Screen to: 96 Swl: 10 Test depth: 0 Test hours: 0

0 Test rate: Test methd: Unknown Grout: Was grouted Pmp cpcity: 10

Latitude: 42.5391149821 -84.8395537412 Longitude: Methd coll: Interpolation-Map

Elevation: 895

Elev methd: Topographoc Map Interpolation

Wellid: 23000003229 Segno:

Primlith: See Comments Lithmod: Not Reported

Depth: 96 Thickness: 96

NA Aqtype: U Class:

Effect: 0

Higher

D13 South **MI WELLS** MI00090584 1/2 - 1 Mile

Wellid: 23000003240 Import id: 23020525009 County: Eaton Township: Carmel Town range: 02N 05W Section: 25

Owner name: **DONNA FLEMING** Well addr: 2012 S COCHRAN

Well depth: 240 Well type: Household

0 Wssn:

Well num: Not Reported

Driller id: 2064 1993-06-28 00:00:00.000 **PVC Plastic** Const date: Case type:

Case dia: 5 Case depth: 97 Screen frm: 0 0 Screen to: Swl: 38 Test depth: 0 Test hours: 0

Test rate: 0 Test methd: Unknown Grout: Was grouted Pmp cpcity: 10

Latitude: 42.5382445162

Longitude: -84.83628333 Methd coll: Interpolation-Map

Elevation: 914

Elev methd: Topographoc Map Interpolation

Wellid: 23000003240 Seqno: 1

Primlith: See Comments Lithmod: Not Reported

Depth: 240

Thickness: 240

Aqtype: U Class: NA

Effect: 0

1/2 - 1 Mile Higher

Wellid:2300008009Import id:Not ReportedCounty:EatonTownship:EatonTown range:02N 04WSection:19

Owner name: MONTGOMERY BUILDER Well addr: 301 E KALAMO HWY.

Well depth: 160

Well type: Type II public Wssn: 2027323

 Well num:
 001
 Driller id:
 1077

 Const date:
 2002-09-18 00:00:00.000
 Case type:
 PVC Plastic

 Case dia:
 5

 Case depth:
 40

 Screen frm:
 0

 Screen to:
 0

 Swl:
 20

 Test depth:
 160

 Test hours:
 1

Test rate: 60 Test methd: Air Grout: Was grouted Pmp cpcity: 50

Latitude: 42.53858388 Longitude: -84.83229171

Methd coll: Address Matching-House Number

Elevation: 902
Elev methd: Topographoc Map Interpolation

Wellid: 2300008009 Segno: 2

Primlith: Sand Lithmod: Not Reported

Depth: 35 Thickness: 5

Aqtype: D Class: AQ

Effect: 0

E15 SSE 1/2 - 1 Mile Higher

MI WELLS MI00090603

Well addr:

 Wellid:
 23000002808
 Import id:
 23020430007

 County:
 Eaton
 Township:
 Eaton

Town range: 02N 04W Section: 30

Owner name: Not Reported Well depth: 90

Well type: Household

Wssn: 0

 Well num:
 Not Reported
 Driller id:
 107

 Const date:
 1974-06-30 00:00:00.000
 Case type:
 Unknown

 Case dia:
 4

 Case depth:
 54

 Screen frm:
 0

 Screen to:
 0

 Swl:
 28

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown

Grout: Was grouted Pmp cpcity: 0
Latitude: 42.5383176893

Longitude: 42.5363176693 Longitude: -84.8334955209 Methd coll: Interpolation-Map

Elevation: 920

Elev methd: Topographoc Map Interpolation

Wellid: 23000002808 Segno: 1

Primlith: Clay Lithmod: Not Reported Depth: 9

 Thickness:
 9

 Aqtype:
 D
 Class:
 CM

Effect: 0

16 SSE MI WELLS MI00090531

1/2 - 1 Mile Higher

 Wellid:
 2300002806
 Import id:
 23020430005

 County:
 Eaton
 Township:
 Eaton

 Town range:
 02N 04W
 Section:
 30

Owner name: Not Reported Well addr: KALAMO HWY
Well depth: 100

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 107
Const date: 1978-08-31 00:00:00.000 Case type: Unknown

 Case dia:
 4

 Case depth:
 36

 Screen frm:
 0

 Screen to:
 0

 Swl:
 23

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown Grout: Pmp opcity: 10

Latitude: 42.5380562947 Longitude: -84.8305250774 Methd coll: Interpolation-Map

Elevation: 920

Elev methd: Topographoc Map Interpolation

62 E KALAMO HWY

Wellid: 23000002806 Seqno:

Primlith: Clay Lithmod: Not Reported

Depth: 31 Thickness: 21 Aqtype: D

Aqtype: D Class: CM Effect: 0

F17
East MI WELLS MI00092062
1/2 - 1 Mile

1/2 - 1 Mile Higher

> Wellid: 23000002580 Import id: 23020419002 Eaton County: Township: Eaton 02N 04W Section: Town range: 19 Not Reported Owner name: Not Reported Well addr:

Well depth: 100
Well type: Other
Wssn: 0

 Well num:
 Not Reported
 Driller id:
 107

 Const date:
 1971-09-30 00:00:00.000
 Case type:
 Unknown

 Case dia:
 6

 Case depth:
 40

 Screen frm:
 0

 Screen to:
 0

 Swl:
 30

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown

Grout: Was grouted Pmp cpcity: 0

 Latitude:
 42.5457731734

 Longitude:
 -84.8227938403

 Methd coll:
 Interpolation-Map

Elevation: 900

Elev methd: Topographoc Map Interpolation

Wellid: 23000002580 Segno: 2

Primlith: Sandstone Lithmod: Not Reported

 Depth:
 100

 Thickness:
 72

 Aqtype:
 R

Aqtype: R Class: AQ Effect: 0

F18
East MI WELLS MI00091992
1/2 - 1 Mile
Higher

Wellid: 23000002579 Import id: 23020419001 Eaton Township: County: Eaton 02N 04W Town range: Section: 19 Owner name: Not Reported Well addr: Not Reported

Well depth: 100
Well type: *U
Wssn: 0

Well num: Not Reported Driller id: 107
Const date: 1970-08-31 00:00:00.000 Case type: Unknown

Case dia: 6
Case depth: 26
Screen frm: 0

 Screen to:
 0

 Swl:
 10

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown Grout: Pmp cpcity: 130

 Latitude:
 42.5455019645

 Longitude:
 -84.8220495339

 Methd coll:
 Interpolation-Map

Elevation: 900

Elev methd: Topographoc Map Interpolation

Wellid: 23000002579 Segno: 1

Primlith: Sand & Clay Lithmod: Not Reported

Depth: 25

 Thickness:
 25

 Aqtype:
 D
 Class:
 PCM

Effect: 0

19 SE MI WELLS MI00090687 1/2 - 1 Mile

Higher

Wellid:2300009071Import id:Not ReportedCounty:EatonTownship:EatonTown range:02N 04WSection:19

Owner name: ROBERT CONVERSE Well addr: 625 EAST KALAMO HWY

Well depth: 140
Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 1077

Const date: 2004-04-26 00:00:00.000 Case type: PVC Plastic

 Case dia:
 5

 Case depth:
 60

 Screen frm:
 0

 Screen to:
 0

 Swl:
 30

 Test depth:
 140

 Test hours:
 1

Test rate:50Test methd:AirGrout:Was groutedPmp cpcity:25

Latitude: 42.538574 Longitude: -84.826644

Methd coll: Address Matching-House Number

Elevation: 902

Elev methd: Topographoc Map Interpolation

Wellid: 23000009071 Seqno: 1

Primlith: Gravel Lithmod: Not Reported

Depth: 20 Thickness: 20

Aqtype: D Class: AQ

Effect: 0

Map ID Direction Distance

Elevation Database EDR ID Number

20 South MI WELLS MI00090113 1/2 - 1 Mile Higher

 Wellid:
 2300003238
 Import id:
 23020525007

 County:
 Eaton
 Township:
 Carmel

 Town range:
 02N 05W
 Section:
 25

Owner name: Not Reported Well addr: S OF KAL ON COCHRAN W

Well depth: 78
Well type: Household

Wssn: 0

 Well num:
 Not Reported
 Driller id:
 218

 Const date:
 1969-05-26 00:00:00.000
 Case type:
 Unknown

 Case dia:
 -1

 Case depth:
 0

 Screen frm:
 0

 Screen to:
 0

 Swl:
 25

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown

Grout: Was grouted Pmp cpcity: 4

Latitude: 42.5358366773 Longitude: -84.8360728007 Methd coll: Interpolation-Map

Elevation: 910

Elev methd: Topographoc Map Interpolation

Wellid: 23000003238 Segno: 1

Primlith: See Comments Lithmod: Not Reported

Depth: 78
Thickness: 78
Acture: 11

Aqtype: U Class: NA Effect: 0

21 SW MI WELLS MI00090821

 Wellid:
 23000003226
 Import id:
 23020524001

 County:
 Eaton
 Township:
 Carmel

 Town range:
 02N 05W
 Section:
 24

Owner name: Not Reported Well addr: W OF BUS27 ON KALAMO N

Well depth: 100 Household

Wssn: 0

1/2 - 1 Mile

Well num: Not Reported Driller id: 107
Const date: 1969-06-30 00:00:00.000 Case type: Unknown

 Case dia:
 4

 Case depth:
 54

 Screen frm:
 0

 Screen to:
 0

 Swl:
 20

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown Grout: Pmp cpcity: 10

Latitude: 42.5390814113

Longitude: -84.8468594304 Methd coll: Interpolation-Map

Elevation:

Topographoc Map Interpolation Elev methd:

Wellid: 23000003226 Seqno:

Primlith: See Comments Lithmod:

Depth: 100 100 Thickness:

U NA Class: Aqtype:

0 Effect:

22 South 1/2 - 1 Mile Higher **MI WELLS** MI00089978

Wellid: 23000002809 23020430008 Import id: Township: County: Eaton Eaton Town range: 02N 04W Section:

Owner name: Not Reported Well addr: COCHRAN RD

Well depth: 160 Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 776 1973-09-14 00:00:00.000 Unknown Const date: Case type:

Case dia: 4 Case depth: 72 Screen frm: 0 Screen to: 0 Swl: 21 50 Test depth: Test hours: 1

Test rate: 30 Test methd: Unknown Grout: Was grouted Pmp cpcity: 10

42.5350183967 Latitude: -84.8349531192 Longitude: Methd coll: Interpolation-Map

Elevation:

Elev methd: Topographoc Map Interpolation

23000002809 Wellid: Segno: Primlith: Sandstone Lithmod: W/Shale

Depth: 63 Thickness: 32

Higher

R AQ Aqtype: Class:

Effect: 1

23 NNW MI WELLS MI00094450 1/2 - 1 Mile

TC1461870.2s Page A-22

Not Reported

 Wellid:
 2300003046
 Import id:
 23020513004

 County:
 Eaton
 Township:
 Carmel

 Town range:
 02N 05W
 Section:
 13

Owner name: VIRGIL DAVIS Well addr: Not Reported

Well depth: 95

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 1077

Const date: 1977-06-29 00:00:00.000 Case type: PVC Plastic

 Case dia:
 5

 Case depth:
 72

 Screen frm:
 0

 Screen to:
 0

 Swl:
 20

 Test depth:
 95

 Test hours:
 1

Test rate: 50 Test methd: Unknown Grout: Pmp cpcity: 10

Latitude: 42.5568321142 Longitude: -84.8415016416

Methd coll: L1 Elevation: 902

Elev methd: Topographoc Map Interpolation

Wellid: 23000003046 Seqno: 1

Primlith: See Comments Lithmod: Not Reported

Depth: 95 Thickness: 95

Aqtype: U Class: NA

Effect: 0

24 WSW MI WELLS MI00090893 1/2 - 1 Mile

Lower

23000003228 23020524003 Wellid: Import id: Carmel County: Eaton Township: Section: Town range: 02N 05W 24 Owner name: DANIEL TURNER Well addr: Not Reported

Well depth: 45
Well type: Household

Wssn: 0

 Well num:
 Not Reported
 Driller id:
 1791

 Const date:
 1992-07-27 00:00:00.000
 Case type:
 PVC Plastic

 Case dia:
 5

 Case depth:
 40

 Screen frm:
 41

 Screen to:
 45

 Swl:
 19

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown

Grout: Was grouted Pmp cpcity: 0

Latitude: 42.5393850385 Longitude: -84.8499897488

Methd coll: L1 Elevation: 0

Elev methd: Topographoc Map Interpolation

Wellid: 23000003228 Seqno:

Primlith: See Comments Lithmod: Not Reported

Depth: 45 Thickness: 45

0

Aqtype: U Class: NA

G25
SE MI WELLS MI00090539
1/2 - 1 Mile

1/2 - 1 Mile Higher

Effect:

