GROUNDWATER AND SUPPLEMENTAL SOILS INVESTIGATION REPORT

ST. FRANCIS AUTO WRECKERS, INC. 4043 SOUTH PENNSYLVANIA AVENUE ST. FRANCIS, WISCONSIN

December 2001

Prepared For: St. Francis Auto Wreckers, Inc. St. Francis, Wisconsin

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Prepared By: Montgomery Watson Harza Madison, Wisconsin

Project No. 2082394.01160101





December 6, 2001

Ms. Nancy Ryan Wisconsin Department of Natural Resources Southeast Regional Headquarters 2300 N. Dr. ML King Drive P.O. Box 12436 Milwaukee, Wisconsin 53212-0436

WDNR FID # 241469250 BRRTS# 02410000269

Re: St. Francis Auto Wreckers, Inc.
Groundwater and Supplemental Soil and Investigation 4043 South Pennsylvania Avenue St. Francis, Wisconsin

Dear Nancy:

Enclosed are two copies of the subject report, pursuant to the Department's request. St. Francis is anxious to proceed with next steps on this project, based on the recommendations provided in the report. Please review this report as soon as possible.

Please let us know if you have any questions on the report or project direction.

Sincerely

MWH

and W. Hall

Daniel W. Hall, PG Project Manager

Enclosures: Two copies

cc: Mr. Robert Melton, St. Francis Auto Wreckers, Inc. (2)
 Mr. Timm Speerschneider, Dewitt, Ross & Stevens (1)
 Mr. Rob Thiboldeaux, Wisconsin Department of Health (1)

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ST. FRANCIS AUTO WRECKERS, INC. **4043 SOUTH PENNSYLVANIA AVENUE** ST. FRANCIS, WISCONSIN

December 2001

Prepared by:

Matthew H. Nárus Associate Engineer

16/01 Date

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Leo B. Linnemanstons Senior Hydrogeologist

12-6-01 Date

Approved by:

Daniel W. Hall, P.G.

Project Manager

12 - 06 -01 Date

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1.0 SITE BACKGROUND

Montgomery Watson Harza (MWH) has prepared this groundwater and supplemental soils investigation report on behalf of St. Francis Auto Wreckers, Inc. (SFAWI) facility, located in St. Francis, Wisconsin (Drawing A1).

The groundwater investigation was designed to complement the results from the 1999 soil investigation. Also, this groundwater investigation included the collection of additional soil samples to supplement the previously completed soils investigation ("Soils Investigation Report", Montgomery Watson 2000). Details on this investigation are provided in the July 2000 Groundwater Investigation Work Plan (Montgomery Watson 2000b). This Work Plan was approved (with recommended changes) by the WDNR through the letter from Ms. Nancy Ryan to Mr. Robert Melton, dated August 3, 2000 (see copy of letter in Appendix A).

1.1 SITE INFORMATION

The site is located in the City of St. Francis, in Milwaukee County, Wisconsin (Drawing A1). Project information is listed below:

 Project Title: Groundwater Investigation St. Francis Auto Wreckers, Inc. WDNR FID #241469250 BRRT#02410000269

•	Current Property Owner:	Mr. Robert Melton
	Address:	St. Francis Auto Wreckers, Inc.
		4043 S. Pennsylvania Ave.
		St. Francis, Wisconsin 53235
	Phone:	(414) 481-4540

- Client Contact: Mr. Robert Melton
- Consultant: Montgomery Watson Harza Address: One Science Court P.O. Box 5385 Madison, Wisconsin 53705-0385
- Contact: Mr. Daniel W. Hall, P.G. Phone: (608) 231-4747
 - Site Name: St. Francis Auto Wreckers, Inc. St. Francis, Wisconsin
- Location: NE ¼, NW ¼, Section 22, T6N, R22E, Milwaukee County, Wisconsin (Drawing A1).

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2.0 SITE BACKGROUND INFORMATION

This section describes the site history and background information, along with a summary of the known operations and environmental information for neighboring properties. A summary of previous investigation results for this site is also provided, including the conclusions of the previous soils investigation (Montgomery Watson 2000).

2.1 SITE HISTORY AND DESCRIPTION

The SFAWI property is an industrial site that is divided into two portions separated by a small drainage swale area. An auto salvage yard operation occupies the southern portion of the site. The northern portion of the site is presently vacant property. The current owner of the auto salvage yard (Mr. Howard Melton) purchased the property in 1967. The vacant lot was purchased in 1974 (the vacant lot). Two small storage buildings and a larger new building are located on the auto salvage yard portion of the property. The larger new building is used for indoor salvaging of automobiles and over-the-counter business transactions (Drawing B1).

The site is located in an area that is used for mixed residential and industrial/commercial purposes (see Drawing B2). The area located to the north of the vacant lot across East Norwich Avenue consists of properties owned by the Wisconsin Department of Transportation (i.e., former Solstice and Norwich properties) and several private residences. The area located to the east of the vacant lot across Pennsylvania Avenue is an industrial facility owned by D.F., Inc. The area located to the east of the salvage yard is a storage facility owned by the Kitzinger Cooperage Corporation. The area to the south of the salvage yard is a railroad embankment and right-of-way owned by Wisconsin Electric Power Company (ERM 1999). The newly completed Lake Arterial Highway is adjacent to the site on the western side of both the salvage yard and vacant lot. Across the Lake Arterial Highway, to the southwest of SFAWI, is the E-Z Paintr facility.

The Wisconsin Department of Transportation (WI DOT) purchased the western portion of both the salvage yard and vacant lot in 1996 for the construction of the Lake Arterial Highway. As part of this purchase and highway expansion, the property was investigated for environmental impacts. Soil and groundwater impacts were detected during this investigation, and the area acquired by the WI DOT was remediated through soil excavation and disposal activities. A summary of the investigation and remediation activities is contained in this section.

Brief descriptions of the neighboring properties and their environmental impacts are summarized in the following subsections from the Environmental Resources Management (ERM) Site Investigation Report for the D.F. Inc. property submitted to the WDNR in 1999. The information presented is consistent with other sources found in the WDNR case files for the neighboring properties. In general, based upon a brief review of the available information for each of the following neighboring sites, the area around SFAWI contains large amounts of surface and subsurface fill materials and is environmentally impacted by various metals and organic compounds present in soil and groundwater.

2.1.1 WI DOT Solstice and Norwich Properties

The former Norwich and Solstice properties were acquired by the WI DOT as part of the Lake Arterial Highway expansion. The remediation of these properties was conducted by the WI DOT as part of the highway expansion. In September 1996, soils containing PCBs at concentrations greater than 50 mg/kg were removed from the site and a greater volume of soil (approximately 5,000 cubic yards) was treated on-site to reduce TCE concentrations to below hazardous waste disposal limits.

2.1.2 Kitzinger Cooperage Corporation Property

The Kitzinger Cooperage Corporation (Kitzinger) property is located to the east of the auto salvage yard. This site is used to recondition and recycle used steel and plastic drums. Kitzinger has operated this facility since 1951 and may have been preceeded by a company that operated similar processes. Since 1983, Kitizinger has required that empty drums it receives meet RCRA standards for emptiness. Kitzinger is classified as a large quantity hazardous waste generator. Wastes produced from facility operations are (1) ash from drum burnout line, (2) sludge from the hot caustic solution and rinse tanks, and (3) paint filters and sludges which are incinerated. The environmental status of soils and groundwater at the Kitzinger property is presently unknown.

2.1.3 D.F., Inc. Property

The D.F., Inc. property is located to the east of the SFAWI property across Pennsylvania Ave. from the vacant yard area. D.F., Inc. operated an electronic and metal component manufacturing facility on the property until operation ceased in August 1996. Subsequent site investigations conducted by ERM are documented in their 1999 Site Investigation Report.

The ERM (1999) report documented that the D.F., Inc. property, along with many of the other neighboring properties, was filled with various foundry sand materials. No documentation was presented regarding the quality or origin of the foundry sand brought onto the D.F., Inc. site.

Groundwater investigations conducted by ERM on and adjacent to the D.F., Inc. property also indicated the presence of chlorinated volatile organic compounds (CVOCs) and PVOCs in the shallow groundwater at levels above Chapter NR140 enforcement standards. Total VOC concentrations ranged from 1.7 ug/L in well MW1 (located on the eastern end of the D.F., Inc. property) measured in a sample obtained in April 25, 1996 to 477,200 ug/L in well MW7 (located on the south central portion of the D.F., Inc. property) measured in a sample obtained in February 26, 1997. The CVOCs include trichloroethylene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), vinyl chloride, and other breakdown products. The ERM report concluded that two groundwater contamination plumes exist at the D.F., Inc. property: (1) a TCE and 1,1,1-TCA plume with a source located to the south and west of the D.F., Inc. property (highest concentration was measured in an upgradient well, in the southwest corner of the property), and (2) a PVOC plume also with a source located to the south and west of the D.F., Inc. property.

Groundwater level measurements taken during the investigation by ERM indicated that the general flow direction is north-northeast across the D.F., Inc. property and in the surrounding area.

2.1.4 EZ Paintr Facility

The EZ Paintr facility is located to the southwest of the SFAWI property, across the Lake Arterial Parkway. This facility currently is operating a groundwater treatment system for the remediation of chlorinated and other solvent compounds in groundwater. The groundwater system has been in operation at the site since September 1996. According to a May 2000 system progress report (Arcadis, Geraghty, & Miller 2000), the maximum concentration of the primary groundwater contaminant (vinyl chloride) was 2.67 mg/L.

Given the generally northeast direction of groundwater flow in the area, the EZ Paintr facility is hydraulically upgradient of the SFAWI property. The significant impacts to groundwater quality at the EZ Paintr facility have potentially migrated and affected downgradient properties, such as the SFAWI property.

2.2 PREVIOUS SITE INVESTIGATION RESULTS

The following three investigations/remedial actions have been conducted at the SFAWI site to document and or remediate site environmental conditions:

- 1991 STS Consultants Ltd. (STS) Phase II and III Environmental Assessments for soil and groundwater analyses.
- 1997 RMT Investigation and Remedial Actions for the soils on the western portion of the property that was purchased by the Wisconsin Department of Transportation (WI DOT) for the construction of the Lake Arterial Highway.
- 1999 Montgomery Watson soil investigations on the vacant lot and auto salvage yard portions of the site.

A summary of the results of each investigation/remedial action is contained in the following subsections. Additional details on these investigations can be found in the previously submitted Soils Investigation Report (Montgomery Watson 2000).

2.2.1 1991 STS Investigations

STS (STS Consultants, Ltd.) completed Phase II & III Environmental Assessments of the facility in 1991 for the WI DOT. These investigations included performing soil boring, hand auger soil sampling, monitoring well installation, and soil and groundwater analyses. The soil borings and monitoring wells were installed on the western portion of the SFAWI property, in the area of the proposed easement. Hand auger soil sampling was performed across the entire salvage yard property (STS 1991). The locations of environmental sampling points are shown on Drawing B1.

The results of the soil sampling and analyses identified the presence of VOCs, primarily petroleum-related VOCs, and PCBs in the soil. In addition, one of the eight soil TCLP metal samples exceeded the Chapter NR 605 Table 1 limit for lead, that would classify this soil sample as characteristically hazardous (STS 1991; see location SF9 on Drawing B1).

The results of the groundwater sampling and analyses indicated that several VOCs were present above their Chapter NR 140 Enforcement Standards (ESs). The VOCs included benzene, ethylbenzene, toluene, vinyl chloride, and xylene (STS 1991). These sampling locations are also shown on Drawing B1.

Based on these results, the WDNR was notified of the contamination. Following the notification, the WDNR sent a letter to the current owner, dated October 5, 1992, indicating that the current owner is responsible for taking actions necessary to restore the environment. However, the soils around the SF/BW sample locations and around hand auger sample locations BC4 and CD4 were removed from the western portion of the SFAWI property that was acquired by the WI DOT for the construction of the Lake Arterial Highway.

2.2.2 1997 RMT Investigation and Remediation

In 1997, RMT completed additional investigations on the western portion of the SFAWI property. The investigations were conducted to define the degree and extent of contamination associated with the property pending acquisition by the WI DOT for the expansion of the Lake Arterial Highway. The results of this investigation were presented in the report "Work Plan for the Management of Impacted Fill Materials, St. Francis Auto Wrecker's Easement, Lake Parkway Project", prepared for the WI DOT (RMT 1997).

The results of the investigation indicated only 4 soil samples with PCB concentrations above the TSCA (Toxic Substance Control Act) cleanup level of 50 mg/kg, the level which is applicable to restricted access areas (40 CFR Part 761.61(a)(4)(i)(B)(2)). Sample locations are shown on Drawing B1. Several soil samples had contaminant concentrations that exceeded Chapter NR 720 residual contaminant levels (RCLs) for petroleum related compounds. Overall, the investigation results indicated that petroleum contamination was present in soils to a depth of at least 8 to 10 ft, and possibly down to the water table, which was encountered at depths ranging from 8 to 13 ft below the ground surface (bgs). The WI DOT has since completed remediation of this portion of the SFAWI property, which was acquired for the development of the Lake Arterial Highway.

The remediation included removal of the contaminated soils, regrading, compacting, and covering the area. The soils removed were comprised of mostly fill materials with some interspersed waste materials. The waste materials were found in excavated areas on both the auto salvage yard and the vacant lot portions of the SFAWI property. Several drums, including some containing solid or semi-solid materials identified as paint, resin, or adhesive solids, foundry sand and slag, asphaltic tar solids, metals parts and plated debris, and firebricks were also encountered during excavation activities. Approximately 280 cubic yards of PCB-impacted fill and approximately 3,500 cubic yards of PVOC-impacted fill were removed from the western portion of the SFAWI property during September and October 1997 (ERM 1999). For a complete description of the materials encountered and the remedial excavation activities by RMT, refer to the "Remediation Documentation Report" (RMT 1998).

2.2.3 1999 Montgomery Watson Soils Investigation

The methods and results of the site-wide soil investigation conducted by Montgomery Watson in 1999 are contained in their "Soil Investigation Report" (2000). Results and preliminary conclusions from this investigation are discussed according to the three portions of the site: the auto salvage yard, the vacant lot, and the intervening drainage swale area.

2.2.3.1 Salvage Yard Area. The soils in this portion of the property contained VOCs with some concentrations exceeding the Chapter NR 720 soil standards for groundwater protection. VOCs were detected at a depth of 12 ft bgs in soil samples from 9 of the 11 borings performed on this portion of the site. Detected VOCs were primarily petroleum-related, with minor amounts of chlorinated VOCs present in some of the samples. Exceedances of the generic NR 720 groundwater protection RCLs were noted for 1,2-DCA in one sample, for benzene in six samples, and for toluene in one sample. In general, the samples from this portion of the site had total VOC concentrations at least one order of magnitude lower than samples from the vacant lot. Furthermore, because VOC concentrations were detected in samples from just above the water table, VOC migration to the groundwater was likely.

SVOCs were not detected on this portion of the site at the 12-ft depth.

Six soil samples were collected for analyses of the eight RCRA metals. The samples were typically collected at a depth of 2-ft bgs. Analytical results for metals indicated concentrations both above and below NR 720 RCLs for direct contact at an industrial site. Exceedances of the generic NR 720 direct contact RCLs for industrial sites were for arsenic in six samples and for lead in one sample. None of the other detected metals in the six samples exceeded either the generic NR 720 direct contact RCLs or calculated risk-based soil standards.

Only one sample had lead or chromium concentrations that were greater than 20 times the TCLP threshold value, suggesting that the volume of soil which might potentially be hazardous was likely minimal. Elevated metals concentrations detected in the site soils might have been due to site operations, but were more likely due to the large amount of foundry sand fill present in these soils. Fill materials were noted to be present from the ground surface to the top of the water table in many of the borings. Because metals were detected in some deeper soil samples and because of the depth of fill, metals might have an impact on groundwater quality.

PCBs were detected at depth (2 to 8 ft) in six soil samples from this portion of the site. is Mot None of the concentrations exceeded the TSCA cleanup level of 50 mg/kg for a restricted a "restrict access area, such as the salvage yard. Because PCBs concentrations at the depth were access substantially lower than concentrations from previous surface soil results, vertical migration within soil to the water table was not a concern. PCBs migration was also unlikely due to their high retardation factors and low water solubilities.

2.2.3.2 Vacant Lot. Similar to the auto salvage yard, the soil results indicated the presence of VOCs at the 12-ft depth. VOCs were detected in 8 of the 12 borings, and were primarily petroleum-related VOCs. In the 15 soil samples collected, exceedances of the generic NR 720 RCLs for groundwater protection were for benzene in five samples, for ethylbenzene in six samples, for toluene in three samples, and for total xylenes in six samples. In general, the soil samples from this portion of the site had total VOC concentrations at least one order of magnitude greater than samples from the auto salvage yard. Two areas of particularly high VOC concentrations were also noted on this portion of the property: (1) the westernmost area around borings HP09 and HP12, and (2) the central eastern area around borings HP07 and HP10.

The only SVOC detected was minor concentrations of pyrene at the 12-ft depth in two of the soil samples from this portion of the property.

Soil analytical results for RCRA metals indicated that cadmium, arsenic, chromium, and lead, were detected at concentrations exceeding generic NR 720 RCLs and/or the calculated risk-based standards for direct contact at an industrial site. Several concentrations of lead, chromium, cadmium, and mercury were at levels that were greater than 20 times the TCLP threshold values indicating that the samples might be hazardous.

Similar to the auto salvage yard, foundry sand fill was noted from the ground surface to just above the water table (approximately 12-ft bgs). The metals detected might be related to the fill materials. Because of the metals concentrations and depth of fill, metals might have an impact on groundwater quality.

Low concentrations of PCBs (Arochlors 1248, 1254, and 1260) were detected in seven soil samples collected at a depth of 2 ft bgs. Three samples exceeded the TSCA cleanup level of 1 mg/kg for a high occupancy, unrestricted access area, such as the vacant lot. PCBs migration is unlikely due to their high retardation factors and low water solubilities.

Salvage your

area

2.2.3.3 Drainage Swale Area. The two hand auger soil samples collected from the drainage swale were not analyzed for VOCs.

SVOCs were detected in only one of the two soil samples. Phenol and 2-methylphenol concentrations were detected in the sample from the western portion of the swale (HB02). These concentrations did not exceed any of the NR 720 calculated risk-based soil standards for direct contact at an industrial site. For comparison, no SVOCs were detected in the salvage yard, and pyrene was the only SVOC detected in the vacant lot. At what dupted

Soil analytical results for RCRA metals indicated lead, chromium, cadmium, barium, mercury, and arsenic, were detected in one or both of the drainage swale soil samples at concentrations exceeding the generic NR 720 RCLs and/or the calculated risk-based standards for direct contact at an industrial site. Several concentrations of lead, chromium, cadmium, and mercury were also at levels that were greater than 20 times the TCLP threshold values indicating that the samples might be hazardous.

PCBs (Arochlors 1254 and 1260) were detected in both samples from the drainage swale. Only the concentration from the sample at the eastern end of the drainage swale (HB01 exceeded the TSCA cleanup level of 1 mg/kg for a high occupancy, unrestricted access area, such as the drainage swale.

2.2.3.4 Summary of 1999 Soils Investigation Results. The soil investigation at the SFAWI property indicated the presence of primarily petroleum related VOCs, and to a lesser extent, chlorinated VOCs at depths just above the water table. The VOC contamination might be related to activities at the salvage yard or to the presence of fill and/or waste materials found throughout the site. The soil VOC contamination might potentially impact groundwater.

In general, SVOCs appeared to be of minimal concern. Only minor concentrations of SVOCs were detected at three locations, located in the vacant lot and drainage swale portions of the site.

Numerous soil samples from the site had metals concentrations that exceed NR 720 direct contact RCLs for industrial sites. Additionally, some of these samples also had metals concentrations that were greater than 20 times the TCLP threshold value potentially indicating the soils may be hazardous. The metals might be related to the foundry sand fill found throughout the site. Because of the concentration of these metals and depth of fill, metals might have an impact on groundwater quality.

PCBs (Arochlors 1248, 1254, and 1260 primarily) were detected in both areas of the site at depths of 2-ft or deeper. None of the concentrations detected in the salvage yard exceeded the TSCA cleanup level of 50 mg/kg for a restricted access area, such as the salvage yard. Four of the samples from the vacant lot and drainage swale exceeded the TSCA cleanup level of 1 mg/kg for a high-occupancy, unrestricted access area, such as the vacant lot and drainage swale.

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Groundwater and Supplemental Soils Investigation Report

3.0 SAMPLING METHODS AND OBSERVATIONS

The previous section described the results of earlier investigations that focused on impacts to soils at the site. The intent of the soil investigation performed by Montgomery Watson was to characterize the potential vertical migration of contaminants found in earlier investigations at the site. Based on the results of the soil investigation, the Groundwater Investigation Work Plan was prepared and submitted to the WDNR in July 2000. The WDNR conditionally approved the Work Plan with the addition of a supplemental soils investigation. The following objectives were developed for the groundwater and supplemental soil investigation:

- Determine the status of site soils in regards to applicable solid and hazardous waste regulations (i.e., TCLP metals) as requested by the WDNR,
- Determine the depth of soils impacted by PCBs at selected locations as requested by the WDNR,
- Determine whether a direct contact risk is present for impacted soils at depths less than 2 ft below the ground surface (impacted soils at depths below 2 ft are not $-\frac{5}{who}$ considered a direct contact risk at this site) as requested by the WDNR,
- Determine the degree and extent of VOCs, metals, and PCB impact on local groundwater quality from the site soils and/or site operations,
- Determine the potential for groundwater contamination migrating from offsite locations.

The sections below provide the investigative methods used to fulfill these project objectives.

3.1 SOIL INVESTIGATION

Soil sampling was conducted at the site on July 18, 2001. Soil samples were collected using direct-push methods. A hydraulic probe was used at truck accessible locations, which included borings SB01, SB02, SB03, SB04, and SB09. Soil samples from other locations (SB05, SB06, SB07, and SB08) were collected using a combination of hand-auger and manual direct-push methods. The soil sample locations are shown on Drawing B1. Soil samples were screened for the presence of VOCs using a photoionization detector (PID) and classified using the Unified Soil Classification System (USCS). Soil boring logs and borehole abandonment forms are included in Appendix B. Soil samples were collected for analysis of various combinations of parameters, including total and TCLP metals (cadmium, lead, chromium, and/or mercury) and PCBs. Samples were preserved on ice and shipped under chain of custody procedures to CT Laboratories in Baraboo, Wisconsin.

The soil samples were analyzed for metals via EPA Method 6010B and Method 7471 (mercury, only); for TCLP metals via EPA Method 6010B; and for PCBs via EPA Method 8082.

3.2 GROUNDWATER INVESTIGATION

3.2.1 Monitoring Well Installation and Development

Five groundwater monitoring wells (MW01-MW05) were installed at the site by Badger State Drilling on July 16 and 17, 2001. Borings were conducted using 4 1/4-in hollow stem augers from the ground surface to the terminus of each borehole. Soil samples were collected and logged by a MWH geologist at 2 ½-ft intervals, screened for the presence of VOCs using a PID, and classified using the Unified Soil Classification System (USCS). Soil boring logs are included in Appendix B. No soil samples were collected from these soil borings for laboratory analysis. Drill cuttings were contained in labeled, steel 55gallon drums and staged on-site for later disposal.

Monitoring wells were constructed in accordance with Chapter NR 141, using 2-in. diameter Schedule 40 PVC well screen and pipe. Monitoring well locations are shown on Drawing B1. Monitoring well construction forms are included in Appendix B.

Monitoring wells were developed after installation in accordance with Chapter NR 141 requirements. Wells were developed by pumping following a 30-minute surge and purge cycle. Purge water from the well development was contained in labeled steel 55-gallon drums and staged on site for later disposal. Monitoring well development forms are included in Appendix B.

The well locations and elevations (ground surface, riser, and protective casing) were surveyed to allow evaluation of groundwater flow directions. An on-site storm water manhole and its invert elevation were also surveyed. The location of this manhole is shown on Drawing B3.

3.2.2 Monitoring Well Sampling

Groundwater samples were collected on July 26, 2001 for analysis of VOCs, SVOCs, PCBs, and dissolved metals. Groundwater samples were collected by lowering a stainless steel bailer into the well and retrieving the sample. Prior to sampling, approximately 3 well volumes were removed to purge the well. Measurements of natural attenuation/field parameters (including redox potential, dissolved oxygen concentrations, specific conductivity, temperature, and pH) were collected using field instruments. Samples were preserved on ice and shipped under chain of custody procedures to CT Laboratories in Baraboo, Wisconsin. A trip blank and bailer blank sample were also collected and analyzed for QA/QC purposes.

Groundwater samples were analyzed by the laboratory for SVOCs via EPA Method 8270; PCBs via EPA Method 8082; metals via EPA Methods 6010B, 7060 (arsenic, only), and 7470 (mercury, only); and VOCs via EPA Method 8260. Laboratory analytical reports are included in Appendix C.

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4.0 INVESTIGATION RESULTS

This section describes the results of the investigation activities, including a summary of the site geology and hydrogeology, results from the supplemental soils investigations, and results from the site groundwater investigations.

4.1 SITE GEOLOGY AND HYDROGEOLOGY

Logs of the soil and monitoring well borings conducted during this investigation are presented in Appendix B. These logs provide additional information about the general site geology noted through previous investigations conducted at the site. The logs confirm that the site is generally fill materials overlying a glacially-derived clay environment, encountered at depths of 13 to 15 ft bgs. The natural clay environment is typical of the glacial moraine deposits in the Milwaukee area. The fill materials are primarily foundry sand (dark brown to gray sands) with mixed amounts of debris (i.e., glass, various plastics, wood chips, brick fragments, rubber, and metal fragments). The thickness of the fill materials is generally from 2 to 12 ft, approximately to the top of the water table and native materials. In salvage yard, the fill materials are mostly covered on the surface by a 1-ft. thick layer of gravel, silt, or sand material mixture. In the vacant lot, the fill material is covered with a thin veneer of topsoil and heavy growth of various grass, weeds, bushes, and trees.

The borings logs for this investigation and the previous soils investigation also noted petroleum staining, odors, and/or slight product sheens observed in some of the site soils. In general, these observations were applicable to subsurface fill materials that would not be considered as native, glacial till deposits.

More detailed information on the types and depths of the debris material encountered is provided on the boring logs for each location. Refer to Appendix B of the Soils Investigation Report (Montgomery Watson 2000) for the boring logs of the soil sampling conducted in August 1999. Similar fill conditions were also noted during the investigations performed at the neighboring D.F., Inc. property located to the east of the site across Pennsylvania Ave.

Water levels were measured in the site monitoring wells on July 26, 2001. Water level measurements and groundwater elevations are presented in Table 1. Depths to groundwater at the site ranged from 14 to 18 ft bgs. The water table generally occurs within natural silty clay deposits underlying the site, just below the fill materials. A water table map was developed from the groundwater elevations and is provided as Drawing B3. Groundwater flow is appears to be generally in a northeasterly direction across the site. This groundwater flow direction is consistent with ERM's interpretation through their investigations of the neighboring D.F., Inc. property (ERM 1999).

In addition, the invert elevations at two manholes for the 66-in. diameter storm sewer that is present along the east side of the site are also shown on Drawing B3. Given the water table

elevation in the vicinity of the site and the storm sewer invert elevation, the storm sewer may be functioning as a hydraulic barrier and preferential migration pathway for groundwater.

4.2 SUPPLEMENTAL SOIL INVESTIGATION RESULTS

The supplemental soil investigation was required by the WDNR through the groundwater investigation work plan approval letter dated August 3, 2000 by Ms. Nancy Ryan (see copy attached in Appendix A). This investigation was designed to determine whether soils at the site may be considered characteristically hazardous as defined in Chapter NR 605, to complete the determination of the vertical extent of metals and/or PCB impacts, and to determine whether a direct contact risk may exist for impacted soils less than 2 ft below the ground surface.

Laboratory analytical reports for the soil samples are provided in Appendix C. Table 2 presents the metals and TCLP metals results for these additional soil samples and the results from the previous soil investigation. Table 3 presents the PCB results for the additional soil samples and also the previous soil investigation results.

4.2.1 Vacant Lot

Four additional soil samples (SB01-SB04) were collected in the vacant lot portion of the property and analyzed for metals, TCLP metals, and/or PCBs.

4.2.1.1 Metals. Cadmium was detected in the two samples, SB01 (4-5 ft) and SB04 (4-5 ft), at concentrations of 13.0 mg/kg and 0.13 mg/kg, respectively. The cadmium concentrations in the two samples are less than the results (72 and 33.3 mg/kg) from the 1999 samples collected at these locations at shallower depths (HP05; 2-ft and HP11; 4-ft).

Only the sample from boring SB02 (4-5 ft) was analyzed for chromium; the concentration detected was 56 mg/kg. This concentration was less than the concentration (132 mg/kg) detected in the 1999 sample (HP06; 2-ft).

Lead was detected in four samples at concentrations ranging from 25.2 mg/kg (SB03; 4-5 ft) to 1,280 mg/kg (SB01; 4-5 ft). Only the concentration in sample SB01 exceeded the lead NR 720 direct contact RCL for industrial sites (500 mg/kg). The lead concentrations in samples SB03 (4-5 ft; 25.2 mg/kg) and SB04 (4-5 ft; 35.4 mg/kg) were significantly less than the concentrations (1,370 and 520 mg/kg) detected in their respective 1999 sample locations (HP07; 2-ft and HP11; 4-ft). The concentrations detected in samples SB01 (4-5 ft.; 1,280 mg/kg) and SB02 (4-5 ft.; 216 mg/kg) were similar to the concentrations (1,390 and 378 mg/kg) from their respective 1999 samples (HP05; 2-ft and HP06; 2-ft).

One additional soil sample from the vacant lot was analyzed for mercury (SB01; 4-5 ft); the concentration detected was 3.7 mg/kg. This concentration of mercury is similar to the

concentration (5.3 mg/kg) from the 1999 sample collected previously at this location (HP05; 2-ft).

The results from the TCLP metal analyses for mercury, cadmium, and chromium indicated that none of the samples were characteristically hazardous as defined by Chapter NR 605. The TCLP lead concentrations ranged from 0.0261 mg/L (SB04; 4-5 ft) to 8.32 mg/L (SB02; 4-5 ft.). The TCLP result from SB02 was the only result to exceed the characteristically hazardous threshold of 5.0 mg/L for lead.

4.2.1.2 PCBs. Four additional soil samples from two sample locations (SB01 and SB04) were collected in the vacant lot area to determine the vertical extent of PCBs at two locations where PCBs were previously detected at the 2-ft depth interval (samples HP05 and HP07). These additional results are shown on Drawing B4. The results from the two samples collected from boring SB01 (0-0.5 ft and 4-5 ft) had a detection for PCBs only in the deeper sample (Arochlor-1254; 27 mg/kg). The results from the two samples collected from boring SB04 (0-0.5 ft and 4-5 ft) did not have PCB detections.

4.2.2 Salvage Yard Area

Three additional soil samples (SB07-SB09) were collected and analyzed for metals (SB07, only) and PCBs (SB08 and SB09) in the auto salvage yard.

4.2.2.1 Metals. One additional soil sample collected for metals analysis (SB07; 4-5 ft) detected chromium at a concentration of 94.5 mg/kg. Lead was also detected in this sample at a concentration of 1,710 mg/kg, an exceedance of the NR 720 RCL for industrial sites.

The results from the TCLP metal analyses for chromium indicated that the sample was not characteristically hazardous as defined by Chapter NR 605. However, the TCLP lead results (10.1 mg/L) indicated that this sample is characteristically hazardous for lead.

4.2.2.2 PCBs. Two additional soil samples were collected in the salvage yard to determine the vertical extent of PCBs at locations where PCBs were detected in 1999. Neither sample SB08 (3-4 ft), collected near HP15 (2-ft), nor sample SB09 (4-4.5 ft), collected near HP13 (2-ft), had a detection of PCBs.

4.2.3 Drainage Swale Area

Two additional soil samples (SB05 and SB06) were collected in the drainage swale portion of the property and analyzed for metals, TCLP metals, and PCBs (SB05, only).

4.2.3.1 Metals. Cadmium was detected in sample SB06 (3-4 ft) at a concentration of 2.0 mg/kg. This concentration is less than the concentration detected (40.1 mg/kg) in the 1999 soil sample at this location (HB02; 0-1 ft).

Chromium was detected in sample SB05 (3-4 ft) at a concentration of 168 mg/kg. This concentration is similar to the concentration detected (112 mg/kg) in the 1999 soil sample at this location (HB01; 0-1 ft).

Lead concentrations detected in SB05 (3-4 ft) and SB06 (3-4 ft) were 1,120 mg/kg and 108 mg/kg, respectively. The results for SB05 are greater than the results (646 mg/kg) from the shallower 1999 sample (HB01; 0-1 ft) collected at this location. However, the results for sample SB06 are less than the results (531 mg/kg) from the shallower 1999 sample (HB02; 0-1 ft) collected at this location.

Sample SB05 (3-4 ft) had a mercury concentration of 26.3 mg/kg that is less than the concentration (46.6 mg/kg) detected in the shallower 1999 sample (HB01; 0-1 ft).

The results from the TCLP metal analyses for lead, mercury, cadmium, and chromium indicated that none of the samples were characteristically hazardous as defined by Chapter NR 605.

4.2.3.2 PCB Results. One additional PCB sample (SB01; 3-4 ft) was collected in the drainage swale to determine the vertical extent of PCBs detected at location of HB01. Sample SB01 (3-4) did not have a detection of PCBs.

4.3 GROUNDWATER INVESTIGATION RESULTS

The objective of the groundwater investigation was primarily to determine the potential impact of site soils on the site groundwater. Additionally, the investigation also provided information to evaluate the potential for groundwater impacts from offsite.