 Wellid:
 2300002803
 Import id:
 23020430002

 County:
 Eaton
 Township:
 Eaton

 Town range:
 02N 04W
 Section:
 30

Owner name: Not Reported Well addr: E KALAMO HWY

Well depth: 90

Well type: Household

Wssn: 0

 Well num:
 Not Reported
 Driller id:
 107

 Const date:
 1978-10-31 00:00:00.000
 Case type:
 Unknown

 Case dia:
 4

 Case depth:
 42

 Screen frm:
 0

 Screen to:
 0

 Swl:
 28

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown Grout: Pmp opcity: 10

Latitude: 42.5380932449
Longitude: -84.8219913826
Methd coll: Interpolation-Map

Elevation: 915

Elev methd: Topographoc Map Interpolation

Wellid: 23000002803 Seqno: 1

Primlith: Clay Lithmod: Not Reported

Depth: 19
Thickness: 19
Aqtype: D

Aqtype: D Class: CM Effect: 0

G26
SE MI WELLS MI00090540
1/2 - 1 Mile
Higher

 Wellid:
 2300002804
 Import id:
 23020430003

 County:
 Eaton
 Township:
 Eaton

 Town range:
 02N 04W
 Section:
 30

Owner name: Not Reported Well addr: KALAMO HWY

Well depth: 100 Well type: Household

Wssn: 0

 Well num:
 Not Reported
 Driller id:
 107

 Const date:
 1971-04-30 00:00:00.000
 Case type:
 Unknown

Case dia: 4
Case depth: 54
Screen frm: 0

 Screen to:
 0

 Swl:
 20

 Test depth:
 0

 Test hours:
 0

Test rate: 0 Test methd: Unknown Grout: Pmp cpcity: 0

Latitude: 42.5380948369 Longitude: -84.8216203522 Methd coll: Interpolation-Map

Elevation: 925

Elev methd: Topographoc Map Interpolation

Wellid: 23000002804 Segno: 1

Primlith: Clay Lithmod: Not Reported

Depth: 10 Thickness: 10

Aqtype: D Class: CM

Effect: 0

H27
South FED USGS USGS2318212
1/2 - 1 Mile

1/2 - 1 I Higher

Agency cd: USGS Site no: 423158084501101

Site name: 02N 05W 25ADDA 01

Latitude: 423158

 Longitude:
 0845011
 Dec lat:
 42.53281481

 Dec lon:
 -84.83637634
 Coor meth:
 M

Coor accr:FLatlong datum:NAD27Dec latlong datum:NAD83District:26State:26County:045

Country:USLand net:\$25T02NR05WMLocation map:Not ReportedMap scale:Not ReportedAltitude:930Altitude method:M

Altitude accuracy: 5. Altitude datum: NGVD29

Hydrologic: Kalamazoo. Michigan. Area = 2030 sq.mi.

Topographic: Undulating

Site type: Ground-water other than Spring Date construction: 19550101
Date inventoried: Not Reported Mean greenwich time offset: EST

Local standard time flag: Y Type of ground water site: Single well, other than collector or Ranney type

Aquifer Type: Not Reported

Aquifer: SAGINAW FORMATION

Well depth: 95.0 Hole depth: Not Reported Source of depth data: Not Reported Project number: Not Reported Real time data flag: 0 Daily flow data begin date: 0000-00-00

Daily flow data end date: 0000-00-00 Daily flow data count: 0

Peak flow data begin date: 0000-00-00 Peak flow data count: 0 Peak flow data end date: 0000-00-00 Water quality data begin date: 1967-10-19

Water quality data end date:1967-10-19 Water quality data count: 1

Ground water data begin date: 0000-00-00 Ground water data end date: 0000-00-00

Ground water data count: 0

Ground-water levels, Number of Measurements: 0

Map ID Direction				
istance			Datahasa	EDD ID Normal
levation 28			Database	EDR ID Numl
zo outh /2 - 1 Mile igher			MI WELLS	MI00089569
Wellid:	23000003239	Import id:	23020525008	
County:	Eaton	Township:	Carmel	
Town range:	02N 05W	Section:	25	
Owner name:	MIKE SHILLING	Well addr:	Not Reported	
Well depth:	80	Won addi.	Not reported	
Well type:	Household			
Wssn:	0			
Well num:	Not Reported	Driller id:	1612	
Const date:	1988-07-20 00:00:00.000		PVC Plastic	
Case dia:	5	Case type:	FVCFlastic	
	5 55			
Case depth: Screen frm:	0			
Screen to:	0			
Swl:	24			
-	0			
Test depth: Test hours:	0			
Test rate:	30	Test methd:	Unknown	
Grout:	Was grouted	Pmp cpcity:	10	
Latitude:	42.5326123274			
Longitude:	-84.8364553628			
Methd coll:	L1			
Elevation:	925			
Elev methd:	Topographoc Map Interpolation	on		
Wellid:	23000003239	Seqno:	1	
Primlith:	See Comments	Lithmod:	Not Reported	
Depth:	80		·	
Thickness:	80			
Aqtype:	U	Class:	NA	
Effect:	0			
29				
E /2 - 1 Mile ligher			MI WELLS	MI00090542
Wellid:	23000002802	Import id:	23020430001	
County:	Eaton	Township:	Eaton	
Town range:	02N 04W	Section:	30	
Owner name:	Not Reported	Well addr:	KALAMO HWY	
Well depth:	80	TTOII GGGI.	10 12/10/10 11/1/1	
Well type:	Household			
Wssn:	0			
Well num:	Not Reported	Driller id:	107	
Const date:	1973-09-30 00:00:00.000	Case type:	Unknown	
Const date.	4	case type.	OHMHOWH	
Case depth:	42			
Screen frm:	0			
Screen to: Swl:	0 23			
Test depth: Test hours:	0			
Test nours:	0	Tost mothd:	Linknown	

Test methd:

Pmp cpcity:

Test rate:

Latitude:

Was grouted

42.5380980173

Grout:

Unknown

0

Longitude: -84.8208782912 Methd coll: Interpolation-Map

Elevation:

Topographoc Map Interpolation Elev methd:

Wellid: 23000002802 Seqno: 2

Primlith: Sand & Clay Lithmod:

Depth: 40

Thickness: 13 D

PCM Class: Aqtype:

0 Effect:

30 South 1/2 - 1 Mile Higher **MI WELLS** MI00089513

Wellid: 23000002807 23020430006 Import id: . Township: County: Eaton Eaton Town range: 02N 04W Section:

2283 S COCHRAN RD Owner name: Not Reported Well addr:

Well depth: 80

Well type: Household

Wssn: 0

Well num: Not Reported Driller id: 107 1976-04-30 00:00:00.000 Const date: Case type: Unknown

Case dia: 4 Case depth: 48 Screen frm: 0 Screen to: 0 Swl: 20 0 Test depth: Test hours: 0

Test rate: 0 Test methd: Unknown Grout: Was grouted Pmp cpcity: 0

42.5322744273 Latitude: -84.8349310151 Longitude: Methd coll: Interpolation-Map

Elevation:

Elev methd: Topographoc Map Interpolation

23000002807 Wellid: Segno:

Primlith: Sand & Clay Lithmod: Not Reported

Depth: 33 Thickness: 21

D PCM Aqtype: Class:

Effect: 0

31 ENE MI WELLS MI00093477

1/2 - 1 Mile Higher

Not Reported

Wellid:2300007665Import id:Not ReportedCounty:EatonTownship:EatonTown range:02N 04WSection:20

Owner name: Charlotte Assembly of God Well addr: 1072 E Clinton Trail

Well depth: 69

Well type: Household

Wssn: 0

 Well num:
 Not Reported
 Driller id:
 2287

 Const date:
 2000-10-06 00:00:00.000
 Case type:
 PVC Plastic

Case dia: 5
Case depth: 38
Screen frm: 0
Screen to: 0

Swl: 18
Test depth: 0
Test hours: 0
Test rate: 25

Test rate: 25 Test methd: Air Grout: Was grouted Pmp cpcity: 10

Latitude: 42.5531054 Longitude: -84.8193084

Methd coll: Address Matching-House Number

Elevation: 0

Elev methd: Not Reported

Wellid: 2300007665 Segno: 2

Primlith: Clay Lithmod: Not Reported

Depth: 30 Thickness: 3

Aqtype: D Class: CM

Effect: 0

32 South MI WELLS MI00089483 1/2 - 1 Mile

Higher

 Wellid:
 2300000054
 Import id:
 23020419408

 County:
 Eaton
 Township:
 Eaton

 Town range:
 02N 04W
 Section:
 19

Owner name: CHARLOTTE CHURCH OF CHRISTEll addr: Not Reported

Well depth: 84

Well type: Type II public Wssn: 2020023

 Well num:
 001
 Driller id:
 1612

 Const date:
 1986-02-06 00:00:00.000
 Case type:
 PVC Plastic

 Case dia:
 5

 Case depth:
 45

 Screen frm:
 0

 Screen to:
 0

 Swl:
 20

 Test depth:
 0

 Test hours:
 0

Test rate: 40 Test methd: Unknown Grout: Pmp opcity: 18

Latitude: 42.532029 Longitude: -84.838162

Methd coll: GPS Code Measurement Differential (DGPS)

Elevation: 922

Elev methd: Topographoc Map Interpolation

Wellid: 23000000054 Seqno: Lithmod: Primlith: Sand & Gravel Not Reported

Depth: 30 Thickness: 30

D 0 Aqtype: Class: AQ

Effect:

Direction

Distance Database EDR ID Number

SW 1/2 - 1 Mile OIL_GAS 0000041125

API Well No: 21045395070000

Permit No: 39507 10/28/1985 Permit Date:

County: **EATON** Slant: D BH County: **EATON** Township: CARMEL Tier: 2 N/S Direction: Ν Range: 5 E/W Direction: W 25 Section: 10-acre Fraction: NW 40-acre Fraction: NW160-acre Fraction: NE Lease Name: **FULLERTON** Well No: 1-24

MOSBACHER ENERGY CO Permitted Owner:

TERRELL, JACK & MARION Surface Owner:

3973 1001 Depth: Elevation: **G NGRN** State Land: NO Formation: Federal Land: NO Well type: Dry Hole Well Status: Plugging Approved Surface X Coord: 1862501.910 379411.050 Bottom X Coord: Surface Y Coord: 1862358.000 Bottom Y Coord: 378838.000 MGR Surface X Coord: 594811.578 MGR Surface Y Coord: 221537.255 MGR Bottom X Coord: 594854.020

MGR Bottom Y Coord: 221719.417 Description: Dry Hole

AREA RADON INFORMATION

State Database: MI Radon

Radon Test Results

Test Type	Zip	Floor	Stop Date	Can 1 Res pCi/L	Can 1 Error	Can 2 Res pCi/L	Can 2 Error
	_						
Geographic	48813		4/8/88	3.2	9.7%		
Random	48813	0	2/19/88	1.8	11.4%		
Random	48813	0	2/17/88	3.1	7.4%		
Random	48813	0	1/10/88	5.9	4.3%		
Random	48813	1	12/31/87	8.9	4.3%		
Random	48813	0	12/1/87	13.8	5.8%		

State Database: MI Radon

Radon Test Results

Zip	Less than sign	Pci/L
_		
48813		4.30
48813		7.30
48813		1.50
48813		3.80
48813		1.20
48813		35.30
48813		5.50
48813		2.30
48813		3.90
48813		3.90
48813		3.30
48813		2.50
48813		5.40
48813		1.40
48813		3.20
48813		2.60
48813		2.40
48813		2.00
48813		4.10
48813		3.10
48813		0.70
48813		3.30
48813		6.40
48813	<	0.30
48813	<	0.30
48813		5.50
48813		1.00
48813		3.20
48813		

AREA RADON INFORMATION

		0.60
48813		2.00
48813		3.10
48813		3.90
48813		3.60
48813		4.10
48813		4.40
48813		4.80
48813		2.30
48813		1.30
48813		4.40
48813		4.10
48813		2.40
48813		11.00
48813		4.40
48813		4.40
48813		5.20
48813		23.60
48813		2.00
48813		2.20
48813		6.10
48813		0.90
48813		3.20
48813		3.40
48813	_	0.30
48813	<	0.70
		3.10
48813		
48813		1.50
48813		1.40
48813		1.50
48813		21.70
48813		4.60
48813		5.30
48813		4.20
48813		3.80
48813		9.40
48813		10.90
48813		5.60
48813		8.40
48813		7.50
48813		4.40
48813		4.20
48813		13.10
48813		7.50
48813		8.40
48813	<	0.30
48813		2.10
48813		0.60
48813		2.40
48813		1.90
48813		6.00
48813		6.10
48813		9.70
48813		7.00
48813		10.40
48813	<	0.30
48813		

AREA RADON INFORMATION

		5.00
48813		4.40
48813		4.50
48813		4.80
48813		5.80
48813	<	0.30
48813		2.30
48813		7.50
48813		1.40
48813		7.70
48813		0.70
48813		0.80
48813		4.10
48813		6.80
48813		12.30
48813		8.00
48813		3.70
48813		4.10
48813		17.10
48813		0.80
48813		2.20
48813		1.50
48813		1.10
48813		0.10
48813		0.90
48813		0.30
48813		0.10
48813		6.40
48813		1.20
48813		0.90
48813		1.70
48813		1.30
48813		0.20
48813		3.10
48813		6.50
48813		6.90
48813		3.20
48813		1.10
48813		5.10
48813		
		0.60
48813		0.90
48813		3.40
48813		2.70
48813		4.10
48813		3.90
48813	<	0.30
48813		2.40
48813		2.00
48813		2.30
48813		2.40
48813		1.00
48813		2.30
48813		14.30
48813		6.10
48813		2.90
48813		2.00
48813		
.5010		

AREA RADON INFORMATION

		5.30
48813		2.20
48813		15.50
48813		45.80
48813		40.00
48813		5.70
48813		20.90
48813		
		2.00
48813		5.60
48813		3.10
48813		35.90
48813		1.60
48813		7.00
48813		4.10
48813		3.00
48813		4.00
48813		2.10
48813		3.40
48813		11.70
48813		4.30
48813		3.10
		-
48813		8.70
48813		3.00
48813		4.90
48813		4.00
48813		4.50
48813		2.60
48813		3.10
48813		6.20
48813		3.90
48813		5.00
48813		6.20
48813		6.70
48813		6.30
48813		4.50
48813		
		2.40
48813		6.20
48813		1.20
48813		2.90
48813		4.50
48813		2.10
48813	<	0.30
48813		12.10
48813	<	0.30
48813		6.30
48813		2.70
48813		4.30
48813		3.30
48813		4.30
48813		
		5.50
48813		1.00
48813		5.80
48813		8.80
48813		3.00
48813		13.20
48813		4.70
		0
48813		

AREA RADON INFORMATION

		9.60
18813		7.70
18813		2.00
18813		5.80
18813		2.20
18813		3.20
18813		0.80
18813		8.40
18813		3.10
18813		11.10
18813		4.60
18813		2.70
18813		1.10
18813		2.90
18813		4.80
18813		6.80
18813		5.00
18813		15.10
18813		3.50
18813		1.70
18813		1.10
18813		3.90
18813		1.80
18813		0.40
18813		2.70
18813		6.20
18813		0.80
18813	<	0.30
18813		2.80
18813		1.70
18813		3.20
18813		6.00
18813		5.70
18813		2.90
18813		13.50

Federal EPA Radon Zone for EATON 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.