This section describes the analytical results from the groundwater investigation. Tables 4, 5, 6, and 7 summarizes the groundwater analytical results for dissolved metals, PCBs, VOCs, and SVOCs. Analytical results are compared to Chapter NR 140 groundwater quality standards (ES- enforcement standard and PAL- preventative action limit). Exceedances of the Chapter NR 140 groundwater standards are shown on Drawing B7. Complete laboratory analytical reports are provided in Appendix C. Field parameter measurements are presented on Table 8.

4.3.1 Metals

Arsenic concentrations ranged from below detection limits to 13.5 ug/L (MW02), which exceeds the PAL of 5 ug/L. Monitoring well MW02 is the only well with a PAL exceedance for arsenic.

Beryllium concentrations ranged from 0.62 ug/L (MW04) to 0.79 ug/L (MW05), which exceed the PAL of 0.4 ug/L. The beryllium concentration exceeds the PAL in the five monitoring wells (MW01 to MW05).

Cadmium was detected at concentrations ranging from below detection limits to 0.84 ug/L (MW01), which exceeds the PAL of 0.5 ug/L. Monitoring well MW01 is the only well with a PAL exceedance for cadmium.

Lead was detected at concentrations ranging from below detection limits to 2.6 ug/L (MW02). Monitoring well MW02 (2.6 ug/L) and MW05 (2.0 ug/L) both exceed the PAL of 1.5 ug/L for lead.

Chromium was detected at concentrations ranging from below detection limits to 1.4 ug/L (MW01). Copper was detected in site groundwater only in well MW02 at a concentration of 4.8 ug/L. Nickel was detected in site groundwater at concentrations of 6.7 ug/L (MW04) to 16.7 ug/L (MW02). Zinc concentrations ranged from 7.2 ug/L (MW05) to 34.4 ug/L (MW02).

Antimony, selenium, silver, thallium, and mercury were not detected in any of the groundwater samples.

4.3.2 PCBs

PCBs were not detected in any of the groundwater samples.

4.3.3 SVOCs

Only one SVOC was detected at a concentration exceeding a PAL. Bis(2-ethylhexyl)phthalate was detected in monitoring wells MW02, MW03, and MW04 at concentrations of 1.6, 1.9, and 1.4 ug/L, respectively.

4.3.4 VOCs

VOCs (chlorinated and petroleum related compounds) were detected in the five monitoring wells at concentrations exceeding NR 140 groundwater standards. At the furthest upgradient site monitoring well (MW01, located on the auto salvage yard), the concentrations of benzene (4.4 ug/L), naphthalene (26 ug/L), chloromethane (0.34 ug/L), and cis-1,2-dichloroethene (cis-1,2-DCE) (4.1 ug/L) exceeded their respective NR 140 PALs. Additionally, the concentration of vinyl chloride detected in this well (0.33 ug/L) exceeded the NR 140 ES of 0.2 ug/L. At the upgradient monitoring well (MW02, located in the vacant lot area), the concentration of chloromethane (0.35 ug/L) exceeded its PAL, and the concentration of vinyl chloride ES.

At the downgradient monitoring well (MW05, located on the northern edge of the vacant lot), the PAL was exceeded for total trimethylbenzenes (365 ug/L) and chloroform (1.9 ug/L). The ES was exceeded in MW05 for naphthalene (51 ug/L) and benzene (10 ug/L). At the downgradient monitoring well (MW03, located at the northeast corner of the vacant lot), the PAL was exceeded for benzene (4.7 ug/L) and chloromethane (0.67 ug/L). The ES was

exceeded in MW03 for vinyl chloride (4.8 ug/L). At the downgradient monitoring well (MW04, located in the salvage yard), concentrations of benzene (2.5 ug/L) and chloromethane (0.32 ug/L) exceeded their PALs.

4.3.5 Field Parameters

Field parameters were also measured in the five monitoring wells (Table 8). Dissolved oxygen concentrations ranged from 0.5 mg/L (MW01) to 2.3 mg/L (MW02). Redox potentials ranged from -44 meV (MW02) to -96 meV (MW04). Specific conductivities ranged from 1,868 µmhos/cm (MW04) to 3,740 µmhos/cm (MW02). The pH ranged from 6.7 (MW02) to 7.75 (MW04).

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5.0 DISCUSSION AND INTERPRETATION

The results of this groundwater and supplemental soils investigation and the previous site soils investigation indicate impacts to soils that exceed the Chapter NR 720 soil standards and to groundwater that exceed the Chapter 140 groundwater standards. The SFAWI property is an industrial property consisting of the operating salvage yard and the vacant lot. Discussion and interpretation of the investigation results are presented in the following subsections according to the media affected.

5.1 SOILS

Based on the results from this investigation and the 1999 investigation, soils on both the salvage yard portion and vacant lot portion of the SFAWI property have been impacted by metals, VOC, and PCBs contamination. The soils across the entire property consist of mostly foundry sand fill overlying glacial silty clay. Because the soil and foundry sand fill are intimately related at the site from the ground surface to depths of 8 to 12 ft below the ground surface, the terms soil and fill are used synonymously in the context of both these materials and NR 720 standards. The surface of the vacant lot has a thin veneer of topsoil and is otherwise heavily vegetated with grass, weeds, bushes, and trees. The surface of the salvage yard has been mostly covered by crushed stone, and the salvage yard is also enclosed by a security fence to restrict access.

Because of the surface conditions at the site, potential direct contact risk from exposure to contaminated soil is assumed to be limited to soils that are less than 2 ft below ground surface. Soils at depths greater than 2 ft below ground surface are not considered a direct contact risk, but these soils still have contaminant concentrations that exceed the RCL for the protection of groundwater.

5.1.1 Vacant Lot

Soil samples analyzed from the vacant lot indicate the presence of lead and arsenic at concentrations above Chapter NR 720 direct contact RCLs for industrial sites. Arsenic concentrations from soil samples collected at depths less than 2 ft below ground surface ranged from 2.26 to 38.6 mg/kg, exceeding the RCL of 1.60 mg/kg. Even though the soil is primarily foundry sand fill, this concentration is well within the typical arsenic concentrations in native soil (1 to 40 mg/kg). Lead exceedances were noted in two samples from depths less than 2 ft bgs. Only one sample (SB02) from this portion of the site had a lead TCLP concentration (8.32 mg/L) that indicated that the sample was characteristically hazardous by Chapter NR 605.

Observations from the metals results are that cadmium and chromium concentrations in soil samples decrease with depth, lead concentrations vary with depth (some increases and some decreases noted), and mercury concentrations are only slightly decreased with depth. The

variation of metals concentrations with depth is likely due to the variability of the fill materials present throughout this area and the rest of the site.

PCBs were detected in nine of the 14 samples collected in this portion of the site. Only three samples from this portion of the property had PCB concentrations above the TSCA cleanup value of 1 mg/kg for high occupancy, unrestricted access areas, such as the vacant lot. Soil sampling at depth indicates PCB concentrations above 1 mg/kg only at SB01/HP05, suggesting that migration of PCBs is generally not occurring. The source of the PCBs detected in the soil samples from this area of the site is uncertain, but is apparently not ubiquitous within the fill materials.

VOC results from the soil sampling conducted in the salvage yard in 1999 indicated that VOCs were detected in 8 of the 12 soil borings at depths of approximately 8 to 12 ft. VOCs consisted primarily of petroleum-related VOCs with minor amounts of chlorinated VOCs. The generic NR 720 RCLs for groundwater protection were exceeded for benzene in five samples, for ethylbenzene in six samples, total xylenes in six samples, and for toluene in three samples. The origin of the detected VOCs, both petroleum and chlorinated, may be related to the fill materials present at the site. Borings conducted on this portion of the site encountered subsurface fill type materials that had petroleum odors, black soil staining, and/or the presence of slight amounts of weathered product sheens.

The only SVOC detected was pyrene in two of the soil samples from this portion of the property. The low concentrations (< 5 mg/kg) were less than the WDNR RCL of 8,700 mg/kg. The origin of these SVOCs is uncertain; however, it may be related to the fill materials present at the site.

5.1.2 Salvage Yard

Unlike the vacant lot, only one soil sample (HP21) was collected from less than 2 ft below ground surface. Soil sample HP21 indicated the presence of arsenic at a concentration above Chapter NR 720 direct contact RCLs for industrial sites. The arsenic concentration 5.6 mg/kg, exceeded the RCL of 1.60 mg/kg. Similar to the vacant lot, this concentration is well within the typical arsenic concentrations in native soil (1 to 40 mg/kg). An elevated lead concentration (1710 mg/kg) was noted in a sample collected at depth (SB07; 4-5 ft); the sample was determined to have a lead TCLP concentration (10.1 mg/L) was characteristically hazardous by Chapter NR 605. The presence of lead and arsenic may be related to the foundry sand fill present in the surface and subsurface across the entire site.

Low concentrations of PCBs (< 10 mg/kg) were detected in the soil samples from this area of the site. None of the PCB concentrations in the salvage yard exceeded the TSCA cleanup value of 50 mg/kg for restricted access, low-occupancy areas, such as the salvage yard. Supplemental soil samples from deeper depths at locations where PCBs were detected above 1 mg/kg did not detect the presence of PCBs, indicating that the migration of PCBs to deeper soils is not occurring at this area of the site.

VOC results from the soil sampling conducted in the salvage yard in 1999 indicated that VOCs were detected in 9 of the 11 soil borings at a depth of approximately 12 ft (i.e., just above the water table). VOCs consisted of primarily petroleum-related VOCs with minor amounts of chlorinated VOCs. The generic NR 720 RCLs for groundwater protection were exceeded for benzene in six samples, for 1,2-DCA in one sample, and for toluene in one sample. The occurrence of petroleum-related VOCs in the salvage yard may be related to current operations or possibly to the fill materials. The relatively low concentrations of petroleum-related VOCs found across the site does not indicate a large single source, but more likely a diffuse source.

SVOCs were not detected in the soil samples collected from this area of the site.

5.1.3 Drainage Swale

Soil samples analyzed from the drainage swale indicate the presence of lead and arsenic at concentrations above Chapter NR 720 direct contact RCLs for industrial sites. Arsenic concentrations ranged from 3.73 to 6.06 mg/kg, exceeding the RCL of 1.60 mg/kg. Lead concentrations ranged from 531 to 646 mg/kg, exceeding the RCL of 500 mg/kg. The arsenic and lead results indicate variations in concentrations with depth (i.e., some metals have decreased concentrations with depth, while others have increased or have similar concentrations with depth). The variation in concentrations is likely due to the variability in the fill materials across the entire SFAWI property.

PCBs were detected in one of two surface soil samples greater than the TSCA cleanup value of 1 mg/kg for high occupancy, unrestricted access areas. An additional sample collected below the soils with the PCB concentration above 1 mg/kg indicates that migration of PCBs is not occurring. The source of the PCBs detected in the soil samples from this area of the site is uncertain, but may be related to the fill materials present.

5.2 GROUNDWATER

Groundwater concentrations of beryllium and cadmium are greater than their PALs, but not above their ESs. The cadmium concentration was detected in the upgradient monitoring well (MW01), and is not likely related to the salvage yard soils, because cadmium was not detected. The origin of the beryllium in groundwater is uncertain, because site soils were not analyzed for beryllium; thus, it is uncertain if the groundwater detections of beryllium are related to the site soils.

Lead was detected in two monitoring wells (MW2 and MW05) at concentrations that exceed the PAL, but below the ES. This result indicates that lead may be migrating to the groundwater from the surface and/or subsurface fill materials that had elevated lead concentrations. PCBs were not detected in the site groundwater, indicating that PCB migration to groundwater is not occurring.

Petroleum-related VOCs are present in the five monitoring wells at the site. Only benzene is detected in all five wells at a concentration that exceeds NR 140 groundwater standards. The highest concentration of petroleum-related VOCs is in the downgradient well MW05. The origin of the petroleum-related VOCs is likely migration of contamination from diffuse sources on site that may be related to the salvage yard operations.

Chlorinated VOCs are also present in the five monitoring wells at the site. The only ES exceedance for a chlorinated VOC is for vinyl chloride in upgradient monitoring wells MW01 and MW02 and downgradient monitoring well MW03. Cis-1,2-DCE is also detected in upgradient well MW01 at a concentration above the PAL. Chloromethane is detected in four of the five wells at a concentration that exceed the PAL. In general, the concentration of chlorinated VOCs is relatively low (< 20 ug/L), and the only higher chlorinated compound detected was a minor concentration (0.15 ug/L) of PCE at well MW03. The origin of the chlorinated VOCs is likely to be from offsite sources, such as the plume from the D-F, Inc. facility or the previously remediated WI DOT Lake Arterial Highway property (former SFAWI property).

Concentrations of bis(2-ethylhexyl)phthalate were detected at concentrations above its PAL in three monitoring wells at the site. These detections were not above the ES for this compound. The origin of this compound in groundwater is uncertain because no SVOCs were detected in previous soil samples.

Field parameter results, such as dissolved oxygen and redox potential, indicate that the site groundwater presents anaerobic and reducing conditions. These conditions potentially indicate that natural biodegradation of VOCs may be occurring at the site.

5.3 POTENTIAL MIGRATION PATHWAYS

The SFAWI property is an industrial property consisting of the operating salvage yard and the vacant lot. The only complete potential site contaminant exposure pathway is via direct contact with impacted site soils or inhalation/ingestion of site soils by workers in the salvage yard area and/or surrounding residents in the vacant lot or drainage swale areas. Other exposure pathways are incomplete, because there are no direct receptors. This facility is in an area of mixed industrial, commercial, and residential use.

The chlorinated and petroleum VOCs in the upgradient monitoring wells (MW01 and MW02) indicate that the source(s) of these VOCs may be related to residual soils that may be present in the previously remediated, upgradient WI DOT Lake Arterial Highway property (former SFAWI property).

Based on the proximity of chlorinated and petroleum VOCs to downgradient property lines to the north and east, offsite migration is possible. However, other investigations have noted environmental impacts already existing at downgradient and sidegradient offsite locations (ERM 1999). Furthermore, several major utilities and utility corridors are present beneath Pennsylvania and Norwich Avenues, and likely act as a hydraulic barrier for groundwater from the SFAWI property. Based on drawings provided by the Village of St. Francis and field observations, the invert elevations of the large diameter (> 66 inches) storm sewers that are downgradient of the site are below the water table. A detailed City of St. Francis utility map is provided in Appendix D.

As described in Section 2, groundwater is known to be impacted at the downgradient D.F., Inc. facility. Because the VOC concentrations noted at the D.F., Inc. (i.e., chlorinated VOC concentrations up to 500 mg/L) are four orders of magnitude (10,000 times) greater than the concentrations detected in the downgradient SFAWI monitoring wells, it is unlikely that the D.F., Inc. groundwater impacts are the result of impacts at the SFAWI site. However, given the likelihood that the large diameter storm sewer is acting as a groundwater sink between the two sites, the chlorinated VOC plume may be migrating into the utility corridor of the storm sewer. The presence of the high concentrations of chlorinated VOCs in the plume at the west side of the D.F., Inc. property would likely lead to significant soil gas concentrations of these VOCs in the vicinity of the plume that may create a halo of groundwater contamination in potentially upgradient monitoring wells, such as observed in the SFAWI monitoring well MW03.

Downgradient groundwater receptors (e.g., public or private wells) are not known to be present in the area of this site. The area is serviced by municipal water that is drawn from Lake Michigan, and thus, the groundwater migration pathway is not complete.

Surface water impacts via offsite drainage are not a complete migration pathway. Water discharged from the site through storm water sewers is conveyed to Lake Michigan, where the discharge is substantially diluted (EPA 1993). This pathway will be addressed as part of the storm water permitting and the installation of storm water BMPs, to prevent the release of the noted environmental impacts from the facility via storm water discharge.

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6.0 CONCLUSIONS

6.1 SOILS

Soil investigations have detected exceedances of applicable PCB, VOC, and metals regulatory standards or cleanup thresholds. The following conclusions can be derived from the soil results from the site:

- Metals (except for arsenic) in the salvage yard from depths less than 2 ft below ground surface do not exceed the NR 720 direct contact RCLs for industrial sites. Arsenic concentrations exceed the RCL, but no remediation for metals is considered necessary for soils in the salvage yard.
- Lead and arsenic concentrations in the vacant lot and drainage swale from depths less than 2 ft below ground surface exceed their direct contact RCL for industrial sites. Although arsenic concentrations are in the range of typical soil concentrations, lead contaminated soils need to be addressed in the vacant lot and drainage swale.
- PCB concentrations in surface soils (0 to 0.5 ft below ground surface) from the vacant lot do not exceed the TSCA cleanup levels of 1 mg/kg for a high occupancy, unrestricted area. However, several samples in the vacant lot and drainage swale from depths of less than 2 ft below ground surface do exceed the TSCA level of 1 mg/kg. Therefore, soils contaminated with PCBs from these areas will need to be addressed.
- PCB concentrations in soils samples in the salvage yard from depths of less than 2 ft below ground surface do exceed the TSCA level of 50 mg/kg for a low occupancy, restricted area. Therefore, soils contaminated with PCBs from these areas will need to be addressed.