Federal Area Radon Information for Zip Code: 48813

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	8.900 pCi/L	0%	100%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	6.150 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS

1:24,000- and 1:25,000-scale topographic quadrangle maps.

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 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

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

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

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

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

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

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

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

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

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

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Water Well Data

Source: Department of Environmental Quality, Drinking Water and Radiological Protection Division

Telephone: 517-335-9218

Michigan Oil and Gas Wells

Source: Michigan Department of Natural Resources

Locations of oil and gas wells are compiled from permit records on file at the Geological Survey Division (GSD),

Michigan Department of Natural Resources.

RADON

State Database: MI Radon

Source: Department of Environmental Quality

Telephone: 517-335-9551 Radon Test Results

Michigan Radon Test Results

Source: Department of Environmental Quality

Telephone: 517-335-8037

These results are from test kits distributed by the local health departments and used by

Michigan residents. There is no way of knowing whether the devices were used properly, whether there are duplicates

(or repeat verification) test (i.e., more than one sample per home), etc.

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey.

The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

APPENDIX J

WATER WELL RECORDS



DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION PERMIT NO: WATER WELL AND PUMP RECORD TAX NO: Completion is required under authority of Part 127 Act 368 PA 1978 Failure to comply is a misdemeanor 11429 LOCATION OF WELL Range No. Section No. Town No. County Township Name 3 W SE 1/45E1/45E1/4 CARMEL EATON Distance and Direction from Road Intersection 3. OWNER OF WELL O.I mile WEST OF COCHRAN Rd, on Address Dan Martin charlathe Hwy. THE SHOW NORTH SIDE OF KALAMO. Address Same as Well Location 🛮 🛣 Yes 🔲 No Street Address & City of Well Location New Weil Date Completed 4. WELL DEPTH: Sketch Map Locate with 'x' in Section Below t. 10 8 98 Replacement Well Rotary Driven ☐ Dug 5. Cable Tool Jetted Auger/Bored Hollow Rod 6. USE: X Household Type I Public Type III Public ☐ Irrigation ☐ Type IIa Public ☐ Heat Pump ☐ Test Well ☐ Type IIb Public ☐ 7. CASING: Steel Threaded Height: Above/Below Plastic Welded Surface: ____ft THICKNESS OF STRATUM DEPTH TO BOTTOM OF STRATUM Other___ FORMATION DESCRIPTION Diameter: 5 in. to/ole it. depth Weight: ____ ____in. to ____ft. depth 27 27 Sand & gravel Drive Shoe BORE HOLE: Diameter: 7% in. to/06 ft. depth Shale Packer _in. to ____ft, depth 31 8. SCREEN: Not Installed Gravel-Packed shale sandrock, Lime Lime, white sandrock Diameter 126 Lenath: 28 Bremer Check FITTINGS: K-Packer gray sandrock Line, state 223 ft. Other Blank Above Screen 9. STATIC WATER LEVEL: 101 Flowing ft. Below Land Surface 10, PUMPING LEVEL: Below Land Surface **223** ft. After _hrş. Pumping at_ Air Air Bailer Plunger 11, WELL HEAD COMPLETION: 12" Above Grade Pitless Adapter Well House Basement Offset From 🐧 □ No 🗷 Yes 12. WELL GROUTED? OCT 2 2 1998 Bentonite Neat Cement Additives No. of Bags______ 13. NEAREST SOURCE OF POSSIBLE CONTAMINATION: BARRY-EATON DIST. Type 5 PIC Distance 75 ft. Direction HEALTH DEPT Distance_ CHARLOTTE Pump Installation Only 14 PUMP: Not Installed Manufacturer's Name MCDONOIP 15. ABANDONED WELL PLUGGED? Yes No Depth____ft. Casing Diameter ____ Length of Drop Pipe 45 ft. Capacity 10 G.P.M. Neat Cement Bentonite Slurry PLUGGING MATERIAL: TYPE: Submersible Jet Other Concrete Grout Bentonite Chips Cement/Bentonite Slurry Yes No PRESSURE TANK: Casing Removed? No. of Bags Well X-Trol 16. REMARKS: (Elevation, Source of Data, etc.) 18. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my jurisdiction and this report is true to the best of my 17. DRILLING MACHINE OPERATOR: Employee Subcontractor Terry

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

TAX NO:	MICHIGAN DEF					PERMIT NO:	4
1. LOCATION OF WELL						# 424	01
· · ·	wnship Name		Fraction		Section No.	Town No.	Range No.
EATON Distance and Direction from Road Intersec	CARMEL.		NE 1/4 N	1/4 N□/4 3. OWNERO	F WELL	2N	<u> </u>
Maurer Rd. Just s & W		Υ		Address	Howard C	ONST.	į
THISTERN THE COULT OR W	. Shundari UV	•		1296 Ts	LAND HWY	CHARLOTTE, MI	.48813
Street Address & City of Well Location				Address S	iame as Well Loca	ation Yes	No
Locate with 'x' in Section Below	7	ketch Map		4. WELLDER			ew Well eplacement Well
	1	JANA Y		95 5. □ Cable	ft. 2 /	12 / 96 □ Re otary □ Driv	·
W	W S S S S S S S S S S S S S S S S S S S	rr'		☐ Hollow	Rod 🗀 A	uger/Bored 🗌 Jet	ted
	X	Broadwa	<u>-</u>			ype I Public Typ	
		V 1000	J		Irrigation ☐ Ty	ype IIa Public 🔲 Hea ype IIb Public 🔲	at Pump
1 MILE	M'				Steel Tr	hreaded Height	: Above/Below
2. FORMATION DESCRIPTION		THICKNESS	реетнто		Plastic W	/elded Surface	e:ft
		OF STRATUM	DEPTH TO BOTTOM OF STRATUM	Diameter:	Other	87 ft. depth Weigh	t: SDR 21lbs/ft.
CLAY		26	26	BORE HO	5_in. to in. to	ft, depth	ve Shoe
GRAVEL		9	35		8 _in. to	83 ft. depth Sha	
GREY CLAY		29	64		in. to	ft. depth	
SAND		10	74	Туре	• • • • • • • • • • • • • • • • • • • •	Gravel-Pack Diameter	
GREY CLAY		6	80	Slot/Gauze		Length:	
SHALE AND SANDROCK		3	83	FITTINGS	: K-Packe	er 🔲 Bremer Che	
		12	95		Above Screen	ft. Other	
SANDROCK		1.2	<u></u>	-1	VATER LEVEL: ft. Below Land	Surface	wing
		 		10. PUMPING	LEVEL: Below L	and Surface	
67				Plunge	ft. After r	hrs. Pumping at_ Air	G.P.M. Test Pump
D. J. CO The		 		1	AD COMPLETION	r	01-
7 (P 1997)				L X Pitless ☐ Basen	Adapter nent Offset	☐ 12" Above☐ Well Hous	
6-3 13-5-3 				12. WELL GR			0 to <u>83</u> ft.
100 500 6.50 100 444	······			☐ Neat C	Cement 📈 🛭 B	Sentonite Oth	
egisa Visk	····					SSIBLE CONTAMINA	TION:
				Type_St	EPTIC Dis	stance 70+ ft. Di	irection NE
USE A 2ND SHEET IF NE				Type			irection
15. ABANDONED WELL PLUGGED?	Yes No			14. PUMP: Manufactu	Not Installed rer's Name	Pump Insta	<u> </u>
Casing Diameterin. PLUGGING MATERIAL:	Depthft. Neat Cement	Bentonite S	Slurry	Model Nur	nber	HP	Volts_220
Cement/Bentonite Slurry	Concrete Grout	Bentonite C	Chips	TYPE:	Drop Pipe Submersible	ft. Capacity _ JetOther_	
No. of Bags	Casing Removed?	」Yes □ 1	No	PRESSUF		19 un venn	
EMARKS: (Elevation, Source of D	vaia, eic.j			Manufactu Model Nur		02 UG XTROL Capacity	Gallons
	Γ			RACTOR'S CER		nout to the same of the same	ut of im-
CHINE OPERATOR:			ge and belief	f.		port is true to the bes	st of mly
☐ Subcontractor		REGISTERED	CHAS. K	LEINFELT	<u>& Son 010</u>	J/ RE	GISTRATION NO.
<u> </u>	<u> </u>				CHARLOTTE		
		Signed	Januari AUTHORI	ZED REPRESENTATI	Bray	Date 2/	12/96

MICHIGAN DEPARTMENT OF PUBLIC HEALTH GEOLOGICAL SURVEY NO. WATER WELL AND PUMP RECORD 1 LOCATION OF WELL Township Name Fraction Section Number Town Number Range Number EATON CARMEL 24 Distance And Direction From Road Intersection Winston Johnson (Cont. 4 mi. W. of Cochnan on Kalamo Hwy. Brian Stults 250 W. Kalamo Address Street Address & City of Well Location Address Same As Well Location? Yes No Locate with "X" in Section Below · Sketch Map: 4 WELL DEPTH: Date Completed New Well 8 28 93 Replacement Well W) Cable tool Rotary Hollow rod ___ Auger Jetted KALAMU ROAD 6 USE: X Domestic Type | Public Irrigation Type IIa Public Heat pump Test Well. Type IIb Public CASING: Steel Threaded Height: Above/MAW Plastic Welded Surface THICKNESS Weight SDR_21/s./ft FORMATION DESCRIPTION OF STRATUM BOTTOM OF _____ in. to _____ ft. depth Grouted Drill Hole Diameter ____ in. to ____ ft. depth ☐ Yes Drive Shoe sandy clay gravel Not Installed 83 Type <u>Atainless</u> Diameter ___ Slot/Ga**xx 25** Length 4 ft. _____ ft. and __**96**____ ft. FITTINGS: K-Packer Lead Packer Bremer Check Blank atchesaded to pipeer 9 STATIC WATER LEVEL: 1 . . . 10 ft. below land surface
10 PUMPING LEVEL: below land surface ain test hrs. pumping at _____ G.P.M. ft. after _____ hrs. pumping at _____ G.P.M. 11 WELL HEAD Pitless adapter 12" above grade COMPLETION: Basement offset Approved pit 12 WELL GROUTED? No Yes From to 92 ft. Neat cement X Bentonite Other No. of bags of cement ____ ____Additives _ 13 Nearest source of possible contamination Type <u>Aeptic</u> Distance <u>50+ft.</u> Direction <u>SE</u> Well disinfected upon completion? Yes No Was old well plugged? ■ Not Installed Pump Installation Only Manufacturer's ranked jacket __ _{Volts} <u>22</u>0 Length of Drop Pipe __30 _ ft. capacity ______ / _ _ G.P.M. Submersible ___ Jet ___ PRESSURE TANK 202 xtnol USE A 2ND SHEET IF NEEDED Model number_

Chas. Kleinfelt & Son 0107

REGISTERED BUSINESS NAME REGISTRATION NO.

Address 3402 W 5Pt. Hwy. Charlotte, M1. 48813

16. WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

AUTHORIZED REPRESENTATIVE

Authority: A Completion: R Penalty: C

Act 368 PA 1978
Required
Conviction of a violation
of any provision is a
misdemeanor.