The soil impacts for metals are likely related to the presence of foundry sand fill found throughout the site and area in general. These materials are documented to exist throughout the unsaturated soil zone of the site and into the shallow groundwater (i.e., from the surface to depths of 15-ft bgs). Similar materials are documented through the investigations and remediations conducted at neighboring properties.

The degree and extent of soil contamination has been characterized at the SFAWI property. The only complete migration pathway for site soils is through direct contact to impacted surface soils.

6.2 GROUNDWATER

Groundwater impacts above NR 140 enforcement standards are noted in the site monitoring wells. The following conclusions can be derived from the groundwater results from this site:

- Lead concentrations in groundwater exceeded the PAL are likely related to the soil impacts detected in the foundry sand fill found at the site and throughout the area. Arsenic concentrations in groundwater exceeded the PAL but may be related to naturally occurring arsenic in the site soils. Cadmium concentrations in groundwater exceeded the PAL but do not appear to be related to site soils. Beryllium concentrations in groundwater exceeded the PAL but their origin is uncertain in relation to the site soils.
- Petroleum related VOCs in groundwater may be related to residual soil contamination from fill materials or possibly releases from historic operations at the salvage yard.
- Chlorinated VOCs in groundwater may be related to offsite sources such as the plume from the D-F, Inc. facility or the previously remediated WI DOT Lake Arterial Highway property (former SFAWI property). Furthermore, the VOC concentrations in groundwater at the SFAWI property (i.e., 0.33 to 4.8 ug/L vinyl chloride) are significantly less than the VOC concentrations found at the upgradient EZ Paintr facility (i.e., 2,600 ug/L vinyl chloride) or the downgradient D-F, Inc. facility (i.e., 2,200 ug/L vinyl chloride).
- The only compounds detected in site monitoring wells above NR 140 enforcement standards were benzene (5 wells) and vinyl chloride (3 wells).
- PCBs are not present in the site groundwater, so no remediation is necessary for PCBs in groundwater.
- Groundwater migration is likely affected by the large diameter storm sewers present under Pennsylvania and Norwich Avenues, which may be acting as a hydraulic barrier and preferential migration pathway.
- No complete migration pathways exist for the groundwater. Downgradient receptors are not known to be present.

The nature and magnitude of groundwater contamination has been characterized through this investigation. Because area groundwater is impacted at concentrations equal to or greater than the concentrations measured at the SFAWI property, further investigations regarding the extent of site-related groundwater contamination are not warranted by SFAWI.

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7.0 RECOMMENDATIONS

The following recommendations are proposed for mitigating environmental risks from this site and determining site attenuation/remediation trends.

- Installation of pavement will provide the following remedies:
 - Provide an engineered control that will allow for a performance standard for direct contact with soils at the site, Both Salvag yard a vacant lot
 - Provide for the application of site-specific performance based soil standards, in accordance with NR 720.19 which would be greater than applicable NR 720 RCLs,
 - Fulfill TSCA cap requirements for bulk PCB remediation cleanups (40 CFR 761.61(a)(7) and (a)(8)),
 - Limit groundwater infiltration from the impacted site soils and potential contaminant migration to the groundwater,
 - Provide compliance with the requirements for the site to meet stormwater best management practices with respect to managing potentially contaminated runoff from the site.
- Installation of fencing to limit access to the vacant lot and mitigate potential environmental risks from exposures to the site soils. Installation of fencing and appropriate signage will provide for application of a 50 mg/kg PCB cleanup goal over the vacant lot.
- Completion of a follow-up round of site groundwater monitoring to confirm site groundwater results and concentration levels.

SFAWI intends to expand the salvage yard operation onto the vacant lot. The vacant lot would be cleared of brush and graded, and the entire property would be paved and enclosed by a security fence to reduce or eliminate the potential for direct contact to site workers and the public.

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- Wisconsin Department of Natural Resources, letter from Ms. Nancy Ryan to Mr. Robert Mellon, dated August 3, 2000.

MLN/mln/vlr/ndj/LB1/DWH N:\Jobs\208\2394\01\wp\rpt\99_Sec 8 GW Invest.doc 2082394.01160101-MAD-1

Table 1

Summary of Water Table Elevations and Survey Data St. Francis Auto Wreckers 4043 South Pennsylvania Avenue St. Francis, Wisconsin

	<u>MW01</u>	<u>MW02</u>	<u>MW03</u>	<u>MW04</u>	<u>MW05</u>
Top of Casing (ft)	676.51	675.17	664.95	672.27	671.74
Total Depth (ft)	25.0	23.0	20.0	20.0	24.3
Date	D	epth to Wat	er from Top	of Casing (<u>ft)</u>
7/26/01	18.50	17.88	14.10	17.98	18.84

Groundwater Elevation (ft above mean sea level)

7/26/01	658.01	657.29	650.85	654.29	652.90
1120101	000.01	031.23	050.05	0.51.25	052.90

Notes:

1. Datum is concrete sidewalk slab at the southwest corner of the intersection of East Norwalk Street and South Pennsylvania Avenue.

TAB/tab/LBL N:\jobs\208\2394\01\gw_elev_table.xls 2082394.01160101-MAD 10/8/01

TABLE 2

Summary of Soil Analytical Results - Metals August 1999 and July 2001 Sampling Events St. Francis Auto Wreckers St. Francis , Wisconsin

	Calcula																									
	TCLP			Direct Contact S	oil Standards	Vacant Portion of Property								Auto Salvage Yard Portion of Property							Drainage Swale					
	Threshold	NR 72	0 RCL	Adult Employee	Adult	HP02	HP05	SB01	HP06	SB02	HP07	SB04	HP09	HP11	SB03	HP14	SB07	HP17	HP18	HP20	HP21	HP22	HB01	SB05	HB02	SB06
Sample Depth	Conc. (mg/L)	Non-Ind.	Indust.	Carcinogenic	Non-Carcin.	<u>2-ft.</u>	<u>2-ft.</u>	<u>4-5ft</u>	<u>2-ft.</u>	<u>4-5ft</u>	<u>2-ft.</u>	<u>4-5ft</u>	<u>2-ft.</u>	<u>4-ft.</u>	<u>4-5ft</u>	<u>6-ft.</u>	<u>4-5ft</u>	<u>8-ft.</u>	<u>8-ft.</u>	<u>4-ft.</u>	<u>2-ft.</u>	<u>4-ft.</u>	<u>0-1 ft.</u>	<u>3-4ft</u>	<u>0-1 ft.</u>	<u>3-4ft</u>
Analyte (mg/kg)															1											
Barium	100	NS	NS	NT	72000	14	160	NA	130	NA	300	NA	6.0	8.3	NA	200	NA	49	49	16	23	25	130	NA	1800*	NA
Cadmium	1.0	8	510	NT	1000	ND	72	13.0	ND	NA	10.7	NA	12.5	33.3	0.13	3.90	NA	ND	ND	ND	ND	ND	4.42	NA	40.1	2.0
Chromium	5.0	14 ⁽¹⁾	200 (1)	NT	5100 ⁽²⁾	4.43	96	NA	132	56	35	NA	11	27.8	NA	137	94.5	14.3	19.5	46.7	11.4	11.4	112	168	29.2	NA
Lead	5.0	50	500	NT	NT	4.22	1390	1280	378	216	1370	35.4	2.67	520	25.2	384	1710	12.9	14.8	13.3	16.8	17.8	646	1120	531	108
Selenium	1.0	NS	NS	NT	5100	ND	0.800	NA	ND	NA	ND	NA	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	NA	6.92	NA
Silver	5.0	NS	NS	NT	5100	ND	0.707	NA	1.70	NA	0.492	NA	ND	0.217	NA	1.05	NA	ND	ND	ND	ND	ND	0.114	NA	9.61	NA
Arsenic	5.0	0.039	1.60	1.9	310	2.26*	15.9*	NA	38.6*	NA	17.3*	NA	6.40*	58.4*	NA	17.3*	NA	6.60*	4.86*	4.93*	5.60*	9.60*	6.06*	NA	3.73*	NA
Mercury	0.2	NS	NS	NT	310	0.0239	5.30*	3.7	1.16	NA	0.354	NA	0.0262	ND	NA	0.214	NA	ND	0.0441	ND	ND	0.0277	46.6*	26.3*	1.06	NA
TCLP Cadmium	1.0							0.363		NA		NA			0.00613		NA							NA		0.0107
TCLP Chromium	5.0							NA		0.0023		NA			NA		0.0619							0.0302		NA
TCLP Lead	5.0							2.04		8.32		0.0261			0.292		10.1							1.12		0.0105
TCLP Mercury	0.2							<1.4E-4		NA		NA			NA		NA				<u> </u>			<1.4E-4		NA

General Notes:

1. All of the samples were obtained from the bottom of the collected core interval depths noted above. Thus, the actual analyzed intervals for this analysis was approximately the 6 inches above the noted depths.

2. TCLP = Toxicity Characteristic Leachate Procedure. These are the threshold concentrations for metals in the resulting liquid from the TCLP test, as given in Table 1 of NR 605.08(5), Wis. Adm. Code. If the leachate concentration exceeds these threshold values, then the material is classified as a hazardous waste. Due to the dilution factor present in the TCLP analysis, soil concentrations that are more than 20 times greater than the TCLP threshold concentration have a possibility of exceeding the threshold concentrations.

3. RCLs = residual contaminant levels, the soil cleanup standards established under NR 720, Wis. Adm. Code.

4. NR 720 Industrial standards are for sites not zoned for residential use.

5. NR 720 Non-industrial standards are for sites zoned for residential or commercial use.

- 6. NS = No standard established under NR 720
- 7. ND = compound not detected above background levels
- 8. NT = No toxicity information was available to calculate direct contact, risk-based standards for this scenario.

9. NA = Not analyzed.

10. Bolded results indicate that concentration meets or exceeds NR 720 non-industrial residual contaminant level

11. Bolded and shaded results indicate that concentration meets or exceeds NR 720 RCLs for industrial sites.

12. * = indicates that results exceed the calculated direct contact risk based standard for either the child residential non-carcinogenic scenario or the adult employee scenario.

13. Italicized results indicate that the metal concentration was more than 20 times the TCLP threshold level.

14. Metals were analyzed for using EPA Method 6010B.

15. The HP samples were from the August 1999 sampling activities. The SB samples were from the August 2001 sampling activities.

Footnotes:

(1) NR 720 RCL is for hexavalent chromium.

(2) The risk based calculated standard for the adult industrial scenario for chromium is based upon Chromium(VI) toxicity information.

MLN/las/LBL

n:/jobs/208/2394/01/soilanal_total.xls (Metals)

TABLE 3Summary of Soil Analytical Results - Polychlorinated Biphenyls (PCBs)August 1999 and July 2001 Sampling Events

St. Francis Auto Wreckers

St. Francis, Wisconsin

		Vacant Portion of Property												Auto Salvage Yard Portion of Property										Drainage Swale		
Sample Depth	HP01 2-ft	HP02 2-ft	SB01 0-0.5ft	HP05 2-ft	SB01 4-5ft	HP06 2-ft	SB04 0-0.5ft	HP07 2-ft.	SB04 4-5ft	HP09 2-ft	HP12 2-ft	HP13 2-ft.	SB09 4-4 5ft	HP14 6-ft	HP15 2-ft.	SB08 3-4ft	HP16 6-ft	HP19 8-ft.	HP20 4-ft	HP21 2-ft.	HP22 4-ft.	HP23 2-ft	HB01 0-1 ft.	SB05 3-4ft	HB02 0-1 ft.	
Analyte (mg/kg)	<u> </u>			2							<u> </u>			<u> </u>				<u></u>	<u></u>				<u> </u>			
PCB-1016	ND	ND	<0.044	ND	<0.051	ND	<0.043	ND	<0.041	ND	ND	ND	<0.050	ND	ND	<0.044	ND	ND	ND	ND	ND	ND	ND	<3.3	ND	
PCB-1221	ND	ND	<0.044	ND	< 0.051	ND	< 0.043	ND	< 0.041	ND	ND	ND	< 0.050	ND	ND	<0.044	ND	ND	ND	ND	ND	ND	ND	<3.3	ND	
PCB-1232	ND	ND	< 0.033	ND	< 0.038	ND	< 0.033	ND	<0.031	ND	ND	ND	<0.037	ND	ND	<0.033	ND	ND	ND	ND	ND	ND	ND	<2.5	ND	
PCB-1242	ND	ND	< 0.056	ND	< 0.063	ND	< 0.054	ND	< 0.051	ND	ND	ND	<0.062	ND	ND	< 0.056	ND	ND	ND	ND	ND	ND	ND	<4.2	ND	
PCB-1248	ND	ND	< 0.033	ND	<0.038	ND	< 0.033	1.3	<0.031	ND	ND	ND	<0.037	0.23	ND	<0.033	ND	ND	0.36	ND	ND	0.23	ND	<0.050	ND	
PCB-1254	ND	ND	<0.022	1.6	27	0.3	< 0.022	0.52	<0.020	0.76	0.1	8.3	< 0.025	0.26	3.7	<0.022	ND	1.1	0.46	ND	ND	0.18	5.4	<0.033	ND	
PCB-1260	0.021	ND	< 0.044	ND	<2.5	ND	< 0.043	ND	< 0.041	ND	ND	ND	<0.050	ND	ND	<0.044	ND	ND	ND	ND	ND	ND	ND	<0.067	0.35	
Total PCBs	0.021	ND	ND	1.6	27	0.3	ND	1.82	ND	0.76	0.1	8.3	ND	0.49	3.7	ND	ND	1.1	0.82	ND	ND	0.41	5.4	ND	0.35	
Total Solids (%)	87.4	94.1	89.1	84.6	78.6	74.7	91.6	90.8	97.6	95.2	95.8	76.9	80.8	83.4	89.7	90.5	79.7	80.6	88.2	90.9	91.1	74.7	87.9	60.0	92.7	

General Notes:

1. All of the samples were obtained from the bottom of the collected core interval depths noted above. Thus, the actual analyzed intervals for this analysis was approximately the 6 inches above the noted depths.

2. ND = Not detected

3. PCBs were analyzed for using EPA Method 8082.

4. The HP samples were from the August 1999 sampling activities. The SB samples were from the August 2001 sampling activities.

MLN/las/LBL

n:/jobs/208/2394/01/soilanal_total.xls (PCBs)

Table 4

Summary of Groundwater Analytical Results - Metals St. Francis Auto Wrecker's Facility 4043 South Pennsylvania Avenue St. Francis, Wisconsin

	<u>Arsenic</u>	Antimony	Beryllium	<u>Cadmium</u>	Chromium	Copper	Lead	Nickel	Selenium	Silver	<u>Thallium</u>	<u>Zinc</u>	Mercury
ES	50	6	4	5	100	1300	15	100	50	50	2	5000	2
PAL	5	1.2	0.4	0.5	10	130	1.5	20	10	10	0.4	2500	0.2
<u>MW01</u>				:									
7/26/01	<1.3	<3.4	0.68	0.84	1.4	<2.9	<1.4	10.2	<5.2	<0.62	<5.4	22.7	<0.14
<u>MW02</u>													
7/26/01	13.5	<3.4	0.76	0.44	<0.61	4.8	2.6	16.7	<5.2	<0.62	<5.4	34.4	<0.14
<u>MW03</u>													
7/26/01	4.4	<3.4	0.64	<0.42	1.2	<2.9	<1.4	9.1	<5.2	<0.62	<5.4	13.2	<0.14
<u>MW04</u>							i					1	
7/26/01	<1.3	<3.4	0.62	<0.42	<0.61	<2.9	<1.4	6.7	<5.2	<0.62	<5.4	16.3	< 0.14
<u>MW05</u>													
7/26/01	4.4	<3.4	0.79	<0.42	0.69	<2.9	2.0	10.3	<5.2	<0.62	<5.4	7.2	<0.14

Notes:

1. ES = Enforcement Standard, Chapter NR140, Wisconsin Administrative Code. Bolded values indicate exceedances.

2. PAL = Preventive Action Limit, Chapter NR140, Wisconsin Administrative Code. Bolded and italicized values indicate exceedances.