MUREAU OF ENVIRONMENTAL AND

occupational Malth-Gy^egs

15. Remarks, elevation, source of data, etc.

17. Rig Operator's Name:

D67d 2/89

GEOLOGICAL SUBVEY NO			PUBLIC HEALTH	PERMIT N	8605 UMBER
County Township Name		Fraction	Section Nu	ımber Town Number	Range Number
EARCH CARMEL		1	5 F 1/4 SE 1/4 20		
stance And Direction From Road Intersection		· · · · · · · · · · · · · · · · · · ·	3 OWNER OF WELL:	<u> </u>	S EAW)
TO OF A MILE WEST OF COUNSELL	PUNIO 0	N ME	1	mineral or 1 for 13	
NOUTH SIDES OF KNIAMO HOY.		-		TURNER	-
				CALAMO INC. Y.	
APPICE 160' OFF OF KALAMO 1464) treet Address & City of Well Location			Address Same As Wel	77E MT 461 Location? X Yes D] No
	ketch Map:		4 WELL DEPTH: Date	Completed DAY I YEAR New We	
ocate with "X" in Section Below S	1		45 FT. 00.	DAY I YEAR IN New We	II
	cue	NAMED.		Motary Driven	
and	- 4			Auger Jetted	∐ Dug
- - - -	<u> </u>	NEAVAO 167.	S LISE: F-1		Tues III Dulis -
1 / Timber					Type III Public
				Type Itb Public	Heat pump
	1		7 CASING:	1	- /D - I
1 MILE			Diameter L Steel L	ā ' " " " " " " " " " " " " " "	·
	THICKNESS	DEPTH TO	5 in to 40 ft.	depth Surface	
FORMATION DESCRIPTION	OF STRATUM	BOTTOM OF STRATUM	in. to ft.	depth vveignt	lbs./ft.
Sec.			Grouted Drill Hole Diam in. to ft.	Drive Chee	Yes
0-6 SAM SCIAY	/	6	m. to ft.		□ No
0-6 SAND CLAY 6-45 CHAVE(8 SCREEN:	Not In	atallad
0-45 (MAVE)	39	45	Type		stalled
**		<i></i>		Length 4	
				ft. and	
			FITTINGS: K-Packe	er Lead Packer E	rt. Bremer Check
			Blank above screen		
,			9 STATIC WATER LEVEL:		
			ft. be	ow land surface	Flow
			10 PUMPING LEVEL: belov	land surface	
			MEW atto	Thrs. pumping at 40	GPM
				hrs. pumping at	
	<u> </u>			,no. partipility at	_ G.F.(VI.
		. ==	11 WELL HEAD	fless adapter 12" a	bove grade
	<u> </u>			asement offset Appro	
			12 WELL GROUTED?	No Gres From	to 4/1 ft
				•	
•			Neat cement	Bentonite Other	
			No. of bags of cement _	Additives	
			13 Nearest source of possib		
			Туре	Distanceft. Direc	etion
			Well disinfected upon com	oletion? Yes No	o
			Was old well plugged?	Yes No	o
			14 PUMP: Not Insta	illed .Pump Inst	allation Only
			Manufacturer's name		
			Model number	HP V	olts 230
	<u> </u>		Length of Drop Pipe		-
	1 1		· · · · · · · · · · · · · · · · · · ·	· · · ·	

BUREAU OF ENVIRONMENTAL AND THE REGISTERED OCCUPATIONAL HEALTH-GWOS ddress

PRESSURE TANK:

Model number

Manufacturer's name

16. WATER WELL CONTRACTOR'S CERTIFICATION:

D67d 2/89

17. Rig Operator's Name:

15. Remarks, elevation, source of data, etc.

Authority: Completion: Penalty:

Capacity

Submersible

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Act 368 PA 1978 Required Conviction of a violation of any provision is a misdemeanor.

Gallons

RECEIVED

1992

USE A 2ND SHEET IF NEEDED Mich. Dept. of Public Health

AUG 7

GEOLOGICAL SURVEY NO.

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

WATER WELL AND PUMP RECORD

 L	PEI	RMI'	L	JMB	ER	

1 LOCATION OF WELL							
County Baton	Township Name	0	Fraction		Section Nurvber	Town Number	Range Number
Distance And Direction From Road Inte		mel	1/4	1/4 1/4	24	CN/S	5 EW
Distance And Direction From Road Inte	ersection			3 OWNER OF	WELL: GNUCK	LOUITISOU	_
					Court S	h.	
				Address	JOUL U D	•	
Street Address & City of Well Location				Andres Col	me As Well Locatio	ın? 🏝 Yes 🗆	٦
Locate with "X" in Section Below		Sketch Map:			me As well Location H: (completed)		
		·		1.0	Om ft.	Date of Complet	88
				5 Cable too			Dug
1				Hollow ro			
▋ ᄣ┝╶┈┤╌┈┼┈┈╎╴╴┤ ┋╻ ╴				6 USE: XX Dom			Type III Public
				☐ Irriga			Heat pump
				Test	Well Type II	b Public 🗍	
				7 CASÍNG: Diameter	Steel Thread	led Height: Abov	e/Below
1 MILE					Steel Thread	d Surface 1	ft.
2 FORMATION DESCR	RIPTION	THICKNESS	DEPTH TO BOTTOM OF	in. to	fft. depth	Weight	lbs./ft.
		STRATUM	STRATUM	Grøuted Drill	Hole Diameter ft. depth	D.: 01	П.,
Gravel		63	60	4		Drive Shoe	□ Yes □ No
			<u>63· · </u>	8 SCREEN:	ft. depth	i	
Sandstone		37	100			☐ Not In	
Denter Polity						Diameter	
				FITTINGS:	K-Packer	andf	n. Bremer Check
				☐ Blank ab	ove screen	t. Other	
				9 STATIC WATE	R LEVEL:		
				20	ft. below land VEL: below land su	surface	Flow
				$\frac{100}{1}$ ft. after $\frac{1}{1}$ hrs. pumping at $\frac{30}{1}$ G.P.M			
				f	_ G.P.M.		
				11 WELL HEAD COMPLETION: X Pitless adapter 12" above			
				COMPLETION	I: Basement		
				12 WELL GROU	TED? No	XYes From 0	to 67 ft
				Neat cement KBentonite Other			
				No. of bags o			
				13 Nearest sour	ce of possible conta	mination	
				туре <u> </u>	<u>ptic</u> Distan	ce <u>50ft.</u> Direc	etion
			<u> </u>		ed upon completion		
			į	14 PUMP:	Not Installed	yres	allation Only
				Model numbe	r	HP Vo	olts <u>115</u>
				Length of Dro	1, ~	ft. capacity	
				TYPE:	Submersible	Jet	
				PRESSURE TA			ļ
USE A 2ND SHEET IF NE	enen Mala a	ECEIVED		Manufacturer			
15. Remarks, elevation, source of d	131	" of Poblic II	i tő (/WATER	Model number	CTOR'S CERTIFIC	Capacity CATION:	Gallons
		27 1999	This well		r my jurisdiction and		
	() promotion of the con-		$L \cdot J$	T WellD	rilling	23-102	77
	The state of the s	avice amontal a	rus .	REGISTERED BUSINI	SS NAME	23-107 REGISTRATION	
	** ********	inescommental e o. tsookin-Giv	, Address	4621 T	hornton H	wy. Char	lotte MI
D67d 2/84			Signed _	AUTHORIZ	ED REPRESENTATIVE	Date 7- _	11-88

GEOLOGICAL SURVEY SAMPLE No.							
-	W	ATER WE		RD MICHIGAN DEPARTMENT BE			
1 LOCATION OF WELL		ACT 294	PA 1965	OF PUBLIC HEALTH			
County Twp.	O 2		Fraction	Section No. Town Range			
Distance And Direction from Road Intersections	Cermo 1	(NW SI	= 4 NW 24 2 N/8. 5 E/W.			
1/3 M. E. & 1/3 M. S. of M	78 OW	NER No		3 OWNER OF WELL: Archer Const.			
& Shepard St. B. Side			Address R				
Street address & City of Well Location		THICKNESS	DEPTH TO	4 WELL DEPTH: (completed) Date of Completion			
2 FORMATION			BOTTOM OF STRATUM	120 ft. 8/68			
Sand & Grave I		20	20	5 Cable tool Rotary Driven Dug Hollow rod Jetted Bored			
M3		4-		6 USE: 🔀 Domestic 🗌 Public Supply 🔲 Industry			
Clay		40	(60)	Irrigation Air Conditioning Commercial Test Well			
Shale		30	90	7 CASING: Threaded W Welded Height: Above/Beterr			
Sand Rock		30	120	# in. to 90 ft. Depth surface 1 ft. Weight 11 lbs/ft.			
				in. toft. Depth Drive Shoe? Yes A No			
				8 SCREEN:			
				Type:Diq.;			
				Slot/GauzeLength			
				Set betweenft. andft.			
				Fittings:			
			9 STATIC WATER LEVEL				
			10 PUMPING LEVEL below land surface				
			AIR TEST				
			ft. afterhrs. pumpingg.p.m.				
			11 WATER QUALITY in Parts Per Million:				
			Iron (Fe)Chlorides (CI)				
		Hardness					
			12 WELL HEAD COMPLETION: In Approved Pit In Approved Pit 12" Above Grade				
			13 GROUTING:				
			Well Grouted?				
			Depth: Fromft. toft. G.L.				
			14 SANITARY:				
				Nearest Source of possible contamination 100 feet B Direction So T Type			
			Well disinfected upon completion 🛣 Yes 🗌 No				
				15 PUMP: Manufacturer's Name Rapidayton			
				Model Number HP 3/4			
				Length of Drop Pipe 24 ft. capacity 10 G.P.M.			
				Type: 🔀 Submersible 🔲			
6 Remarks, elevation, source of data, etc.				WELL CONTRACTOR'S CERTIFICATION:			
ADDED INFO. BY DRILLER, IXEM MA				I was drilled under my jurisdiction and this report is true st of my knowledge and belief.			
*CORRECTED BY3			-Ch	EGISTERED BUSINESS NAME SON PREGISTRATION NO.			
			Address R#2 Charlotte. Mich. 48819				
**ADDITION BY;				May / Chile Date 8/31/68			
D67D 100M 6-66			,	AUTHORIZED REPRESENTATIVE			

RD	•	MICHIGAN DEPARTMENT OF

· · · · · · · · · · · · · · · · · · ·		WATER WE		MICHIGAN DEPARTMENT		
1 LOCATION OF WELL		ACT 294	PA 1965		ſ	OF PUBLIC HEALTH
County Eaton	Twp.Cerms 1		Fraction SE1/S/	Section Section		n Range
Distance And Direction from Road	Intersections On Laiemo	OWNER No		3 OWNER OF WEL		ter
N. Side			Address 113 W. Leurence			
Street address & City of Well Loc	ation			C7	harlotte,	Mich.
2 FORMAT	ION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	4 WELL DEPTH: (a		ate of Completion
Clay & A	Sand	35	35	5 Cable tool Hollow rod		Driven Dug
Sand Ro	ek .	15	50	6 USE: 🗗 Domesti	c Public S	
Shale		20	29	☐ Test We	II 🗆 💶	
Sand Roc	:k	30	100	Digm.	ft, Depth	
					ft. Depth	Weight Us /ft.
				8 SCREEN:	_	
						Dia.;
				Slot/Gauze Set between		-
				Fittings:		
				9 STATIC WATER I	LEVEL	
				10 PUMPING LEVEL		ace pingg.p.m.
						pingg.p.m.
				11 WATER QUALITY	' in Parts Per Mi	llion:
			Iron (Fe)Chlorides (CI)			
,				Hardness 12 WELL HEAD COM		
				⊉ Pitless		In Approved Pit 12'' Above Grade
				13 GROUTING: Well Grouted?	Yes 🗌 No	
				Material: Nea	t Cement 🔲 💆	Prill Mid to
				Depth: From 14 SANITARY:	_ft. toft.	G.L.
				Nearest Source of	possible contami	ination
					Direction	
				Well disinfected u	pon completion	LALI Yes L.I.No
				Manufacturer's Na		3
				Model Number		HP. 5 pacity 16 G.P.M.
				Type: 🗹 Submer:	sible	
6 Remarks, elevation, source of a	lata, etc.		 17 water v	U Jet WELL CONTRACTOR'		eciprocating
April with the second			This well	l was drilled under my st of my knowledge and	jurisdiction and	
area, Julius 🗡			<u>Cha</u>	ES. Aleinfelt Egistered business na	& Son	0.107 REGISTRATION NO.
COADUMNIN NO	/		Address_	Charlotte R#	e. Mich.	48813
067D 100M c.cc			SignedA	UTORIZED REPRESENT	TIVE	ate 7/36/69

APPENDIX K

USGS TOPOGRAPHIC MAPS





EDR Historical Topographic Map Report

Charlotte Armory 1310 South Cochran Street Charlotte, MI 48813

Inquiry Number: 1461870.4

July 08, 2005

The Standard in **Environmental Risk Management Information**

440 Wheelers Farms Road Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050

Fax:

1-800-231-6802

Internet:

www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property, and its surrounding area, resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable is defined as information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable. To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following standard historical sources may be used: aerial photographs, city directories, fire insurance maps, topographic maps, property tax files, land title records (although these cannot be the sole historical source consulted), building department records, or zoning/and use records. ASTM E 1527-00 requires "All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful." (ASTM E 1527-00, Section 7.3.2 page 12.)

EDR's Historical Topographic Map Report includes a search of available public and private color historical topographic map collections.

Topographic Maps

A topographic map (topo) is a color coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topos show the shape, elevation, and development of the terrain in precise detail by using contour lines and color coded symbols. Many features are shown by lines that may be straight, curved, solid, dashed, dotted, or in any combination. The colors of the lines usually indicate similar classes of information. For example, topographic contours (brown); lakes, streams, irrigation ditches, etc. (blue); land grids and important roads (red); secondary roads and trails, railroads, boundaries, etc. (black); and features that have been updated using aerial photography, but not field verified, such as disturbed land areas (e.g., gravel pits) and newly developed water bodies (purple).

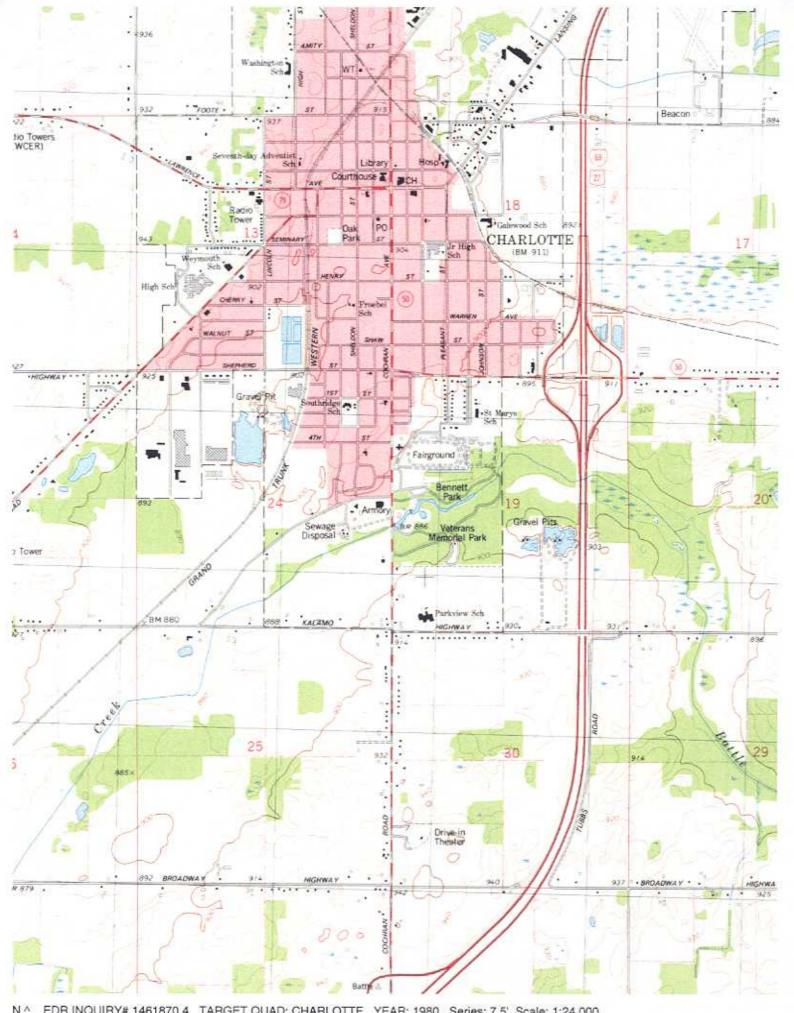
For more than a century, the USGS has been creating and revising topographic maps for the entire country at a variety of scales. There are about 60,000 U.S. Geological Survey (USGS) produced topo maps covering the United States. Each map covers a specific quadrangle (quad) defined as a four-sided area bounded by latitude and longitude. Historical topographic maps are a valuable historical resource for documenting the prior use of a property and its surrounding area, and due to their frequent availability can be particularly helpful when other standard historical sources (such as city directories, fire insurance maps, or aerial photographs) are not reasonably ascertainable.

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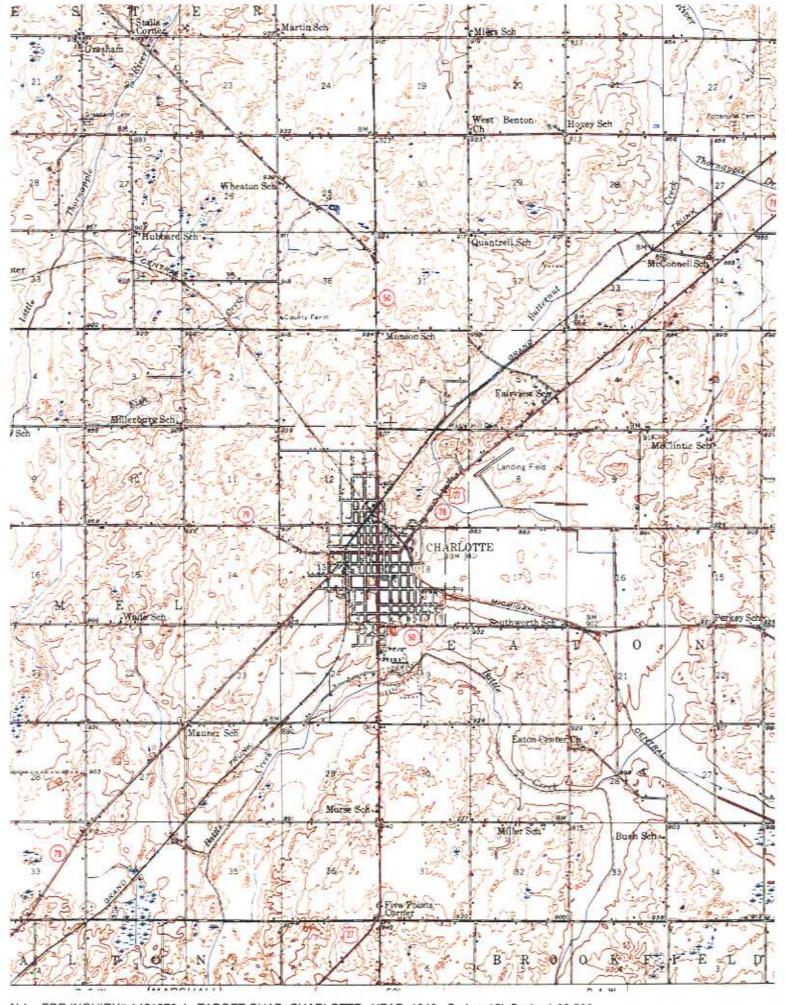
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EDR INQUIRY# 1461870.4 TARGET QUAD: CHARLOTTE YEAR: 1980 Series: 7.5' Scale: 1:24,000



APPENDIX L

ENDANGERED AND THREATENED WILDLIFE AND PLANTS

IN

EATON AND SURROUNDING COUNTIES















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County Element Data

Choose a new county

Eaton County		Curre	ent as of 1/4/2005
Scientific Name	Common Name	Federal Status	State Status
Acella haldemani	Spindle Lymnaea		SC
Acris crepitans blanchardi	Blanchard's Cricket Frog		SC
Alasmidonta marginata	Elktoe		sc
Alasmidonta viridis	Slippershell Mussel		SC
Arabis perstellata sensu lato	Rock Cress		T
Baptisia lactea	White or Prairie False Indigo		SC
Clemmys guttata	Spotted Turtle		T
Cyclonaias tuberculata	Purple Wartyback		sc
Eleocharis radicans	Spike-rush		×
Emys blandingii	Blanding's Turtle		SC
Galearis spectabilis	Showy Orchis		T
Great blue heron rookery	Great Blue Heron Rookery		
Gymnocladus dioicus	Kentucky Coffee-tree		SC
Hieracium paniculatum	Panicled Hawkweed		SC
Isotria verticillata	Whorled Pogonia		T
Linum virginianum	Virginia Flax		T
Mertensia virginica	Virginia Bluebells		T
Mesic southern forest	Rich Forest, Central Midwest Typ	e	
Moist Acid Cliff			
Myotis sodalis	Indiana Bat or Indiana Myotis	LE	E
Nerodia erythrogaster neglecta	Copperbelly Watersnake	PS:LT	E
Notropis texanus	Weed Shiner		X
Panax quinquefolius	Ginseng		T
Panicum microcarpon	Small-fruited Panic-grass		SC
Papaipema speciosissima	Regal Fern Borer		sc
Pennsylvanian earth history	Geographical Feature		
Platanthera leucophaea	Prairie Fringed Orchid	LT	E
Pleurobema coccineum	Round Pigtoe		sc
Primary sedimentary structural feature	Geographical Feature		
Rallus elegans	King Rail		E
Secondary sedimentary structural feature	e Geographical Feature		
Sistrurus catenatus catenatus	Eastern Massasauga	С	SC
Venustaconcha ellipsiformis	Ellipse		SC
Villosa iris	Rainbow		sc

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Barry County		Curre	ent as of 1/4/2005
Scientific Name	Common Name	Federal Status	State Status
Acris crepitans blanchardi	Blanchard's Cricket Frog		sc
Agrimonia rostellata	Beaked Agrimony		SC
Amorpha canescens	Leadplant		SC
Arabis missouriensis var. deamii	Missouri Rock-cress		sc
Berula erecta	Cut-leaved Water-parsnip		Т
Besseya bullii	Kitten-tails		T
Bog			
Bouteloua curtipendula	Side-oats Grama Grass		T
Cacalia plantaginea	Prairie Indian-plantain		sc
Calephelis mutica	Swamp Metalmark		SC
Catocala amestris	Three-staff Underwing		E
Circus cyaneus	Northern Harrier		SC
Clemmys guttata	Spotted Turtle		Т
Coastal plain marsh	Infertile Pond/marsh, Great Lakes Type	1 57	
Cypripedium candidum	White Lady-slipper		T
Dendroica cerulea	Cerulean Warbler		sc
Draba reptans	Creeping Whitlow-grass		T
Dry-mesic southern forest	47.0 = 18.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
Elaphe obsoleta obsoleta	Black Rat Snake		sc
Eleocharis equisetoides	Horsetail Spike-rush		sc
Eleocharis melanocarpa	Black-fruited Spike-rush		sc
Emys blandingii	Blanding's Turtle		SC
Erynnis persius persius	Persius Duskywing		Т
Fontigens nickliniana	Watercress Snail		sc
Fuirena squarrosa	Umbrella-grass		Т
Fundulus dispar	Starhead Topminnow		sc
Gavia immer	Common Loon		T
Great blue heron rookery	Great Blue Heron Rookery		
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	T
Helianthus hirsutus	Whiskered Sunflower		sc
Hemicarpha micrantha	Dwarf-bulrush		sc
Hemileuca maia	Barrens Buckmoth		sc
Hesperia ottoe	Ottoe Skipper		T
Heterocampa subrotata	Small Heterocampa		sc
Hillside Prairie	High Prairie, Midwest Type		(A)
Hydrastis canadensis	Goldenseal		Ť
Incisalia henrici	Henry's Elfin		SC
Inundated Shrub Swamp	Shrub Swamp, Central Midwest Type		8897.0C

Isotria verticillata	Whorled Pogonia		Т
Juncus scirpoides	Scirpus-like Rush		Т
Justicia americana	Water-willow		T
Kuhnia eupatorioides	False Boneset	PS	SC
Lepyronia angulifera	Angular Spittlebug		SC
Meropleon ambifusca	Newman's Brocade		sc
Microtus pinetorum	Woodland Vole		SC
Moraine	Geographical Feature		
Myotis sodalis	Indiana Bat or Indiana Myotis	LE	E
Nelumbo lutea	American Lotus		T
Neonympha mitchellii mitchellii	Mitchell's Satyr	LE	E
Northern Wet-Mesic Prairie			
Notropis anogenus	Pugnose Shiner		SC
Oecanthus laricis	Tamarack Tree Cricket		sc
Panax quinquefolius	Ginseng		T
Papaipema speciosissima	Regal Fern Borer		sc
Potamogeton pulcher	Spotted Pondweed		T
Prairie fen	Alkaline Shrub/herb Fen, Midwest Type	1	
Psilocarya scirpoides	Bald-rush		T
Pygarctia spraguei	Sprague's Pygarctia		SC
Rallus elegans	King Rail		Ε
Rhynchospora macrostachya	Tall Beak-rush		SC
Rotala ramosior	Tooth-cup		sc
Scutellaria parvula	Small Skullcap		T
Sistrurus catenatus catenatus	Eastern Massasauga	С	SC
Sisyrinchium strictum	Blue-eyed-grass		sc
Spartiniphaga inops	Spartina Moth		SC
Stylurus laurae	Laura's Snaketail		sc
Terrapene carolina carolina	Eastern Box Turtle		sc
Tradescantia bracteata	Long-bracted Spiderwort		X
Wet prairie	Wet Prairie, Midwest Type		
Wet-mesic prairie	Tallgrass Prairie, Central Midwest Type	t)	
Wilsonia citrina	Hooded Warbler		SC

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Calhoun County		Curre	ent as of 1/4/2005
Scientific Name	Common Name	Federal Status	State Status
Acella haldemani	Spindle Lymnaea		SC
Acris crepitans blanchardi	Blanchard's Cricket Frog		SC
Agrimonia rostellata	Beaked Agrimony		sc
Alasmidonta marginata	Elktoe		SC
Ammodramus savannarum	Grasshopper Sparrow	PS	sc
Amorpha canescens	Leadplant		SC
Angelica venenosa	Hairy Angelica		sc
Baptisia lactea	White or Prairie False Indigo		sc
Bog			
Cacalia plantaginea	Prairie Indian-plantain		SC
Clemmys guttata	Spotted Turtle		T
Corydalis flavula	Yellow Furnewort		T
Cuscuta pentagona	Dodder		SC
Cypripedium candidum	White Lady-slipper		T
Dendroica cerulea	Cerulean Warbler		sc
Drumlin	Geographical Feature		
Dry-mesic southern forest			
Eleocharis compressa	Flattened Spike-rush		T
Eleocharis engelmannii	Engelmann's Spike-rush		SC
Eleocharis radicans	Spike-rush		X
Emys blandingii	Blanding's Turtle		SC
Erimyzon oblongus	Creek Chubsucker		E
Filipendula rubra	Queen-of-the-prairie		T
Fraxinus profunda	Pumpkin Ash		Т
Geum virginianum	Pale Avens		SC
Great blue heron rookery	Great Blue Heron Rookery		
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	T
Helianthus hirsutus	Whiskered Sunflower		SC
Hibiscus moscheutos	Swamp Rose-mallow		SC
Hydrastis canadensis	Goldenseal		T
Isotria verticillata	Whorled Pogonia		T
Lechea minor	Least Pinweed		sc
Lepisosteus oculatus	Spotted Gar		SC
Lepyronia angulifera	Angular Spittlebug		sc
Liparis liliifolia	Purple Twayblade		sc
Mertensia virginica	Virginia Bluebells		T
Mississippian earth history	Geographical Feature		
Nerodia erythrogaster neglecta	Copperbelly Watersnake	PS:LT	E