3. All concentrations are quoted in units of ug/L.

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Summary of Groundwater Analytical Results - PCBs St. Francis Auto Wrecker's Facility 4043 South Pennsylvania Avenue St. Francis, Wisconsin

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	Aroclor-	Total						
	<u>1016</u>	<u>1221</u>	<u>1232</u>	<u>1242</u>	<u>1248</u>	<u>1254</u>	<u>1260</u>	PCBs
ES	None	0.03						
PAL	None	0.003						
<u>MW01</u> 7/26/01	<0.003	<0.002	<0.003	<0.003	<0.003	<0.002	<0.003	ND
<u>MW02</u> 7/26/01	<0.003	<0.002	<0.003	<0.003	<0.003	<0.002	<0.003	ND
<u>MW03</u> 7/26/01	<0.003	<0.002	<0.003	<0.003	<0.003	<0.002	<0.003	ND
<u>MW04</u> 7/26/01	<0.003	<0.002	<0.003	<0.003	<0.003	<0.002	<0.003	ND
<u>MW05</u> 7/26/01	<0.15	<0.1	<0.15	<0.15	<0.003	<0.002	<0.003	ND

Notes:

1. ES = Enforcement Standard, Chapter NR140, Wisconsin Administrative Code.

2. PAL = Preventive Action Limit, Chapter NR140, Wisconsin Administrative Code.

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Summary of Groundwater Analytical Results - VOCs St. Francis Auto Wrecker's Facility 4043 South Pennsylvania Avenue St. Francis, Wisconsin

	1.1.Tolehor	ostione	ethylbentere	penere 12.Dichor	oethane	horsethene	Innoethene	emplemente	pentene	Bentene Bentene	n-Buylbert	ene est Buylos	NO. DE LE DININE	Intene Chicobent	ne Choostan	e Chionform	Chiorometh	ane Einythemen	e sopoolog	orisonoon	Juere Menyleri	und ener	n Propiles	tene	Shene Toluene	Virol ohor	Se no prime	e officiere	/
ES	850	480	600	5	7	100	480	1250	75	5	None	None	None	100	400	6	3	700	None	None	60	40	None	5	1000	0.2	10000	10000	
PAL	85	96	60	0.5	0.7	20	96	125	15	0.5	None	None	None	20	80	0.6	0.3	140	None	None	12	8	None	0.5	200	0.02	1000	1000	
7/26/01	0.86	6.4	0.40	0.40	4.1	0.19	1.7	0.16	0.50	4.4	1.3	0.86	0.23	0.38	1.5	<0.1	0.34	1.3	5.4	6.8	2.3	26	2.7	<0.1	1.7	0.33	71	0.67	
<u>MW02</u> 7/26/01	0.94	0.11	<0.2	<0.2	<0.2	<0.1	0.11	<0.1	<0.1	0.35	<0.1	0.47	1.0	<0.1	·<0.4	<0.1	0.35	<0.1	0.32	0.72	0.95	<0.2	0.15	<0.1	<0.2	0.46	<0.2	<0.1	
<u>MW03</u> 7/26/01	2.0	0.33	0.93	<0.2	0.42	<0.1	<0.1	<0.1	0.32	4.7	4.7	8.7	3.0	6.5	1.2	<0.1	0.67	0.26	10	<0.1	<0.3	<0.2	14	0.15	0.64	4.8	0.40	0.22	
<u>MW04</u> 7/26/01	0.13	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	2.5	<0.1	<0.2	<0.1	<0.1	0.54	<0.1	0.32	<0.1	<0.1	<0.1	2.3	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	
<u>MW05</u> 7/26/01	<1.5	350	<2.9	<2.2	<2.8	<4.0	15	<1.3	<2.1	10	95	140	25	<1.2	<3.0	1.9	<4.0	5.9	120	28	<1.6	51	250	<1.5	<1.4	<1.8	37	3.4	

Notes:

S = Enforcement Standard, Chapter NR140, Wisconsin Administrative Code. Bolded values indicate exceedances.
 PAL = Preventive Action Limit, Chapter NR140, Wisconsin Administrative Code. Bolded and italicized values indicate exceedances.

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Summary of Groundwater Analytical Results - SVOCs St. Francis Auto Wrecker's Facility 4043 South Pennsylvania Avenue St. Francis, Wisconsin

		rentene	noi /	tohenol		attalate	malate	malate	ate	\$.		
	1,2-1010	hioroc 2. Met	olphet 38 4	Methylin Acetor	nenonu Bis	inet When Dinney	JONDIN Dinnos	Sylphu Diethy	phinate Artitroso	opylanine Hapit	alene phenol	. /
ES	600	None	None	None	6	100	None	None	None	40	6000	
PAL	60	None	None	None	0.6	20	None	None	None	8	1200	
<u>MW01</u> 7/26/01	<0.38	34	29	2.7	<2.8	<1.4	<0.64	<0.1	1.3	13	3.0	
<u>MW02</u> 7/26/01	<0.38	<0.45	<0.34	<0.5	1.6	<0.68	<0.32	<0.51	<0.48	<0.48	<0.23	
<u>MW03</u> 7/26/01	0.46	<0.45	<0.38	<0.5	1.9	1.2	0.69	0.52	<0.48	<0.48	<0.23	
<u>MW04</u> 7/26/01	<0.19	<0.45	<0.38	<0.5	1.4	<0.68	<0.32	<0.51	<0.48	<0.48	<0.23	
<u>MW05</u> 7/26/01	<4.8	<11.0	<9.5	<13.0	<35.0	<17.0	<8.0	<13.0	<12.0	25	<5.8	

Notes:

1. ES = Enforcement Standard, Chapter NR140, Wisconsin Administrative Code. Bolded values indicate exceedances.

2. PAL = Preventive Action Limit, Chapter NR140, Wisconsin Administrative Code. Bolded and italicized values indicate exceedances.

3. Only those compounds with detections are presented in this table.

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Summary of Groundwater Analytical Results - Field Parameters St. Francis Auto Wrecker's Facility 4043 South Pennsylvania Avenue St. Francis, Wisconsin

			Well		
Parameter	MW01	MW02	MW03	MW04	MW05
Dissolved Oxygen (mg/L)	0.5	2.3	0.9	0.5	2.2
Oxidation Reduction Potential (meV)	-84	-44	-82	-96	-91
Temperature (deg C)	13.0	12.2	12.1	12.3	12.5
Specific Conductance (µs/cm)	2730	370	2040	1868	2050
pH (s.u.)	7.25	6.70	7.48	7.75	7.63

MLN/mln/TAB n:/jobs/2394/01/GW_results.xls (field)

















WDNR GROUNDWATER INVESTIGATION WORK PLAN APPROVAL LETTER

Α



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor George E. Meyer, Secretary Gloria L. McCutcheon, Regional Director Southeast Region Annex 4041 North Richards Street PO Box 12436 Milwaukee, Wisconsin 53212-0436 Telephone 414-229-0800 FAX 414-229-0810

August 3, 2000

Mr. Robert Melton St. Francis Auto Wreckers, Inc. 4043 S. Pennsylvania Ave. St. Francis, WI 53207

SUBJECT: St. Francis Auto Wreckers – Work plan for groundwater investigation, WDNR FID#241469250 BRRTS#0210000269

Dear Mr. Melton:

The Wisconsin Department of Natural Resources (the Department) has received a workplan for groundwater investigation and additional soil sampling for the St. Francis Auto Wreckers facility. I have the following comments regarding the proposed investigation:

<u>Soil :</u>

Additional sampling is proposed to characterize contaminated soil/fill at the St. Francis Auto Wreckers site. TCLP analysis is proposed for soil/fill where previous investigation indicated concentrations of metals greater than 20 times the TCLP regulatory level. Additional sampling is also proposed to determine PCB concentrations in locations where PCBs were previously detected at levels greater than 1 part per million. It is the Department's opinion that proposed additional sampling is being undertaken further characterize contamination but does not represent a plan to determine the degree and extent of contaminants. Additional sampling may be required in the future.

Proposed soil borings will be analyzed for the following: <u>underlined items are additional</u> <u>parameters to be included beyond what was suggested in the soil sampling plan</u>. Total metal analysis should be included with all TCLP metals samples.

SB01/HP05 - PCBs <u>above</u> and below 2'; TCLP for <u>cadmium</u>, lead and mercury; <u>total lead</u>, <u>cadmium</u>, mercury

SB02/HP06 - TCLP chromium, lead; total chromium and lead

SB03/HP11 -TCLP cadmium and lead; total cadmium and lead

SB04/HP07 - PCBs (PCBs exceeded 1 ppm at HP07) above and below 2'; TCLP lead; total lead

SB05/HB01 – <u>PCBs (HB01 PCBs exceeded 1 ppm at 0-1')</u> below 1 foot; TCLP chromium, lead, mercury; total chromiu, lead and mercury

SB06/HB02 - TCLP for cadmium and lead; total cadmium and lead





SB07/HP14 – TCLP lead, chromium; total lead and chromium

HP-15 - PCB 3.7 ppm @ 2' - define concentration below that.

HP-13 – PCB 8.3 ppm at 2 ' – define concentration below that.

Groundwater:

The proposed groundwater investigation includes the installation of 4 onsite water table monitoring wells. An additional well is needed on the northern property line (a downgradient well, i.e. located in the vicinity of HP04). A well on the southern border (preferably outside the salvage yard) would also be desirable to assess upgradient contaminant conditions. Suggested sampling parameters include VOCs, metals and PCB contamination. Analysis for SVOCs should be included. Detection limits for SVOC analysis in soil/fill were very high in several soil samples, therefore, it unclear to what extent SVOCs are present.

It is understood that the proposed groundwater investigation is intended to assess releases to groundwater from (SVOCs), VOCs, metals and PCB contamination in soil/fill at the site as well as potential offsite contributions. Please be aware, however, that additional wells may be required to define both offsite and onsite contaminants.

Please inform the Department when the proposed work will begin. If you have any questions regarding this letter, please call me at (414) 229-0874.

Sincerely,

nuncy DRyan

Nancy D. Ryan, Hydrogeologist Remediation and Redevelopment

Cc: SER site file Dan Hall, Montgomery Watson



SOIL BORING LOGS, BOREHOLE ABANDONMENT FORMS, MONITORING WELL CONSTRUCTION FORMS, AND MONITORING WELL DEVELOPMENT FORMS

В

() MW	One Scier P.O. Box Madison, TEL. (60	nce Court 5385 WI 53705 8) 231-4747		LOG OF Gen	TES eral	ST E No	BORING tes
EMPIRICA	CORRELATIONS	WITH STANDAR) PF	NETRATION RESIST		N V/	ALLIES *
	+		PRES	SIVE	NVALL	IE *	RELATIVE
(BLOWS/F	T) CONSISTENCY	STRENGTH (TON	S/SQ	FT)	(BLOWS	5/FT)	DENSITY
0 - 2 3 - 4 5 - 8 GRAINED SOILS 3 - 4 5 - 8 9 - 16 17 - 32 > 32	VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	0 - 0.25 0.25 - 0.50 0.50 - 1.00 1.00 - 2.00 2.00 - 4.00 > 4.00	5 0 0 0 0	COARSE GRAINED SOILS	0 - 4 5 - 1 11 - 3 31 - 5 >50	4 0 30 50 0	VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE
* ASTM D 1	586; NUMBER OF BLOWS OF 1	40 POUND HAMMER FALLI	NG 30	INCHES TO DRIVE A 2 IN. O.D.,	1 1/2 IN. I	.D. SAM	PLER ONE FOOT.
GRA	IN SIZE TERMINOLOGY		\bigcap		SYMB	OLS	
Soil Fraction Partic	le Size U.S.	Standard Sieve Size		SAMPLE TYPE			WELL GRAPHICS
Boulders Lorgo	r then 12" 1	erger then 12"				目目	
Cobbles 3" to Gravel: Coarse 3/4"	12"	3" to 12" 3/4" to 3"		Unsampled interval		Later Bar	Concrete surface seal around well casing
Sand: Coarse2.00 Medium0.42	mm to 3/4	#4 to 3/4 #10 to #4 #40 to #10		2" outside diameter spl spoon sampler	lit		Bentonite slurry or cement- bentonite grout around well casing
Fine 0.074 Silt 0.005 Clay Small	4 mm to 0.42 mm 6 5 mm to 0.074 mm 5 er than 0.005 mm 5	#200 to #40 Smaller than #200 Smaller than #200		3" outside diameter spl spoon sampler	lit		Bentonite pellet seal around well casing
Plasticity characteris	tics differentiate betwee	n silt and clay.	ÌÌ	3" Shelby tube			Fine filter sand backfill around well casing
ORGANIC CONTENT COMBUSTION METH	BY OD oss on Bronational	PROPORATIONS SIONLESS SOILS Defining Range But Reconstruction		5' continuous sampler			Sand backfill around well casing
Description I Non OrganicLess th	an 4% Trace	of Weight	Litten al souther	Drilled by hollow stem augers; not sampled; logged by cuttings			Sand filter pack around well screen
Sedimentary Peat	4-12% Little 2-50% Some More And	5% - 12% 12% - 35% 35% - 50%	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Hand sample from surf	ace		Sand backfill or natural soil collapse in borehole
Woody Peattha	n 50%			AN			Bentonite seal in borehole
GEN	NERAL TERMINOLOGY			4" outside diameter co barrel sampler	re Lass		Gravel backfill around well casing
Physical Characteristics Major Constituents - Clar Structure - Laminated, v	- Color, moisture, grain s y, silt, sand, gravel arved, fibrous, stratified,	shape, fineness, etc. , cemented,		not sampled; logged by cuttings	y		Gravel backfill around
fissured, etc. Geologic Origin - Glacial,	alluvial, eolian, residual,	etc.		LABORATORY TESTS			vortiour biot guo violi
DESCRIPTIO	N OF BORING LOG HEA	DINGS		V - Moisture Content, % L - Liquid Limit, %			Gravel backfill around a leachate well
No. = Sample num	ber within the boring.			L - Mastic Limit, % 1 - Loss on Ignition, % D - Dry Unit Weight, Ibs./	cu, ft.		Gravel backfill around a perforated gas well
Moist = Visual estim	ample recovery. ate of the amount of mo e and sample interval.	pisture in the sample.	p	H - Measure of Soil Alkali or Acidity	nity		Gravel base material
N Value = The penetra	tion resistance, N, is the	sum of blows		DRILLING AND SAMPLI	NG	WAT	ER LEVEL MEASUREMENT
required to a	effect two successive 6'	' penetrations of A D1586					
Depth = Depth below	spoon sampler per ASTN v ground surface	M D 1000.		RC - Rock Coring (Size)		¥	- Water level at time shown
Visual	Bround partition			2D - Rock Quality Design	ator		- No Water Encountered
Classification = Litholog	ic symbol of soil or rock	c type; Description		DM - Drilling Mud	[BCR	- vernie Drinny - Before Casina Removal
of strat	igraphy; Borehole materi ar Beeding, tonglog, ft	iai graphics.	c	CW - Clear Water		ACR	- After Casing Removal
PID = Photoionizet	ion detector reading. Va	lues are recorded		AR - Air Rotary		AD	- After Drilling
as benzene (0 = backgro	equivalent units in ppm a und reading).	above background	н	DC - Drove Casing (Size) SA - Hollow Stem Auger FA - Flight Auger		NOTI show	E: Water level measurements in on the boring logs represent itions at the time indicated and
Other environmental analyse value where quantifiable or	es may be reported. Result as zero or ND when below	s are provided as a detection limit.		HA - Hand Auger		may	not reflect static levels.



One Science Court P.O. Box 5385 Madison, WI 53705 TEL. (608) 231-4747

<u> </u>		·····		
NIFIED SOI	LC	LASS	SIFICATION AND SYMBOL CHART	LABORATORY CLASSIFICATION CRITERIA
		COA	RSE-GRAINED SOILS	
(More than 5	60%	of ma	terial is larger than No. 200 sieve size.)	
· <u></u>		Clean	Gravels (Less than 5% fines)	
GRAVELS		GW	Well-graded gravels, gravel-sand mixtures, little or no fines	GW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})}{D_{10}XD_{60}}$ between 1 and 3
lore than 50% of coarse		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	GP Not meeting all gradation requirements for GW
fraction larger		Gravel	s with Fines (More than 12% fines)	
than No. 4 sieve size		GM	Silty gravels, gravel-sand-silt mixtures	GM Atterberg limits below "A" Above "A" line with P.I. line or P.I. less than 4 between 4 and 7 are
		GC	Clayey gravels, gravel-sand-clay mixtures	GC Atterberg limits above "A" line with P.I. greater than 7
	17.77	Clean	Sands (Less than 5% fines)	$(D_{n})^2$
SANDS		sw	Well-graded sands, gravelly sands, little or no fines	SW $C_u = \frac{-60}{D_{10}}$ greater than 6; $C_c = \frac{-10}{D_{10} \times D_{60}}$ between 1 and 3
50% or more of coarse		SP	Poorly graded sands, gravelly sands, little or no fines	SP Not meeting all gradation requirements for SW
raction smaller	11.1.2	Sands	with Fines (More than 12% fines)	
than No. 4 sieve size	開開	SM	Silty sends, send-silt mixtures	SM Atterberg limits below "A" line or P.I. less than 4 Zone with P.I. between 4
		sc	Clayey sands, sand-clay mixtures	SC Atterberg limits above "A" line with P.I. greater than 7
	1.7.	FI	NE-GRAINED SOILS	Determine percentages of sand and gravel from grain-size curve. Dependin
(50% or mo	ore c	of mate	rial is smaller than No. 200 sieve size.)	on percentage of fines (fraction smaller than No. 200 sieve size),
SILTS		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	Coarse-grained soils are classified as follows: Less than 5 percent GW, GP, SW, SF More than 12 percent GM, GC, SM, SC 5 to 12 percent Borderline cases requiring dual symbols
CLAYS Liquid limit		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	PLASTICITY CHART
less than 50%		OL	Organic silts and organic silty clays of low plasticity	80
SILTS		мн	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
CLAYS Liquid limit		сн	Inorganic clays of high plasticity, fat clays	
50% or greater		он	Organic clays of medium to high plasticity, organic silts	
HIGHLY ORGANIC SOILS		РТ	Peat and other highly organic soils	Δ ⁻ 4 5-100-20 ML & OL
				· · · · · · · · · · · · · · · · · · ·
·			OTHER MATE	RIAL SYMBOLS
	_			

UNIFIED SOIL

CLASSIFICATION SYSTEM

Topsoil GS SM/GM **Crystalline Rock** CL-ML Dolomite Pavement GC-GM SC/GC Claystone Sandstone Siltstone Fill GS2 SC-SM Coal Limestone Shale Refuse See log description for USCS classification of the following soils: SM/GM & SC/GC - Symbols are used to differentiste SM, GM, SC & GC soils. GS2 - Symbol used when approximately equal percentages of gravel, sand, silt & clay exist. GS - Symbol used for GP, GW, SP or SW soils with nearly equal sand and gravel.