No. of the second secon	And the second s		
Notropis anogenus	Pugnose Shiner		SC
Notropis chalybaeus	Ironcolor Shiner		X
Notropis texanus	Weed Shiner		X
Panicum leibergii	Leiberg's Panic-grass		T
Panicum microcarpon	Small-fruited Panic-grass		SC
Papaipema beeriana	Blazing Star Borer		SC
Platanthera ciliaris	Orange or Yellow Fringed Orchid		Т
Platanthera leucophaea	Prairie Fringed Orchid	LT	E
Pleurobema coccineum	Round Pigtoe		SC
Prairie fen	Alkaline Shrub/herb Fen, Midwest Ty	pe	
Protonotaria citrea	Prothonotary Warbler		SC
Rallus elegans	King Rail		E
Silene stellata	Starry Campion		T
Sistrurus catenatus catenatus	Eastern Massasauga	C	SC
Southern floodplain forest			
Southern swamp			
Speyeria idalia	Regal Fritillary		E
Stenelmis douglasensis	Douglas Stenelmis Riffle Beetle		SC
Terrapene carolina carolina	Eastern Box Turtle		SC
Venustaconcha ellipsiformis	Ellipse		SC
Villosa iris	Rainbow		SC
Viola pedatifida	Prairie Birdfoot Violet		T
Wilsonia citrina	Hooded Warbler		SC
Woodland prairie	High Prairie, Midwest Type		
Zizania aquatica var. aquatica	Wild-rice		T

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Ingham County		Current as of 1/4/2005
Scientific Name	Common Name	Federal Status State Status
Accipiter cooperii	Cooper's Hawk	SC
Acris crepitans blanchardi	Blanchard's Cricket Frog	sc
Alasmidonta marginata	Elktoe	sc
Alasmidonta viridis	Slippershell Mussel	sc
Angelica venenosa	Hairy Angelica	sc
Arabis perstellata sensu lato	Rock Cress	T
Asclepias purpurascens	Purple Milkweed	sc
Astragalus neglectus	Cooper's Milk-vetch	sc
Baptisia lactea	White or Prairie False Indigo	sc
Carex crus-corvi	Raven's-foot Sedge	T
Carex davisii	Davis's Sedge	SC
Carex lupuliformis	False Hop Sedge	T
Carex trichocarpa	Hairy-fruited Sedge	sc
Carex typhina	Cat-tail Sedge	Т
Castanea dentata	American Chestnut	E
Clemmys guttata	Spotted Turtle	т
Cryptotis parva	Least Shrew	T
Diarrhena americana	Beak Grass	T
Emys blandingii	Blanding's Turtle	sc
Esker	Geographical Feature	
Galearis spectabilis	Showy Orchis	T
Glyptemys insculpta	Wood Turtle	sc
Gomphus lineatifrons	Splendid Clubtail	SC
Great blue heron rookery	Great Blue Heron Rookery	
Gymnocladus dioicus	Kentucky Coffee-tree	sc
Hemicarpha micrantha	Dwarf-bulrush	SC
Hemileuca maia	Barrens Buckmoth	sc
Hybanthus concolor	Green Violet	sc
Hydrastis canadensis	Goldenseal	T
Lycopus virginicus	Virginia Water-horehound	T
Mesic southern forest	Rich Forest, Central Midwest Typ	oe .
Microtus pinetorum	Woodland Vole	SC
Morus rubra	Red Mulberry	T
Myotis sodalis	Indiana Bat or Indiana Myotis	LE E
Notropis anogenus	Pugnose Shiner	SC
Notropis texanus	Weed Shiner	X
Oecanthus laricis	Tamarack Tree Cricket	SC
Panax quinquefolius	Ginseng	T

Papaipema speciosissima	Regal Fern Borer		SC
Pleurobema coccineum	Round Pigtoe		SC
Poa paludigena	Bog Bluegrass		T
Poor conifer swamp			
Rallus elegans	King Rail		E
Scirpus clintonii	Clinton's Bulrush		sc
Scirpus torreyi	Torrey's Bulrush		sc
Scleria triglomerata	Tall Nut-rush		SC
Scutellaria parvula	Small Skullcap		T
Silphium perfoliatum	Cup-plant		T
Sistrurus catenatus catenatu	s Eastern Massasauga	С	SC
Southern floodplain forest			
Terrapene carolina carolina	Eastern Box Turtle		SC
Tradescantia virginiana	Virginia Spiderwort		sc
Venustaconcha ellipsiformis	Ellipse		SC
Villosa iris	Rainbow		SC

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Jackson County		Curre	ent as of 1/4/2005
Scientific Name	Common Name	Federal Status	State Status
Acris crepitans blanchardi	Blanchard's Cricket Frog		SC
Alasmidonta viridis	Slippershell Mussel		SC
Ammodramus henslowii	Henslow's Sparrow		T
Ammodramus savannarum	Grasshopper Sparrow	PS	SC
Angelica venenosa	Hairy Angelica		sc
Anguispira kochi	Banded Globe		SC
Asclepias hirtella	Tall Green Milkweed		T
Asclepias purpurascens	Purple Milkweed		SC
Baptisia lactea	White or Prairie False Indigo		SC
Besseya bullii	Kitten-tails		T
Bog			
Botaurus lentiginosus	American Bittern		SC
Calephelis mutica	Swamp Metalmark		sc
Celtis tenuifolia	Dwarf Hackberry		SC
Chlidonias niger	Black Tern		sc
Cirsium hillii	Hill's Thistle		sc
Clemmys guttata	Spotted Turtle		Т
Cryptotis parva	Least Shrew		Т
Cyclonaias tuberculata	Purple Wartyback		sc
Cypripedium candidum	White Lady-slipper		T
Dendroica cerulea	Cerulean Warbler		SC
Discus patulus	Domed Disc		sc
Dry southern forest	Well Drained Forest, Central Midwe	st Type	
Dry-mesic southern forest		2	
Elaphe obsoleta obsoleta	Black Rat Snake		sc
Eleocharis caribaea	Spike-rush		T
Eleocharis engelmannii	Engelmann's Spike-rush		sc
Eleocharis equisetoides	Horsetail Spike-rush		sc
Emys blandingii	Blanding's Turtle		sc
Erimyzon oblongus	Creek Chubsucker		E
Esker	Geographical Feature		
Eupatorium sessilifolium	Upland Boneset		T
Gallinula chloropus	Common Moorhen	PS	SC
Gomphus lineatifrons	Splendid Clubtail		SC
Great blue heron rookery	Great Blue Heron Rookery		84153
Gymnocladus dioicus	Kentucky Coffee-tree		SC
Helianthus mollis	Downy Sunflower		T
Hillside Prairie	High Prairie, Midwest Type		

20			
Hydrastis canadensis	Goldenseal		T
Ixobrychus exilis	Least Bittern		Т
Kame	Geographical Feature		
Kuhnia eupatorioides	False Boneset	PS	SC
Lampsilis fasciola	Wavy-rayed Lampmussel		Т
Lepyronia angulifera	Angular Spittlebug		SC
Liparis liliifolia	Purple Twayblade		SC
Mississippian earth history	Geographical Feature		
Moraine	Geographical Feature		
Muhlenbergia richardsonis	Mat Muhly		Т
Myotis sodalis	Indiana Bat or Indiana Myotis	LE	Ε
Neonympha mitchellii mitchellii	Mitchell's Satyr	LE	E
Notropis texanus	Weed Shiner		X
Noturus miurus	Brindled Madtom		SC
Oarisma poweshiek	Poweshiek Skipperling		Т
Oecanthus laricis	Tamarack Tree Cricket		SC
Oecanthus pini	Pinetree Cricket		SC
Panax quinquefolius	Ginseng		Т
Panicum leibergii	Leiberg's Panic-grass		T
Papaipema beeriana	Blazing Star Borer		SC
Papaipema maritima	Maritime Sunflower Borer		SC
Papaipema sciata	Culvers Root Borer		SC
Papaipema silphii	Silphium Borer Moth		Т
Papaipema speciosissima	Regal Fern Borer		SC
Pennsylvanian earth history	Geographical Feature		
Platanthera ciliaris	Orange or Yellow Fringed Orchid		T
Pleurobema coccineum	Round Pigtoe		SC
Poa paludigena	Bog Bluegrass		T
Polygala cruciata	Cross-leaved Milkwort		SC
Pomatiopsis cincinnatiensis	Brown Walker		SC
Prairie fen	Alkaline Shrub/herb Fen, Midwest Type		
Primary sedimentary structural feature	Geographical Feature		
Prosapia ignipectus	Red-legged Spittlebug		SC
Rallus elegans	King Rail		E
Relict conifer swamp	Forested Bog, Central Midwest Type		
Scirpus clintonii	Clinton's Bulrush		SC
Scleria triglomerata	Tall Nut-rush		SC
Silene stellata	Starry Campion		T
Sistrurus catenatus catenatus	Eastern Massasauga	C	SC
Sisyrinchium strictum	Blue-eyed-grass		SC
Southern floodplain forest			
Southern swamp			
Southern wet meadow	Wet Meadow, Central Midwest Type		
Speyeria idalia	Regal Fritillary		E
Spiza americana	Dickcissel		SC
Sporobolus heterolepis	Prairie Dropseed		SC
Stylurus amnicola	Riverine Snaketail		SC
Stylurus laurae	Laura's Snaketail		SC

Terrapene carolina carolina	Eastern Box Turtle	SC
Valeriana edulis var. ciliata	Edible Valerian	T
Venustaconcha ellipsiformis	Ellipse	sc
Villosa iris	Rainbow	SC
Wet prairie	Wet Prairie, Midwest Type	
Wet-mesic prairie	Tallgrass Prairie, Central Midwest Type	
Wilsonia citrina	Hooded Warbler	SC
Zizania aquatica var. aquatica	Wild-rice	Т