2-enq

Soil Boring Logs and Abandonment Forms

SOIL	BORING	LOG	INFORMATION
Form 4	400-122		7-98

]	Route To:	Watershed Remediati	/Wastewater 🗌 on/Revelopment	Was	te Man Other	ageme	nt 🗌					Pag	- 1	of	1
Facili St	ty/Proj	ect Na ncis A	me Auto			2082394.011	60101	Licens	se/Pern	nit/Mor	nitoring	Numb	er	Borin N	g Num 1W01	ber		
Borin	g Drille	d By:	Name of	crew chief	f (first, last)	and Firm		Date I	Drilling	Starte	d	Date	Drilling	g Comp	leted	Drillin	g Meth	nod
Bage	er Sta	te Dr	illing -	J. Rich					7/1	7/01			7/17	7/01		4 1/4" 1	.D. HSA	•
WI U	nique V	Vell No	o. Dì	NR Well II	D No.	Well Name	1	Final	Static	Water	Level	Surfa	ce Elev	ation		Boreho	ole Dia	meter
Local	Grid C) rigin [(estin	nated:) or Boring L	ocation		L		Feet M	ISL	Loca	1 Grid I	_Feet I	MSL n		<u>o i</u>	nches
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NE	1/4 @	$\frac{N}{N}$	<u>v</u> 1/4 o	f Section	<u>, T</u>	<u>0</u> N, R <u>2</u>	2E/\	V Loi	ng	Ciati			V/11	Feet [⊐s		Fee	t 🗆 W
	Facili			Cou	Milwaul	kee		unty Co 41	ae	S	Frai	ncis	Village	÷				_
Sam	ple	ł	σ											Soil	Prope	ties		
	e 4	ب	F + 0 L T		Soil/Roc	k Description	n						0					
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лел Ц	+ 0 - 0 - 0 - 0 - 0 - 0 - 0 	U r	th Iou fac		Each	Major Unit			6	i Ho	- D	ΓFI	9 L 0 9 L 0	ter ter		i + i	90	L e
a d d d	0 2 C	3101	а В С Г С С						ISC:	na og	le –	, ID,	E +	- 0 - 0	<u>σ</u> ε	- Ja:	30	
~ 10				Brown t	o Gray, Silt	v SAND with Gra	avel and	1	FILL			ш.		20		<u> </u>	<u>u</u> .	
1	12	9	-	Fill Mat	erials: Meta	l, Plastic, Glass,	Rubber					5.3		М				
2	6	100										4.9		М				
3	6	100	- 5									5.0		М				
4	12	11	Ē									53		M				
•			 -									0.0						
5	11	23	-10									4.7		w				
6	0	100	-									7.3		М				
7	0	100										4.9		М			<u> </u>	
8	16	3	-15						L			4.2		w				
-			ΕI	Soft, Bro	own-Gray N	1ottled, Silty CLA	ΑY		CL-MI									
9	4	100		Light Br	own GRAV	EL with Sand (D	olomite)	GP			3.2		W				
10	10	19							{	••••		2.1		W				
				Stif to M	ledium Stiff	, Gray, Silty CLA	ĄΥ		¢L-мі									
11	13	19	-									2.1		W				
12	24	19										2.1		w				
			- 25															
					End of	Boring at 25 5 ft				111111								
			-		End Of	boring at 25.5 It												
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

ТАРВ /

Signature

MONTGOMERY WATSON

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

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Route To: Watershed/Wastewater 🗌 Waste Management 🗌 Remediation/Revelopment 🗍 Other 🗌 _____

				Remediatio		Other							Pag	e_1	_of	1
Facili St	ty/Proje . Frai	xt Na ncis A	^{me} Auto		2082394.01160101	Licens	e/Pern	nit/Mor	nitoring	Numb	er	Borin N	g Num 1W02	ber 2		
Borin	g Drille	d By:	Name of	f crew chief (first, last)	and Firm	Date I	Drilling	Starte	d	Date	Drilling	g Comp	leted	Drillin	g Metl	ıod
Bage	er Staf	e Dr	illing -	J. Rich			7/1	7/01			7/17	7/01			11 0. 1157	•
WI U	nique W	ell No	5. D	NR Well ID No.	Well Name	Final	Static	Water I	Level	Surfa	ce Elev	ation		Boreho	ole Dia	meter
					MW02			Feet M	ISL	(572.6	_Feet I	MSL		8 i	nches
Local	Grid O	rigin L	_ (esti	mated:) or Boring Lo	E S/C		.at	o 		Loca	Grid	ocatio. T	n ⊐N			
NE		f NV	N 1/4 o	of Section $\frac{10}{22}$, T	6 N, R 22 E	/W Loi	ıg	0				Feet [Fee	at □ W
	Facili	ty ID		County Milwaul	kee C	ounty Co 41	de	Civil St	Town/ . Fra	City/or ncis	Village	>				
Sam	ple		77									Soil	Prope	rties]
	۰υ	່ ທ	н о + 1	Soil/Roc	k Description						Ð					
	+ - C =	t t		And Geol	ogic Origin For) i <	n				10
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NUN	re Ler	<u>в</u>	Der Sur				nsı	Lo;	DΈ	DI d	s t c	θΩΰ		Ц П П П П П	٩	202
			-	Light Gray, Silty SA	ND with Crushed Dol	omite	SM									
1	14	7	E	Gravel	ine to Medium SAND	(SM)	FILL			1.2		D				
2	13	4		(Possible Foundry S	and)	(0141)				1.2		М				<u> </u>
3	8	9								29.0		М				
4	7	7	+ 	Dark Brownish-Gray FILL Materials and	y, Silty SAND with Va Debris	rious	FILL			17.0		М				
5	7	4								6.9		м				
-		-	10	Plastic, Wood Chips	s, Brick Fragments from	m										
6	6	8	E	9-11'						5.1		М				
			<u>+</u>							0000						
7	9	10								236.0		w				
	2	8	-15	Prouct Sheen at 15'						112.0		w				<u> </u>
-			F	Pushed Wood Chip	from 15-17'							1				
9	20	12	E	Light Gray SILT wi	th Fine Sand					66.0		w				
· · · · · · · · · · · · · · · · · · ·			F	2" Medium Sand Le	ns at 18.5'											ļ
10	17	35	-20	Gray, Silty, Fine to	Medium SAND					19.0		W				
11	18	18	E-									w				
			-	Gray, Silty CLAY			CL									
			-		D :		1									1
			25	End of	Boring at 23.0 ft											
			F													
			-							ļ						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

TAPB /

Signature

Firm MONTGOMERY WATSON

C\gi3\STFRA_D: WDNR

2

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SOIL	BORING	LOG	INFORM	IATION
Frankers A	400 100			7 00

Form 4400-122

7-98

Route To: Watershed/Wastewater 🗌 Waste Management 🗋 Remediation/Revelopment 🗍 Other 🗌 _____

				Keinediatie									Page	e_1_	_of	1
Facilit St	ty/Proje	et Nar	ne uto		2082394.01160101	Licens	e/Perm	nit/Mor	nitoring	Numb	er	Borin N	g Num 1W03	ber S		
Boring	g Drille	d By:]	Name of	crew chief (first, last)	and Firm	Date I	Drilling	Starte	d	Date	Drilling	g Comp	leted	Drillin	g Meth	od
Bage	er Stat	e Dri	illing -	J. Rich			7/1′	7/01			7/17	7/01		4 1/4" 1	.D. H5A	
WI Ur	nique W	ell No	. DI	NR Well ID No.	Well Name	Final	Static '	Water]	Level	Surfa	ce Elev	ation		Boreho	ole Dia	meter
					MW03			Feet M	ISL		<u>665.3</u>	_Feet N	ASL		8 in	nches
Local	Grid O	rigin [] (estir	nated: 🗌) or Boring Lo	ocation	l I	at	0		Loca	l Grid I	ocatio	n			
State I NE	Plane 1/4 o	f NV	V 1/4 o	N, f Section22, T	<u>6 N, R</u> <u>22</u> E/	W Lor	ng	0				Feet [⊔n ⊒S _		_ Fee	
	Facili	ty ID		County Milwauk	cee Co	ounty Co 41	de	Civil St	Town/ Fra	City/or ncis	Village	•				
Sam	ple		1]	L		T					Soil	Prope	rties		
			Pu T	Soil/Boc	k Description			Í								
	+ ĕ	n‡s	μč	And Geol							i <					
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Z 10	1 2 4			C TOPSOU D						<u> </u>	00	Συ		ФН	<u>۵</u>	20
	9	10	E	Brown to gray SILT	Fine to Coarse Sand w	/ith	FILL			4.9		м				
•		10		Fill Materials: Glass	, Bricks, Rubber, Plast	ic,										
2	6	8		Wood Chips, Concr	ete					6.1		М				
3	11	15	- 5							3.2		M				
			-													
4	12	28		Brown-Gray Mottlee	I Silty CLAY	4	¢l-mi			4.9		М				
5	20	18		2" Gray Silty Sand v	with Gravel Lens at 9'					3.2		М				
	10	11	F	Brown, Silty SAND			SM		目	10.0		NAN				<u> </u>
0	19	11	<u> </u>	Gray SILT with Bro	wn Mottling		ML			18.5						
7	11	32	<u> </u>	Gray, Silty, Fine to	Coarse SAND		SM			8.9		w				
			-	Stained Black at 13.	5' to 15'						ĺ					
8	13	30	-15							4.9		w				
				Brownish-Gray SIL	r with Fine Sand, Scatte	ered	ML									
9	12	51	-	Sand Lenses	ree SAND with Fine Gr		SP			2.1		W				
			<u> </u>	Brown SILT with G	rav Mottling		ML									
10	4	35		Brown, Fine to Coan	rse SAND with Gravel		SP			2.1		W				
· · · · · · · · · · · · · · · · · · ·			F '													
			E	End of	Boring at 21.0 ft											
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			25													
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			F	l											L	l

I hereby certify that the information on this form is true and correct to the best of my knowledge.

TAPB /

Signature

MONTGOMERY WATSON

C\gi3\STFRA D: WDNR

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SOIL BORING LOG INFORMATION Form 4400-122 7-98

4

Route To: Watershed/Wastewater 🗌 🦳 Waste Management 🗌

					Remediatio	on/Revelopment	•	Other							Page	. 1	of	1
Facili St	ty/Proje . Frai	ect Nar ncis A	ne Auto			2082394.011601	01	Licens	e/Pern	nit/Mor	nitoring	Numb	er	Borin N	g Num 1W04	ber		
Borin	g Drille	d By:	Name of	crew	chief (first, last)	and Firm		Date I	Drilling	Starte	d	Date	Drilling	g Comp	leted	Drillin	g Meth	od
Bage	er Stat	te Dri	illing -	J. R	ich				7/1	7/01			7/17	7/01		4 1/4" 1	.D. HSA	
WIU	nique V	ell No). Dì	NR W	ell ID No.	Well Name MW04		Final	Static	Water I	Level	Surfa	ce Elev 670.0	ation Feet N	151	Boreho	ole Dia	meter
Local	Grid O	rigin [(estin	nated:) or Boring Lo	pocation				0	1012	Loca	l Grid I	Locatio	n			
State NE	Plane_ 1/4 c	of NV	N 1/4 of	f Secti	$\underline{N}, \underline{22}, T$	<u> </u>	/C/N E/V		.at	0				[Feet [⊐N ⊐S		Fee	□ E t □ W
	Facili	ty ID			County Milwaul		Coi	unty Co 41	ode	Civil	Town/0	City/or	Village	3				
Sam	ple		_		L		.I.,]]]	Soil	Prope	rties		
umber Dd Type	angth Alt. Recovered in.)	low Counts	epth in Ft Below ground urface)		Soil/Roc And Geol Each	k Description ogic Origin Foi Major Unit	-		scs	-aphic og	eli iagram	ED/FID	ompressive trength	o i sture ontent	iquid imit	lastic dex	200	2D∕ omments
a Z	ๅ๛๛	<u></u>	ی ت ت						Š	51	зо	<u> </u>	ပိပ်	ĔŬ	<u> </u>	۵Ĥ	۵.	ŭŭ
	14	40	-	Cru Bro and	ushed DOLOMIT	E ND Mixed with Silt, ad Debris	Clay	/	FILL			0.0		м				
2	11	29	-									1.2		М				
3	2	11										0.0		М				
4	5	100										1.2		М				
5	2	100										5.9		M				
6	16	6		Lig	tht Gray to Dark	Gray SILT, Wood G	Chips		FILL			7.8		M/W				
7	20	3		Bro	own-Gray Mottlee	d Silty CLAY			¢l-mi			4.2		w				
8	19	3		2" 14.	Wet, Silty, Fine 5'	to Coarse SAND Se	am a'	t				1.2		w				
9	11	40			rk Brown, Sandy ried Topsoil)	SILT with Roots (F	ossit	ole /	ML SM			1.2		w				
10	15	26		Gra	ay, Silty, Fine to	Coarse SAND								w				
		fer chot			End of	Boring at 21.0 ft	the b											
Signa	ture	iny that		matric	on on this form is	a de and correct to	the c	Firm	ny kno	wieuge								
~						TAPB /		1	L N	4()NT	GOM	IERY	W A T	INON				

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State of Wisconsin

Department of Natural Resources

				Route To: Watershed Remediatio	/Wastewater 🗌 Wa on/Revelopment 🗌	ste Man Other	agemei	nt 🗌					Page	. 1	of	1
Facili St	ty/Proje	ct Nai	me Auto		2082394.01160101	Licens	se/Pern	nit/Mor	nitoring	Numb	er	Borin N	g Num AW05	ber		
Borin	g Drille	d By:	Name of	crew chief (first, last)	and Firm	Date Drilling Started Date					Drillin	g Comp	oleted	Drilling Method		
Bage	er Stat	e Dr	illing -	J. Rich		7/16/01 7/					7/1	6/01		4 1/4" I.D. HSA		
WIU	WI Unique Well No. DNR Well ID No. Well Name					Final	Static	Water I	Level	Surfa	ce Elev	ation		Borehole Diameter		
	<u>C-11 O</u>	-! -: - [untade 🗌 🔪 og Paring L	MW05			Feet M	ISL		69.1	_Feet l	MSL		<u>8i</u> i	nches
State	Plane	ngin [N,N,	E S/C/	NL	.at	o 		Luca		Locario [⊐N			
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

TAPB /

Signature

MONTGOMERY WATSON

C\gi3\STFRA D: WDNR This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

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SOIL BORING L	OG INFORMATION
Form 4400-122	7-98

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Signature Firm MONTGOMERY WATSON ТАРВ / C\gi3\STFRA D: WDNR This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

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SOIL BORING	LOG	INFORMATION
Form 4400-122		7-98

Route To: Watershed/Wastewater Waste Management Remediation/Revelopment Other Page 1 of 1 2082394.01160101 License/Permit/Monitoring Number Boring Number Facility/Project Name **SB02** St. Francis Auto Boring Drilled By: Name of crew chief (first, last) and Firm Date Drilling Started Date Drilling Completed Drilling Method 2-1/2 SSA 0-3'; Direct Push 3-5' Groundwater MPT Services - D. Bendorff 7/18/01 7/18/01 DNR Well ID No. Well Name Final Static Water Level WI Unique Well No. Surface Elevation Borehole Diameter 3 Feet MSL Feet MSL inches Local Grid Origin (estimated:) or Boring Location Local Grid Location Lat E 5 22 S/C/N $\Box E$ State Plane $\Box N$ 22 1/4 of NW NE 6 Feet $\Box S$ 1/4 of Section Т E/W Feet 🗌 W N, R Long Civil Town/City/or Village Facility ID County Code County Milwaukee 41 St. Francis Soil Properties Sample F† `ound Length Alt. & Recovered (in.) Soil/Rock Description ; < e Blow Counts Depth in F (Below gro And Geologic Origin For Compressi Moisture Content Number and Type RQD∕ Comments Strength surface) Well Diagram υ PID/FID Liguid Limit Each Major Unit Plasti. Index Graphi 200 uscs L 09 ۵. FILL Dark Grayish-Brown, Silty, Fine to Coarse SAND with Fine Gravel 19 1.2 M 1 Ceramic Fragments at 4' 5 End of Boring at 5.0 ft 10 15 2025

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm MONTGOMERY WATSON TAPB / C\gi3\STFRA_D: WDNR This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin

Department of Natural Resources

				Route	To: Watershed/ Remediatio	Wastewater 🗌 n/Revelopment 🔲	Waste Of	Mana ther		nt 🗌					Расс	. 1	of	1	
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

 Signature
 Firm
 MONTGOMERY WATSON

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SOIL BORING LOG	INFORMATION
Form 4400-122	7-98

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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm MONTGOMERY WATSON TAPB / C\gi3\STFRA D: WDNR This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent. 9

SOIL BORING LOG	INFORMATION
Form 4400-122	7-98

Route To: Watershed/Wastewater Waste Management Remediation/Revelopment Other 1 Page of 2082394.01160101 Boring Number Facility/Project Name License/Permit/Monitoring Number St. Francis Auto **SB05** Boring Drilled By: Name of crew chief (first, last) and Firm Date Drilling Started Date Drilling Completed **Drilling Method** Direct Push Groundwater MPT Services - D. Bendorff 7/18/01 7/18/01 WI Unique Well No. DNR Well ID No. Final Static Water Level Well Name Surface Elevation **Borehole Diameter** 2 Feet MSL Feet MSL inches Local Grid Location Local Grid Origin (estimated:) or Boring Location Lat E S/C/N State Plane $\Box N$ $\Box E$ 1/4 of NW 22 22 NE 6 Feet $\Box S$ 1/4 of Section Т N, R E/W Feet 🗌 W Long Facility ID County County Code Civil Town/City/or Village 41 Milwaukee St. Francis Sample **Soil Properties** Depth in Ft (Below ground surface) Soil/Rock Description Blow Counts e G < ۵ Length Alt & Recovere (in.) And Geologic Origin For Moisture Content Compress Strength RQD/ Comments Number and Type Well Diagram PID/FID υ Each Major Unit Liquid Limit Graphi last i Plast Index 200 uscs ۲og ۵. FILL Dark Brown, Silty SAND (SM) 9 W 1 1.2 Light Gray, Silty CLAY CL-MIMM 5 End of Boring at 4.0 ft 10 15 2.0-25

I hereby certify that the information on this form is true and correct to the best of my knowledge.