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APPENDIX M

AERIAL PHOTOGRAPHS





The EDR Aerial Photo Decade Package

Charlotte Armory 1310 South Cochran Street Charlotte, MI 48813

1461870.5

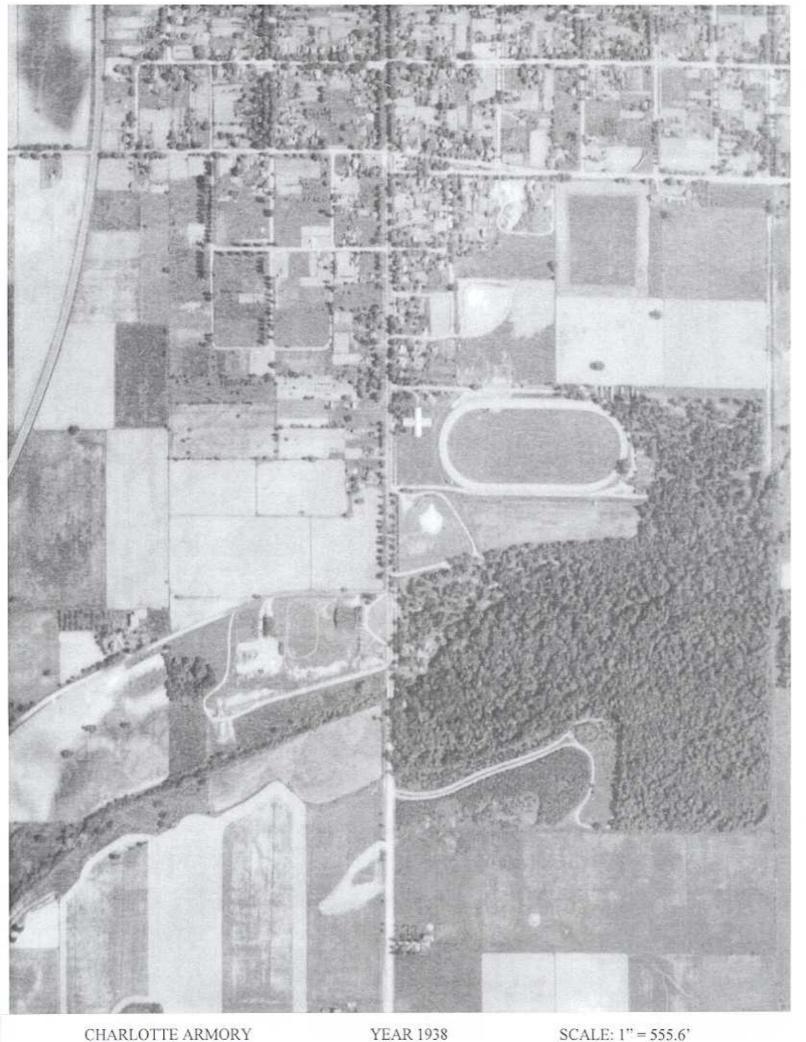
7/11/2005 12:05:27 PM

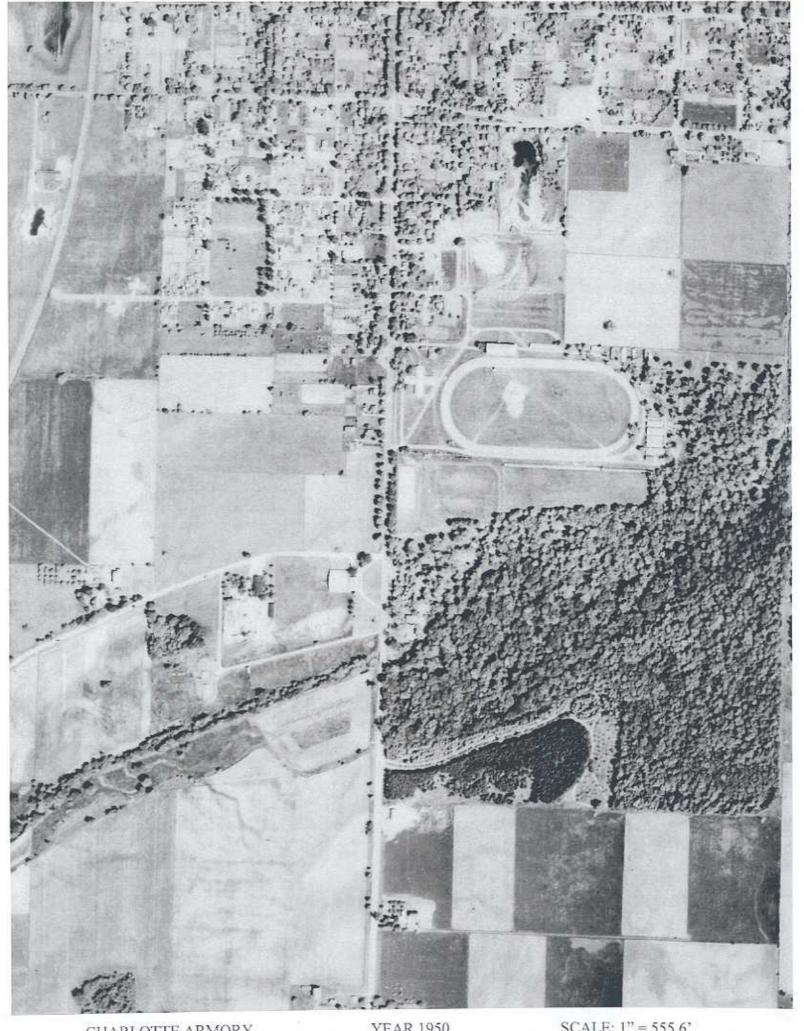
The Standard in Environmental Risk Management Information

440 Wheelers Farms Road Milford, Connecticut 06460

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CHARLOTTE ARMORY

YEAR 1950

SCALE: 1" = 555.6"



CHARLOTTE ARMORY

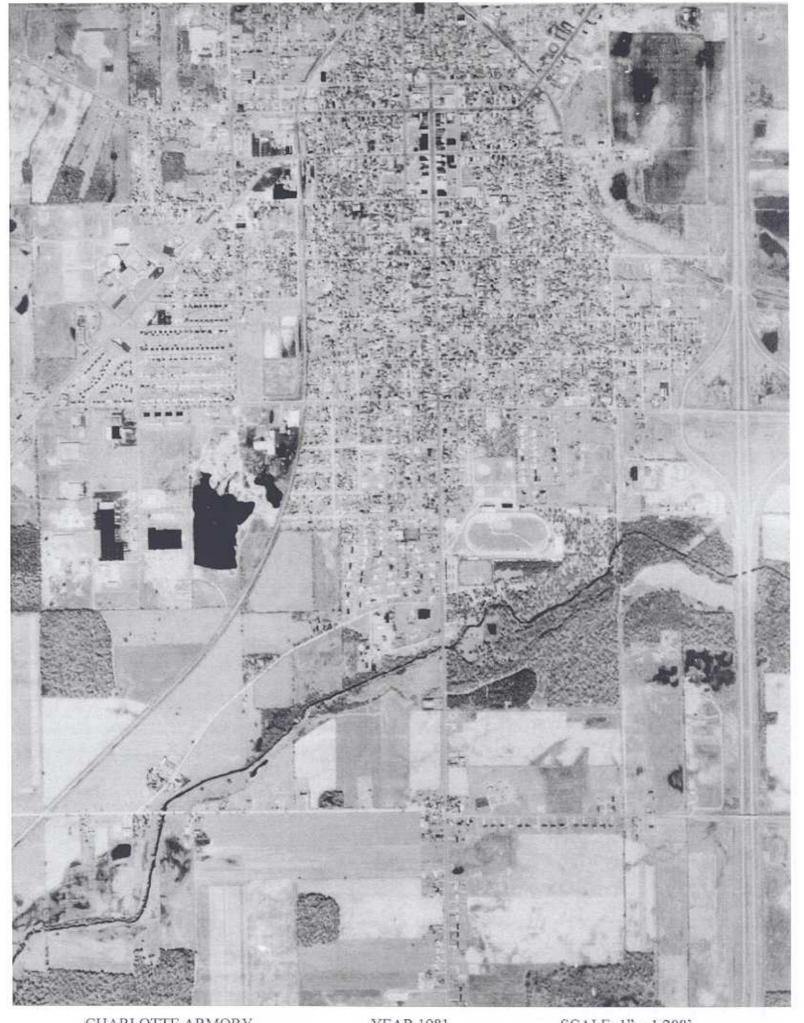
SCALE: 1" = 555.6'



CHARLOTTE ARMORY

YEAR 1974

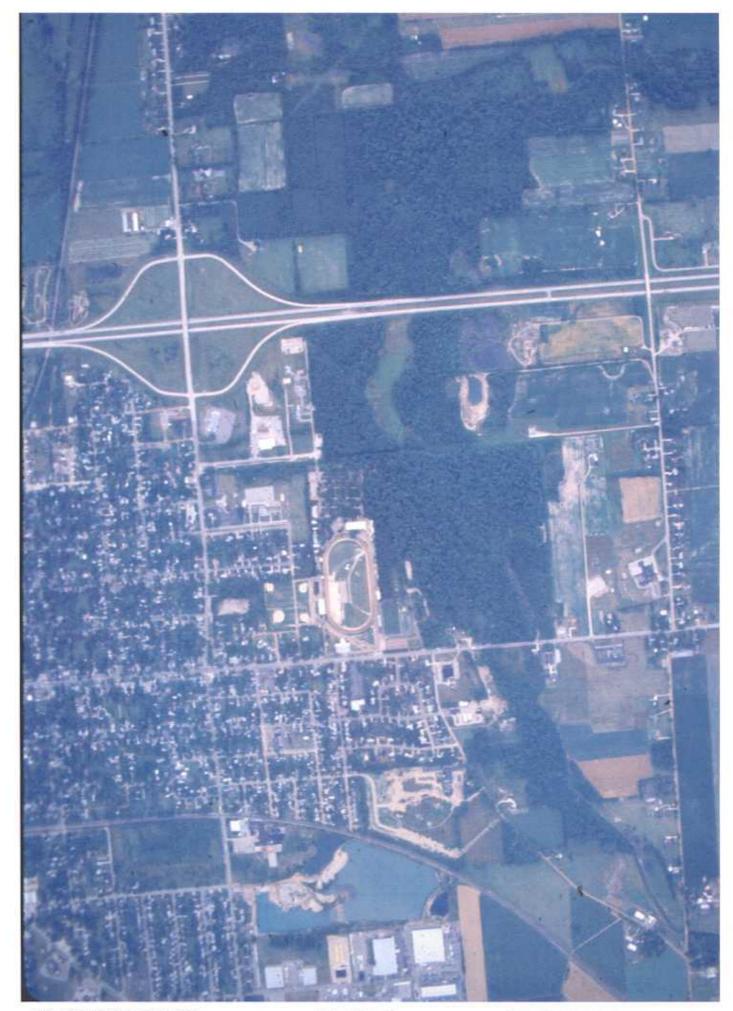
SCALE: 1" = 833'



CHARLOTTE ARMORY

YEAR 1981

SCALE: 1" = 1,208'



CHARLOTTE ARMORY

YEAR 1997

SCALE: UNKNOWN

APPENDIX N

SANBORN FIRE INSURANCE MAPS





"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Manasi Koushik Order Date: 7/8/2005 Completion Date: 7/11/2005

Altech Env. Inquiry #: 1461870.3S

17350 West 10 Mile Road **P.O. #:** NA

Southfield, MI 48075 Site Name: Charlotte Armory

Address: 1310 South Cochran Street

Customer Project: 9201-4012 City/State: Charlotte, MI 48813

1011348DPM 248-559-5500 **Cross Streets:**

Based on client-supplied information, fire insurance maps for the following years were identified

1927 - 1 Map 1950 - 1 Map

Limited Permission to Photocopy Total Maps: 2

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USER'S GUIDE

This User's Guide provides guidelines for accessing Sanborn Map® images and for transferring them to your Word Processor.

Reading Sanborn Maps

Sanborn Maps document historical property use by displaying property information through words, abbreviations, and map symbols. The Sanborn Map Key provides information to help interpret the symbols and abbreviations used on Sanborn Maps. The Key is available from EDR's Web Site at: http://www.edrnet.com/reports/samples/key.pdf

Organization of Electronic Sanborn Image File

- Sanborn Map Report, listing years of coverage
- User's Guide
- Oldest Sanborn Map Image
- Most recent Sanborn Map Image

Navigating the Electronic Sanborn Image File

- 1. Open file on screen.
- 2. Identify TP (Target Property) on the most recent map.
- Find TP on older printed images.
- Using Acrobat® Reader®, zoom to 250% in order to view more clearly. (200-250% is the approximate equivalent scale of hardcopy Sanborn Maps.)
 - A. On the menu bar, click "View" and then "Zoom to..."
 - B. Or, use the magnifying tool and drag a box around the TP

Printing a Sanborn Map From the Electonic File

- EDR recommends printing images at 300 dpi (300 dpi prints faster than 600 dpi)
- To print only the TP area, cut and paste from Acrobat to your word processor application.

Acrobat Versions 6 and 7

- 1. Go to the menu bar
- 2. Click the "Select Tool"
- 3. Draw a box around the area selected
- 4. "Right click" on your mouse
- Select "Copy Image to Clipboard"
- 6. Go to Word Processor such as Microsoft Word, paste and print.

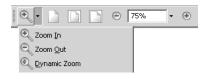
Acrobat Version 5

- 1. Go to the menu bar
- 2. Click the "Graphics Select Tool"
- 3. Draw a box around the area selected
- 4. Go to "Menu"
- 5. Highlight "Edit"
- 6. Highlight "Copy"
- 7. Go to Word Processor such as Microsoft Word, paste and print.

Important Information about Email Delivery of Electronic Sanborn Map Images

- Images are grouped intro one file, up to 2MB.
- In cases where in excess of 6-7 map years are available, the file size typically exceeds 2MB. In these cases, you will receive multiple files, labeled as "1 of 3", "2 of 3", etc. including all available map years.

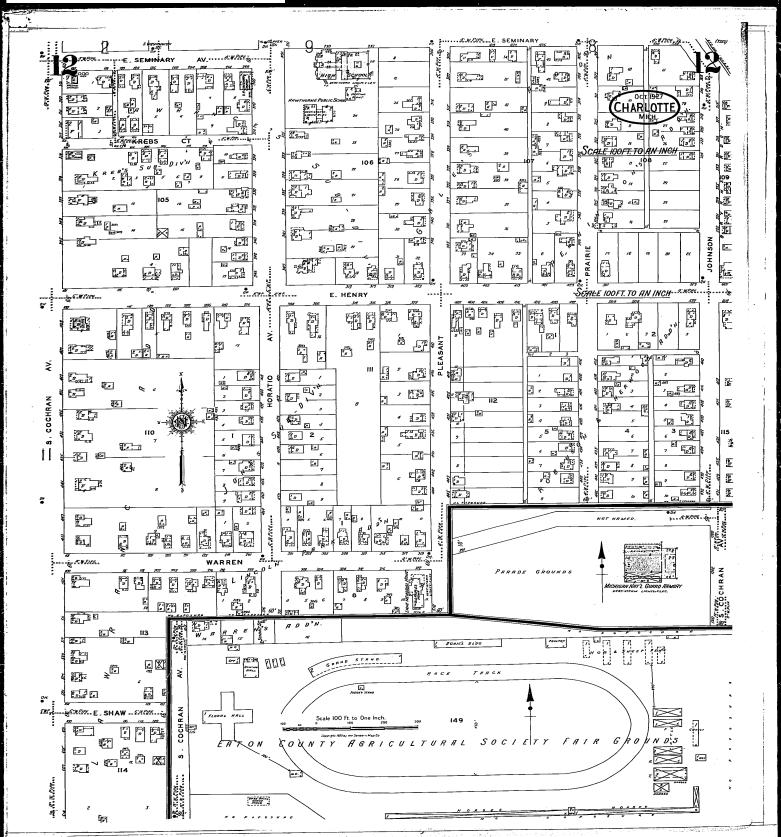
 Due to file size limitations, certain ISPs, including AOL, may occasionally delay or decline to deliver files. Please
- contact your ISP to identify their specific file size limitations.



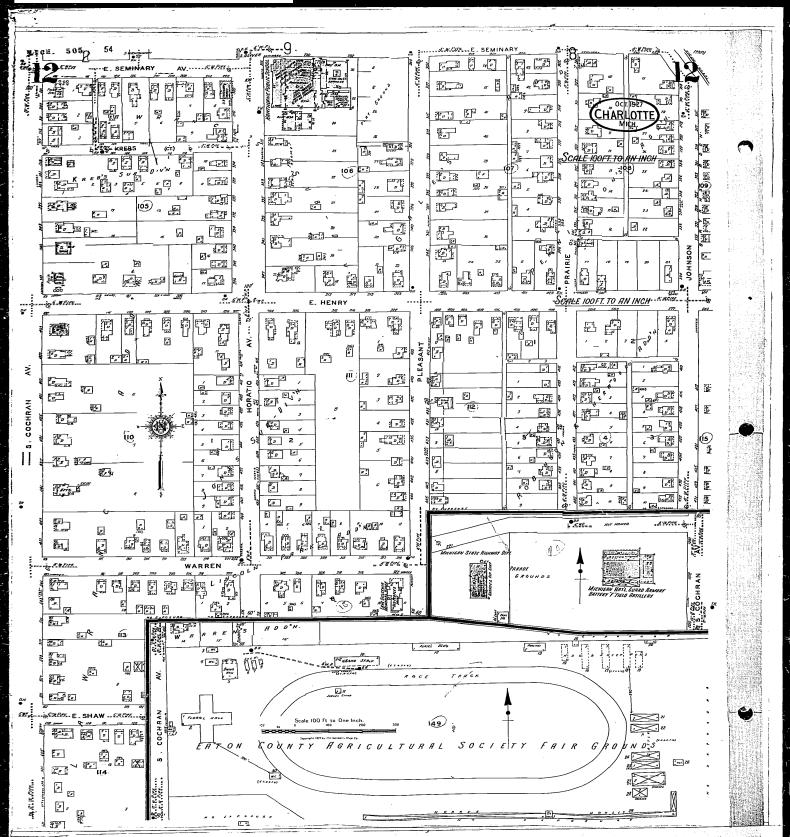












APPENDIX O

EDR CITY DIRECTORY SEARCH





The EDR-City Directory Abstract

Charlotte Armory 1310 South Cochran Street Charlotte, MI 48813

July 11, 2005

Inquiry Number: 1461870-7

The Standard In Environmental Risk Management Information

440 Wheelers Farms Road Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050

Fax: 1-800-231-6802

Environmental Data Resources, Inc. City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist professionals in evaluating potential liability on a target property resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable means information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.

To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following *standard historical sources* may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-00 requires "All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful." (ASTM E 1527-00, Section 7.3.2, page 12.)

EDR's City Directory Abstract includes a search and abstract of available city directory data.

City Directories

City directories have been published for cities and towns across the U.S. since the 1700s. Originally a list of residents, the city directory developed into a sophisticated tool for locating individuals and businesses in a particular urban or suburban area. Twentieth century directories are generally divided into three sections: a business index, a list of resident names and addresses, and a street index. With each address, the directory lists the name of the resident or, if a business is operated from this address, the name and type of business (if unclear from the name). While city directory coverage is comprehensive for major cities, it may be spotty for rural areas and small towns. ASTM E 1527-00 specifies that a "review of city directories (standard historical sources) at less than approximately five year intervals is not required by this practice." (ASTM E 1527-00, Section 7.3.2.1, page 12.)

NAICS (North American Industry Classification System) Codes

NAICS is a unique, all-new system for classifying business establishments. Adopted in 1997 to replace the prior Standard Industry Classification (SIC) system, it is the system used by the statistical agencies of the United States. It is the first economic classification system to be constructed based on a single economic concept. To learn more about the background, the development and difference between NAICS and SIC, visit the following Census website: http://www.census.gov/epcd/www/naicsdev.htm.

Please call EDR Nationwide Customer Service at 1-800-352-0050 (8am-8pm EST) with questions or comments about your report.

Thank you for your business!

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4. SUMMARY

• City Directories:

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1929 through 2005. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

Date EDR Searched Historical Sources:

City Directories Jul 11, 2005

Target Property: 1310 South Cochran Street Charlotte, MI 48813

PUR ID	
¥7	

Year Year	<u>Uses</u>	<u>NAICS</u>	<u>Source</u>
1929	Address not Listed in Research Source	N/A	Polk''s City Directory
 1944	Address not Listed in Research Source	N/A	Polk"s City Directory
1947	Address not Listed in Research Source	N/A	Polk"s City Directory
1951	Address not Listed in Research Source	N/A	Polk"s City Directory
1957	Address not Listed in Research Source	N/A	Robinson''s City Directory
1962	Address not Listed in Research Source	N/A	Robinson''s City Directory
1968	119th Artillery Armory		Robinson''s City Directory
 1972	119th Artillery Armory		Robinson''s City Directory
 1976	119th Artillery Armory		Robinson''s City Directory
 1981	119th Artillery Armory Unemployment Insurance		Robinson''s City Directory
1985	Charlotte Armory National Guard		Bresser''s Criss-Cross Directory
1990	Charlotte Armory USNG Recruiting		Bresser''s Criss-Cross Directory
 1995	Charlotte Armory Michigan Army National Guard		Bresser''s Criss-Cross Directory
2000	Charlotte Armory Michigan Army National Guard		Bresser''s Criss-Cross Directory
 2005	Charlotte Armory Michigan Army National Guard		Bresser''s Criss-Cross Directory

Adjoining Properties

SURROUNDING Multiple Addresses Charlotte, MI 48813

PUR ID	
Year	Uses

PUR I. <u>Year</u>	D <u>Uses</u>	<u>NAICS</u>	<u>Source</u>
1929	**SOUTH COCHRAN STREET**		
	Address not listed in research source (1208)	N/A	Polk"s City Directory
	Address not listed in research source (1212)	N/A	
	Address not listed in research source (1214)	N/A	
	Armory (ws) (Unnumbered)		
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (1225)	N/A	
	Address not listed in research source (1305)	N/A	
	Address not listed in research source (1325)	N/A	
	-All Addresses Beyond 1000 Block S. Cochran are Unnur	nbered	
	TIRRELL ROAD		
	Street not listed in research source		
1944	**SOUTH COCHRAN STREET**		Polk''s City Directory
	Address not listed in research source (1208)	N/A	Folk s City Directory
	Address not listed in research source (1212)	N/A	
	Address not listed in research source (1214)	N/A	
	Armory (ws) (Unnumbered)		
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (1225)	N/A	
	Address not listed in research source (1305)	N/A	
	Address not listed in research source (1325)	N/A	
	-No Other Addresses Listed Beyond 1000 Block South Co	ochran	
	TIRRELL ROAD		•
	Street not listed in research source		
1947	**SOUTH COCHRAN STREET**		Polk''s City Directory
	Address not listed in research source (1208)	N/A	Tolk Selty Directory
	Address not listed in research source (1212)	N/A	
	Address not listed in research source (1214)	N/A	
	Armory (ws) (Unnumbered)		
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (1225)	N/A	

<u>Year</u>	<u>Uses</u>	<u>NAICS</u>	<u>Source</u>
1947 (contin	nued) Address not listed in research source (1305)	N/A	
	Address not listed in research source (1325)	N/A	
	-No Other Addresses Listed Beyond 1000 Block South Co		
	TIRRELL ROAD		
	Street not listed in research source	•	·
1951	**SOUTH COCHRAN STREET**		5 4 4 5 5
	Address not listed in research source (1208)	N/A	Polk''s City Directory
	Address not listed in research source (1212)	N/A	
	Address not listed in research source (1214)	N/A	
	Armory (ws) (Unnumbered)		
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (Unnumbered)	N/A	
	Address not listed in research source (1225)	N/A	
	Address not listed in research source (1305)	N/A	
	Address not listed in research source (1325)	N/A	
	-No Other Addresses Listed Beyond 1000 Block South Co	ochran	
	TIRRELL ROAD		
	Street not listed in research source		
1957	**SOUTH COCHRAN STREET**		Pohinson''s City Director
	Nelson Auto Finance (1208)		Robinson''s City Director
	Residence (1212)		
	Residence (1214)		
	National Guard Armory (Unnumbered)		
	Water Works (Unnumbered)		
	Bennett Park (Unnumbered)		
	Address not listed in research source (1225)	N/A	
	Address not listed in research source (1305)	N/A	
	Address not listed in research source (1325)	N/A	
	-No Other Addresses Listed 1300-1400 Block South Coch	nran St.	
	TIRRELL ROAD		4
	Address not listed in research source (301)	N/A	
1962	**SOUTH COCHRAN STREET**		Robinson''s City Director
	Residence (1208)		Roomson s City Director
	Residence (1212)		
	Residence (1214)		

119th Artillery (Unnumbered) Charlotte Waterworks (1225)

Address not listed in research source (1305)

Address not listed in research source (1325)

N/A

N/A

PUR ID Year Us

PUR ID			
<u>Year</u>	<u>Uses</u>	<u>NAICS</u>	<u>Source</u>
1962 (conti	nued) -No Other Addresses Listed 1300-1400 Block South Coch;	ran St.	
	TIRRELL ROAD		
•	Address not listed in research source (301)	N/A	•
1968	**SOUTH COCHRAN STREET**		Robinson''s City Directory
	Residence (1208)		Robinson's City Directory
	Residence (1212)		
	Residence (1214)		
	Bennett Park (1305)		
	Charlotte Waterworks (1325)		
	-No Other Addresses Listed 1300-1400 Block South Cochr	ran St.	
	TIRRELL ROAD		
	Mich. State Dept. Highway Maint. Div. (301)		
1972	**SOUTH COCHRAN STREET**		Robinson''s City Directory
	Residence (1208)		Robinson's City Directory
	Residence (1212)		
	Residence (1214)		
	Maple City Concession Stand (1305)		
	Bennett Park (1305)		
	Charlotte Waterworks (1325)		
	-No Other Addresses Listed 1300-1400 Block South Cochi	ran St.	
	TIRRELL ROAD		
	Mich. State Dept. Highway Maint. Div. (301)		
1976	**SOUTH COCHRAN STREET**		Robinson''s City Directory
	Residence (1208)		
	Residence (1212)		
	Residence (1214)		
	Maple City Concession Stand (1305)		
	Bennett Park (1305)		
	Charlotte Waterworks (1325)		
	-No Other Addresses Listed 1300-1400 Block South Cochr	ran St.	
	TIRRELL ROAD		
	Mich. State Dept. Highway Maint. Div. (301)		
1001	**COUTH COCHDAN CENTER		
1981	**SOUTH COCHRAN STREET**	•	Robinson"s City Directory
	Residence (1208)		
	Residence (1212)		
	Residence (1214)		
	Bennett Park (1305)	0.	
	-No Other Addresses Listed 1300-1400 Block South Cochi	ran St.	

PUR ID Vear Us

PUR ID	***	NATOG	G		
Year	<u>Uses</u>	<u>NAICS</u>	<u>Source</u>		
. Contin	1981 (continued) **TIRRELL ROAD**				
	Charlotte Dept. of Public Works Garage (301)				
1985	**SOUTH COCHRAN STREET**	•	Bresser''s Criss-Cross Directory		
	Residence (1208)				
	Residence (1212)				
	Residence (1214)				
	Cty. Bennett Park (1305)				
	-No Other Addresses Listed 1300-1400 Block South Cochr	ran St.			
	TIRRELL ROAD		·		
	Charlotte City Garage & Warehouse (301)				
1990	**SOUTH COCHRAN STREET**				
	Residence (1208)	•	Bresser''s Criss-Cross Directory		
	No Return (1212)				
	Residence (1214)				
	-No Other Addresses Listed 1300-1400 Block South Cochr	ran St.			
	TIRRELL ROAD				
	Charlotte City Garage & Warehouse (301)				
1995	**SOUTH COCHRAN STREET**		Daniel Color Constant		
	Residence (1208)		Bresser''s Criss-Cross Directory		
	No Return (1212)				
	Residence (1214)				
	-No Other Addresses Listed 1300-1400 Block South Cochr	ran St.			
	TIRRELL ROAD		•		
	Charlotte City Garage & Warehouse (301)				
2000	**SOUTH COCHRAN STREET**				
.2000	Residence (1208)	•	Bresser''s Criss-Cross Directory		
	No Return (1212)				
	Residence (1214)				
	-No Other Addresses Listed Beyond 1310 South Cochran S	Street			
	TIRRELL ROAD				
•	Charlotte City Garage & Warehouse (301)	•			
	, ,				
2005	**SOUTH COCHRAN STREET**		Bresser''s Criss-Cross Directory		
	Residence (1208)		Blesser's Cliss-Closs Directory		
	Residence (1212)				
	Residence (1214)				
	-No Other Addresses Listed Beyond 1310 South Cochran S	Street			
	TIRRELL ROAD				

PUR ID

<u>Year</u> <u>Uses</u> <u>NAICS</u> **Source**

2005 (continued)

Charlotte City Garage & Warehouse (301)