 Signature
 Firm
 MONTGOMERY WATSON

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SOIL BORING	LOG	INFORMATION
Form 4400-122		7-98

Route To: Watershed/Wastewater 🗌 Waste Management 🗌 Remediation/Revelopment 🗌 Other 🗌 _____

Remediation/Revelopment						Other [Page	. 1	_of	1	
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Sample											Soil	Prope	ties				
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I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature	ТАРВ /	Firm MONTGOMERY WATSON
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Route To: Watershed/Wastewater Waste Management Remediation/Revelopment Other] 1 of 1 Page 2082394,01160101 Facility/Project Name License/Permit/Monitoring Number Boring Number St. Francis Auto **SB07** Boring Drilled By: Name of crew chief (first, last) and Firm Date Drilling Started Date Drilling Completed Drilling Method Direct Push Groundwater MPT Services - D. Bendorff 7/18/01 7/18/01 WI Unique Well No. DNR Well ID No. Well Name Final Static Water Level Surface Elevation **Borehole Diameter** 2 Feet MSL Feet MSL inches Local Grid Origin (estimated:) or Boring Location Local Grid Location Lat S/C/N State Plane Е $\Box E$ $\Box N$ 1/4 of NW 22 22 NE 6 1/4 of Section E/W Feet $\Box S$ Feet 🗌 W Т N, R Long Facility ID Civil Town/City/or Village County County Code Milwaukee 41 St. Francis Sample Soil Properties Depth in Ft (Below ground surface) Soil/Rock Description Counts 9 2 Length Alt & Recovere (in.) And Geologic Origin For Number and Type Compressi Maisture Content Strength RaD∕ Comments Well Diagram υ υ PID/FID Liguid Limit Each Major Unit Graphi Log Plasti Index 200 Blow uscs ۵ Dark Brown, Silty SAND with Gravel FILL Light Brown, Silty SAND with Gravel and FILL Metal Fragments and Fill Materials 1.2 1 12 M 5 End of Boring at 5.0 ft 10 15 -20 25

I hereby certify that the information on this form is true and correct to the best of my knowledge.

 Signature
 Firm
 MONTGOMERY WATSON

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	Remediation/Revelopment	Page	1	of	1				

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I hereby certify that the information on this form is true and correct to the best of my knowledge.

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This form is authorized by Chapters 281, 283, 28	9, 291, 292, 293, 295, an	d 299, Wis. Stats. Completion of this form is mandatory. Failure to file
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Form 4400-122

7-98

Route To: Watershed/Wastewater 🗌 Waste Management 🗌 Remediation/Revelopment 🗌 Other 🗌 _____

									Pag	e1	_of	1
Facility/Project Name 2082394.01160 St. Francis Auto	101	License/Permit/Monitoring Number Boring Number SB09										
Boring Drilled By: Name of crew chief (first, last) and Firm		Date Drilling Started Date Drilling					g Comp	leted	Drillin	g Metł	nod	
Groundwater MPT Services - D. Bendorff			7/1	8/01		7/18/01				Direct I usi		
WI Unique Well No. DNR Well ID No. Well Name		Final 3	Static	Water 1	Level	Surfa	ce Elev	ation		Boreho	le Dia	meter
				Feet N	ISL			_Feet 1	MSL_		2 i	nches
Local Grid Origin [] (estimated: []) or Boring Location [] State Plane	S/C/N		at	o 		Loca	I Gria I	ocatio_]	n ∃N			
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Section <u>22</u> , <u>T</u> <u>6</u> <u>N</u> , <u>R</u> <u>22</u> <u>E/V</u>				/ Long Feet □S						_ Fee	t 🗌 W	
Facility ID County Milwaukee	Cou	unty Co 41	de	Civil	Town/ Fra	City/or ncis	Village	2				
Sample								Soil	Prope	rties		<u> </u>
Soil/Rock Description							e /					
and Geologic Origin Fo	r			0	E	_	ss iv th	ů ů		0		s
Each Major Unit				h i e	- 18 12 - 18	F II	9 L D	stur ten	ъ +	i + i 0	00	-ueu
			ISCS	100	lell	Ц.	е т е т е т	10 i	σe	- a Las	26	
Dark Gray, Silty SAND with Fill Mate	rials:		FILL			<u> </u>	0 0	20	 		11	<u> </u>
Glass, Metal Fragments Odor of Hydraulic Oil, Antifreeze Pres	sent											
						0.0		M				
						0.0		141				
End of Boring at 5.0 ft												
					ļ							
20												
								1				
					ļ							
I hereby certify that the information on this form is true and correct to Signature	the b	est of n	ıy kno	wledge	e.							

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

MONTGOMERY WATSON

ТАРВ /

14-ond

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME								
Well/Drillhole/Borehole County		Original Well Owner (If Known)								
Location Mile	waukee	St. Francis Auto								
	E	Present Well Owner								
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Sec. <u>22</u> ; T	<u>6</u> N; R. <u>22</u> W	St. Fran	icis Auto							
(If applicable)		Street or Ro	oute							
Gov't Lot	Grid Number	4043 S. Pennsylvania Ave.								
Grid Location	ft.	City, State, St. Fran	Zip Code	53235						
Civil Town Name		Facility Wall	No and/o	r Name (If Applicable)	WI Unique Wall No					
		SB01	110. allu/01							
Street Address of Well		Reason for Abandonment								
4045 S. Pennsylvania Ave.		Date of Abr	andonmen	a Sampling Complete						
St. Francis		7/18/01	andonnieli	ii ii						
WELL/DRILLHOLE/BOREHOLE INFORMATION	N									
(3) Original Well/Drillhole/Borehole Construction (Completed on	(4) Depth to W	ater (Feet) NA						
(Date) 7/18/01	-	Pump & Pi	oing Rem	oved? Ves No	Not Applicable					
(Dutt)		Liner(s) Re	moved?	\Box Yes \Box No	Not Applicable					
Monitoring Well Construction Report	rt Available?	Screen Ren	noved?	\Box Yes \Box No	Not Applicable					
Water Well		Casing Left	in Place?	Yes 📕 No	0					
Drillhole Ves	No	If No, Expl	ain	Sampler Removed						
Borehole										
O sector dias T		Was Casing Cut Off Below Surface? Yes No								
Construction Type:		Did Sealing Material Rise to Surface? Yes Vo								
Other (Specify) Direct Dush Sempler		If Yes Was Hole Retonned? Ves I No								
Omer (speeny) <u>Direct Push Sampler</u>	<u> </u>		11 ICS, W							
		(5) Required M	lethod of	Placing Sealing Materia	al					
Formation Type:		Conduc	Conductor Pipe-Gravity Conductor Pipe-Pumped							
Unconsolidated Formation	Bedrock	Dump Bailer Other (Explain) Gravity								
		(6) Sealing Materials For monitoring wells and								
Total Well Depth (ft.) Casing Diamo	eter (ins.) <u>3</u>	monitoring well boreholes only								
(From groundsurface)		□ Neat Cement Grout								
Casing Depth (ft) 5			ement (Co te		ranular Bentonite					
			and Slurry		entonite-Cement Grout					
Was Well Annular Space Grouted?	🗌 No 🔲 Unknown	Bentonite-Sand Slurry								
If Yes, To What Depth? 5	Feet	Chippe	d Bentoni	ite						
(7)			1	No. V	I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII					
(/) Scaling Material Head		Erom (Et)	To (Et)	INO. Y ards, Sacks Sectors (Circ	la Mir Datio					
Sealing Material Used		riom (Ft.)	10 (Ft.)	or Volume One	IC MIX Kallo					
Bentonite Chips (3/8")		Surface	5	7.5 lb	Dry					
ta anna an anna an anna an anna anna an										
			_							
(8) Comments:		1								
(0) comments.				1999 - Landard Contraction - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990						
(9) Name of Person or Firm Doing Sealing Work		(10)	FOR	DNR OR COUNTY U	SE ONLY					
Trevor Bannister, MWH, Inc.	• ····	Date Recei	ved/Inspe	cted Distrie	ct/County					
Signature of Person Doing Work	Signature of Person Doing Work Date Signed									
MATIN	10/5/01	Reviewer/I	nspector		omplying Work					
Street or Route	1 elephone Number	Noncomplying Work								
i Science Court City State Zin Code	1(008) 231-4/4/	- Ponow-up	inecessary	′	1,59					
Madison, Wisconsin 53711		I								

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME									
Well/Drillhole/Borehole	County	Original W	Original Well Owner (If Known)								
Location	Milwaukee	St. Francis Auto									
	E	Present Well Owner St. Francis Auto									
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Sec.	<u>; T6N; R22 W</u>	St. Francis Auto									
(If applicable)		Street or Route									
Gov't Loi	Grid Number	4043 S	4043 S. Pennsylvania Ave.								
Grid Location		City, State,	City, State, Zip Code								
ft [] N. [] S.,	ft. [_] E. [_] W.	St. Fran	ncis, WI 5	53235							
Civil Town Name		Facility Well	No. and/o	r Name (If Applicable)	WI Unique Well No.						
		SB02									
Street Address of Well		Reason for Abandonment									
City Village		Date of Abandonment									
St. Francis		7/18/01	l								
WELL/DRILLHOLE/BOREHOLE IN	NFORMATION										
(3) Original Well/Drillhole/Borehole	Construction Completed on	(4) Depth to W	ater (Feet) NA							
(Date) 7/18/01	•	Pump & Pi	ning Rem	$\frac{1}{1}$ over $\frac{1}{1}$ Ves \prod N	Io Not Applicable						
(Date) //10/01		Liner(s) Re	moved?	\square Yes \square N	Not Applicable						
Monitoring Well Cons	struction Report Available?	Screen Ren	noved?	□ Yes □ N	Io Not Applicable						
Water Well	-	Casing Lef	Casing Left in Place? \Box Yes \blacksquare No								
Drillhole	Yes No	If No, Expl	If No, Explain Sampler Removed								
Borehole											
		Was Casin	Was Casing Cut Off Below Surface? Yes Yes Yo								
Construction Type:	n (Sandnoint)	Did Sealing	Did Sealing Material Rise to Surface? Yes U No								
Other (Specify)	t Push Sampler	Did Materi	If Ves W	Vas Hole Retonned?	\square Yes \square No						
— other (opeenly) <u>— bree</u>			n 103, 0	as note Retopped.							
		(5) Required M	Iethod of	Placing Sealing Mater	ial						
Formation Type:		Condu	Conductor Pipe-Gravity Conductor Pipe-Pumped								
Unconsolidated Formation	Bedrock	Dump Bailer Other (Explain) Gravity									
		(6) Sealing Ma	(6) Sealing Materials For monitoring wells and								
(From groundsurface)	_Casing Diameter (ins.)3	monitoring well boreholes only									
(ITOM groundsurface)		Sand-Cement (Concrete) Grout Bentonite Pellets									
Casing Depth (ft.) 5			Concrete Granular Bentonite								
	-	Clay-S	and Slurry	у 🛛 Е	Bentonite-Cement Grout						
Was Well Annular Space Grouted	i? 📕 Yes 🗌 No 🔲 Unknown	Bentor	ite-Sand S	Slurry							
If Yes, To What Depth?	5 Feet	Chippe	ed Bentoni	ite							
(7)			1	No, Yards,							
Sealing Mater	rial Used	From (Ft.)	To (Ft.)	Sacks Sealant (Cir	cle Mix Ratio						
-				or Volume On	e) or Mud Weight						
Bentonite Chips (3/8")		Surface	5	7.5 lb	Dry						
· · · · · · · · · · · · · · · · · · ·											
				[
(8) Comments:	···				····						
(0) Name of Darson or Eirm Doing C	ealing Work	(10)	EOD	IND OD COUNTY I	ISE ONLY						
Trevor Rannister MWH In	Date Recei	FOR	cted Dietr	ict/County							
Signature of Person Doing Work	Date Signed				ice county						
TANTA	Reviewer/	Inspector		Complying Work							
Street or Route		Noncomplying Work									
1 Science Court	(608) 231-4747	Follow-up	Necessary	y The second sec	7						
City, State, Zip Code					×						
Madison, Wisconsin 53711		1			N:\iobs\208\2394\01\gint\sb02-abn.xl						

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION	1. · · · · · · · · · · · · · · · · · · ·	(2) FACILITY NAME								
Well/Drillhole/Borehole	County	Original W	Original Well Owner (If Known)							
Location	Milwaukee	St. Francis Auto								
	E	Present We	ll Owner							
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Sec.	<u>; T6N; R22</u> W	St. Fran	icis Auto							
(If applicable)		Street or Ro	oute							
Gov't Loi	Grid Number	4043 S	. Pennsylvania	Ave.						
Grid Location $ft \square N. \square S.,$	ft. 🔲 E. 🔲 W.	City, State, St. Frai	Zip Code ncis, WI 5323	5						
Civil Town Name		Facility Well	No. and/or Nar	ne (If Applicable)	WI Unique Well No.					
Street Address of Well		Reason for	Abandonment							
4043 S. Pennsylvania Ave.		Soil Bo	Soil Boring - Soil Sampling Complete							
City, Village St. Francis		Date of Ab 7/18/01	Date of Abandonment 7/18/01							
WELL/DRILLHOLE/BOREHOLE IN	FORMATION				· · · · · · · · · · · · · · · · · · ·					
(3) Original Well/Drillhole/Borehole (Construction Completed on	(4) Depth to W	ater (Feet)	NA						
(Date) 7/18/01		Pump & Pi	ping Removed	$\frac{1}{2}$ Yes \square N	Not Applicable					
(Duto)	·····	Liner(s) Re	moved?	\Box Yes \Box N	Not Applicable					
Monitoring Well Const	ruction Report Available?	Screen Ren	noved?	\Box Yes \Box N	o 📕 Not Applicable					
Water Well	-	Casing Lef	Casing Left in Place? \Box Yes \blacksquare No							
Drillhole	Yes No	If No, Expl	ain <u>Sam</u>	pler Removed						
Borehole										
		Was Casin	Was Casing Cut Off Below Surface? 🔲 Yes 📕 No							
Construction Type:		Did Sealing Material Rise to Surface? Yes U No								
Drilled Driven	(Sandpoint) Dug	If Ves Was Hole Detopped? Use No								
 Other (Specify)Difect 	Push Sampler		If Yes, was F	tole Retopped?						
		(5) Required N	lethod of Plac	ing Sealing Materi	ia1					
Formation Type:			ctor Pipe-Grav	ity D Cond	uctor Pine-Pumped					
Unconsolidated Formation	Bedrock	Dump Bailer Conductor 1 per Glavity Conductor 1 per 4 imped								
		(6) Sealing Materials For monitoring wells and								
Total Well Depth (ft.) <u>5</u>	Casing Diameter (ins.) 3	monitoring well boreholes only								
(From groundsurface)		Neat C	Neat Cement Grout							
		□ Sand-C	Sand-Cement (Concrete) Grout Dentonite Pellets							
Casing Depth (ft.) 5			Concrete Granular Bentonite							
W. W. H.A., L. C. and Country of		Clay-S	and Slurry		Sentonite-Cement Grout					
Was Well Annular Space Grouted		Bentor	ite-Sand Slurr	У						
If Yes, To what Depth?	<u> </u>		ed Bentonne							
(7)				lo. Yards,						
Sealing Materi	al Used	From (Ft.)	To (Ft.) Sac	ks Sealant (Cire	cle Mix Ratio					
			0	r Volume On	e) or Mud Weight					
Bentonite Chips (3/8")		Surface	5 7.5	lb	Dry					
			<u>├</u>	<u></u>						
(8) Comments:			<u></u>							
	1	1/100			IOF ONLY					
(9) Name of Person or Firm Doing Sea	(10)	FOR DNI		JSE ONLY						
I revor Bannister, MWH, Inc	- Date Recei	ved/inspected	Distr	ici/County						
Signature of Person Doing work	Reviewer/	nepector		Complying Work						
Street or Route	Street or Doute				Joncomplying Work					
1 Science Court	(608) 231-4747	Follow-up	Follow-up Necessary							
City, State, Zip Code					3					
Madison, Wisconsin 53711					N:\iobs\208\2394\01\gint\sb03-abn.xl					
WELL/DRILLHOLE/BOREHOL	E ABANDONMENT									
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Form 3300-5B	Rev. 12-91									

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION	(2) FACILITY	NAME				
Well/Drillhole/Borehole	County	Original We	ell Owner	(If Known)		
Location	Milwaukee	St. Fran	cis Auto			
	E	Present We	ll Owner			
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Sec.	<u>22</u> ; T <u>6</u> N; R. <u>22</u> W	St. Fran	cis Auto			
(If applicable)		Street or Ro	oute	· · · · · · · · · · · · · · · · · · ·		
Gov't Lot	Grid Number	4043 S.	Pennsylv	ania Ave.		
Grid Location $ft \square N. \square S.,$	ft. 🔲 E. 🔲 W.	City, State, St. Fran	Zip Code icis, WI 5	53235		
Civil Town Name		Facility Well SB04	No. and/or	r Name (If Applicat	ole)	WI Unique Well No.
Street Address of Well		Reason for	Abandonr	nent		
4043 S. Pennsylvania Ave.		Soil Bo	ring - Soi	l Sampling Comp	lete	
City, Village St. Francis		Date of Aba	andonmen	it		
WELL ODILL LIOLE/DODELIOLE INE	OPMATION	//10/01				
(3) Original Well/Drillhole/Borehole O	onstruction Completed on	(4) Denth to W	ater (Feet) NA		
	onstruction completed on				ן _{דע} ד	N7.4 A. 11 . 1.1
(Date) //18/01		Pump & Pip	ping Remo	ovea 7 🗀 Yes L		Not Applicable
Monitoring Well Constr	uction Report Available?	Liller(S) Ke	noved?			Not Applicable
Water Well		Casing Left	in Place?	\square Yes	No	
	(es No	If No. Expla	ain	Sampler Remove	d	
Borehole		, - p				
•		Was Casing	cut Off	Below Surface?		Yes No
Construction Type:		Did Sealing	g Material	Rise to Surface?		Yes 🛛 No
Drilled Driven	(Sandpoint) 🔲 Dug	Did Materia	al Settle A	fter 24 Hours?		Yes No
Other (Specify) Direct F	Push Sampler		If Yes, W	as Hole Retoppe	d? 🗖	Yes 🗌 No
		(5) 79 1 1 1	F .1 1 01		<u> </u>	
The second free management		(5) Required M	lethod of I	Placing Sealing N	laterial	D'a Duna d
Formation Type:	Padroak	Dump Bailer Conductor Pipe-Gravity				
	LI Bedrock	(6) Sealing Materials For monitoring wells and				
Total Well Depth (ft.) 5 C	Casing Diameter (ins.) 3	(0) Seaming Ma	terituis	monite	oring we	ll boreholes only
(From groundsurface)		□ Neat Cement Grout				
		Sand-C	ement (C	oncrete) Grout	Bent	onite Pellets
Casing Depth (ft.) 5			te		_ Gran	ular Bentonite
			and Slurry	/ L	⊥ Bent	onite-Cement Grout
Was Well Annular Space Grouted?	Yes No Unknown	Benton	ite-Sand S	Slurry		
If Yes, To What Depth?	5 Feet	Chippe	a Bentoni	ite i		
(7)				No. Yards,		
Sealing Materia	l Used	From (Ft.)	To (Ft.)	Sacks Sealant	(Circle	Mix Ratio
-				or Volume	One)	or Mud Weight
		0.0		7.5.11		D
Bentonite Chips (3/8")		Surface	3	01 0.1		
						Į
· · · · · · · · · · · · · · · · · · ·	and a second					
(8) Comments:				1		L
(c) comments.	tanan aya madaa ayaa waxaa ahaa ahaa ahaa ahaa ahaa ahaa a					
(9) Name of Person or Firm Doing Seal	ling Work	(10)	FOR	DNR OR COUN	FY USE	ONLY
Trevor Bannister, MWH, Inc.	Date Recei	ved/Inspe	cted	District/	County	
Signature of Person Doing Work		-				
- I MA Gues	10/5/01	Reviewer/I	nspector		Com	plying Work
Street or Route	Telephone Number				∐ Non	complying Work
1 Science Court	(608) 231-4747	Follow-up Necessary				»/
City, State, Zip Code						7
Madison, Wisconsin 53711		1			N:\jol	bs\208\2394\01\gint\sb04-abn.xls

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY	NAME				
Well/Drillhole/Borehole County		Original We	ell Owner	(If Known)			
Location Milv	waukee	St. Fran	cis Auto				
	E	Present Wel	l Owner				
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Sec. <u>22</u> ; T	6N; R22 W	St. Fran	cis Auto				
(If applicable)	······································	Street or Ro	ute				
Gov't Loi	Grid Number	4043 S.	Pennsylv	ania Ave.			
Grid Location		City, State,	Zip Code				
ft \Box N. \Box S.,	ft. 🗌 E. 🔲 W.	St. Fran	cis, WI 5	3235			
Civil Town Name	-	Facility Well	No. and/or	Name (If Applicabl	e)	WI Unique Well No.	
		SB05		······	-/		
Street Address of Well		Reason for .	Abandonr	nent			
4043 S. Pennsylvania Ave.		Soil Bo	ring - Soil	l Sampling Comple	ete		
City, Village		Date of Aba	andonmen	t			
St. Francis		7/18/01					
WELL/DRILLHOLE/BOREHOLE INFORMATION	N						
(3) Original Well/Drillhole/Borehole Construction (Completed on	(4) Depth to W	ater (Feet) NA			
(Date) 7/18/01		Pump & Pip	oing Remo	oved? 🛛 Yes 🗌	No	Not Applicable	
· · · · · · · · · · · · · · · · · · ·		Liner(s) Rep	moved?	\Box Yes \Box	No	Not Applicable	
Monitoring Well Construction Report	rt Available?	Screen Rem	noved?		No	Not Applicable	
Water Well		Casing Left	in Place?		No		
☐ Drillhole ☐ Yes	No	If No, Expl	ain	Sampler Removed	<u> </u>		
Borehole		W. Out	0			37 N	
Construction Trunce		Was Casing	(Cut Off.) Matarial	Below Surface?		$Y_{22} \square N_{2}$	
Drilled Driven (Sandpoint)		Did Scalling Did Materia	Did Scaling Material Rise to Surface? Yes Vo				
Other (Specify) Direct Push Sample	r Dug		If Yes. W	as Hole Retopped	12 🗌	Yes No	
				as more meropped			
		(5) Required M	lethod of I	Placing Sealing M	aterial		
Formation Type:		Conduc	tor Pipe-0	Gravity 🛛 🖓 C	onducto	or Pipe-Pumped	
Unconsolidated Formation	Bedrock	Dump Bailer Other (Explain) Gravity					
		(6) Sealing Materials For monitoring wells and					
Total Well Depth (ft.)4Casing Diam	eter (ins.) 2			monito	ring wel	ll boreholes only	
(From groundsurface)			ement Gro	out	1	anita Dallata	
Casing Depth (ft.)			tenient (C] Gran	ular Bentonite	
			and Shurry	, [Bent	onite-Cement Grout	
Was Well Annular Space Grouted?	🗆 No 🗖 Unknown		ite-Sand S	Shurry	- Dom	onne coment orout	
If Yes, To What Depth? 4	Feet	Chippe	d Bentoni	te			
(7) Gualian Matarial Hand			T . (T .)	No. Yards,	(Circle	Mar Datia	
Sealing Material Used		From (Ft.)	10 (Ft.)	Sacks Sealant	(Circle	Mix Katio	
				or volume	One)	or wind weight	
Bentonite Chips (3/8")		Surface	4	4 lb		Drv	
(8) Comments:			L				
(9) Name of Person or Firm Doing Sealing Work	(10)	FOR	DNR OR COUNT	Y USE	ONLY		
Trevor Bannister, MWH, Inc.	Date Recei	ved/Inspe	cted I	District/(County		
Signature of Person Doing Work				-			
MMINS		Reviewer/I	nspector	ļĻ		plying Work	
Street or Route	Noncomplying Work				complying Work		
1 Science Court	(008) 231-4/4/	- Follow-up	ivecessary	/		5	
Madison Wisconsin 53711					NAio	hs\208\2394\01\gint\eh05-ahn x1e	
		1					

Madison, Wisconsin 53711

WELL/DRILLHOLE/BOREHOLE	ABANDONMENT
Form 3300-5B	Rev. 12-91

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION	(2) FACILITY NAME						
Well/Drillhole/Borehole	County	Original W	ell Owner	(If Known)			
Location	Milwaukee	St. Fran	ncis Auto				
NE 1/4 of NW 1/4 of Sec	22 · Т 6 N· Р 22 П W	Present we	all Owner				
<u>NE</u> 1/4 01 <u>NW</u> 1/4 01 Sec.	<u></u> , <u>I</u> N, <u>K</u> W	St. Flai	ICIS AUIO				
(II applicable)	Grid Number	A043 S	Pennsylv	vania Ave			
Grid Location		City State	Zin Code				
$ft \square N. \square S.$	ft. \Box E. \Box W.	St. Fra	ncis. WI 5	53235			
Civil Town Name		Facility Wel	No. and/o	r Name (If Applicable)		WI Unique Well No.	
		SB06	i i toi uiita o			in emque i en noi	
Street Address of Well		Reason for	Abandon	ment	•		
4043 S. Pennsylvania Ave.		Soil Bo	oring - Soi	1 Sampling Complete	;		
City, Village St. Francis		Date of Ab	andonmen	nt			
WELL/DRILLHOLE/BOREHOLE IN	JEORMATION	1110/01					
(3) Original Well/Drillhole/Borehole	Construction Completed on	(4) Depth to W	ater (Feet) NA			
(Date) 7/18/01		Pump & Pi	ning Rem	oved? Ves D	No	Not Applicable	
(Date)/18/01		Liner(s) Re	moved?	\Box Yes \Box	No	Not Applicable	
☐ Monitoring Well Con	struction Report Available?	Screen Ren	noved?	□ Yes □	No	Not Applicable	
Water Well	-	Casing Lef	t in Place?	Yes 🗖	No		
	Yes No	If No, Expl	ain	Sampler Removed			
Borehole		Was Casin	~ Cut Off	Dolour Surface?		Voc No	
Construction Type:		Did Sealing	g Cut Off 9 Material	Rise to Surface?		$\frac{1}{2} \frac{1}{2} \frac{1}$	
Drilled Drive	n (Sandpoint) 🔲 Dug	Did Materi	Did Material Settle After 24 Hours?				
Other (Specify) Direc	t Push Sampler		If Yes, W	Vas Hole Retopped?		Yes 🛛 No	
Exemption Type		(5) Required N	Aethod of	Placing Sealing Mate	erial	r Dina Dumnad	
Unconsolidated Formation	Bedrock		Bailer		er (Ex	plain) Gravity	
	_ 200000	(6) Sealing Ma	terials	For monit	toring	wells and	
Total Well Depth (ft.)4	_Casing Diameter (ins.)2	monitoring well boreholes only					
(From groundsurface)		Neat Cement Grout					
Casing Depth (ft)		Sand-Cement (Concrete) Grout Bentonite Pellets					
	-		and Slurry	v D	Bento	nite-Cement Grout	
Was Well Annular Space Grouted	1? 📕 Yes 🗌 No 🔲 Unknown	Bentor	ite-Sand S	Slurry			
If Yes, To What Depth?	4 Feet	Chippe	ed Bentoni	ite			
(7)		-		No. Yards.			
Sealing Mater	rial Used	From (Ft.)	To (Ft.)	Sacks Sealant (C	ircle	Mix Ratio	
- -				or Volume O	ne)	or Mud Weight	
				4.11.		D	
Bentonite Chips (3/8")		Surface	4	4 10		Dry	
		_		· · · · · · · · · · · · · · · · · · ·			
		1					
(8) Comments:							
(9) Name of Person or Firm Doing So	(10)	FOR	DNR OR COUNTY	USE	UNLY		
Signature of Person Doing Work		iveu/mspe	Dis	uicre	Jounty		
MIP Brit	18/5/01	Reviewer/	Inspector		Com	olying Work	
Street or Route	Telephone Number					omplying Work	
1 Science Court	(608) 231-4747	Follow-up Necessary					
City, State, Zip Code					φ		

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Madison, Wisconsin 53711

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION			(2) FACILITY	NAME	·····		
Well/Drillhole/Borehole	County		Original We	ell Owner	(If Known)		
Location	Milwaukee		St. Fran	icis Auto			
	a a m (Present We	ll Owner			
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Sec.	<u>; T6</u>	N; R. 22 W	St. Fran	icis Auto			
(If applicable)			Street or Ro	oute			
Gov't Loi		Grid Number	4043 S.	Pennsylv	ania Ave.		
Grid Location	с —		City, State,	Zip Code	12.20 <i>F</i>		
II [] N. [] S.,	II. []	Е. Ц W.	St. Ffan	ICIS, WI 5	3235		
Civil Town Name			Facility Well SB07	No. and/or	Name (If Applicabl	le)	WI Unique Well No.
Street Address of Well			Reason for	Abandonn	nent		
4043 S. Pennsylvania Ave.			Soil Bo	ring - Soil	l Sampling Compl	ete	
City, Village St. Francis			Date of Aba 7/18/01	andonmen	t		
WELL/DRILLHOLF/BOREHOLE I	VEORMATION						····
(3) Original Well/Drillhole/Borehole	Construction Complete	n he	(4) Depth to W	ater (Feet)) NA		
(D) 7/18/01	Combudgetion e trip	u on	Dump & Di	-ing Dem			Mot Applicable
(Date) //10/01			Liner(s) Re	moved?	\square Yes		Not Applicable
Monitoring Well Con-	struction Report Availa	ble?	Screen Ren	noved?	\Box Yes \Box] No	Not Applicable
Water Well			Casing Left	t in Place?	Yes	No	
Drillhole	Yes No		If No, Expl	ain	Sampler Removed	d	
Borehole							
			Was Casing	g Cut Off I	Below Surface?		Yes No
Construction Type:	(Sandnoint)	Dug	Did Seanng	3 Materiai	Rise to Surface?		
Other (Specify) Direc	n (Sanupoint)	Dug		If Yes. W	Alei 24 nouis: Jas Hole Retonned	17 П	$\mathbf{V}_{PS} \square \mathbf{N}_{O}$
				11 100, 11	as more recopped	1; <u> </u>	
			(5) Required M	fethod of I	Placing Sealing M	laterial	<u> </u>
Formation Type:	_			ctor Pipe-O	Gravity 🗌 C	Conducto	or Pipe-Pumped
Unconsolidated Formation		k	Dump	Bailer	C)ther (E:	xplain) Gravity
Tetel Wall Donth (ft.) 5	Cooing Diameter (inc	` `	(6) Sealing Ma	iterials	For mo	nitoring	y wells and
(From groundsurface)	_Casing Diameter (ms.,)	Neat C	ement Gro	11101110 tur	ming we	II Dorenoics only
(110hi groundsurface)			Sand-Cement (Concrete) Grout Bentonite Pellets				
Casing Depth (ft.) 5			Concrete Granular Bentonite				
·	-		Clay-S	and Slurry	, L] Bent	onite-Cement Grout
Was Well Annular Space Grouted	1? Yes 🗋 No	Unknown	Benton	ite-Sand S	Slurry		
If Yes, To What Deptn?	<u> </u>	Feet		d Bentom	te ı		
(7)					No. Yards,		
Sealing Mater	rial Used		From (Ft.)	To (Ft.)	Sacks Sealant	(Circle	Mix Ratio
				╂───┦	OF VOIUNE	UIE)	OF Muu weight
Bentonite Chips (3/8")			Surface	5	5 <u>lb</u>		Dry
			<u></u>		 		1
				1		<u></u>	
(8) Comments:							
(9) Name of Person or Firm Doing S	ealing Work		(10)	FOR	DNR OR COUNT	ΓY USE	ONLY
(9) Name of Person of Print Doing Searing work Trevor Bannister, MWH, Inc.			Date Recei	ved/Inspe	cted II	District/	County
Signature of Person Doing Work	Date Si	igned	-	1			2
MARS	[8](5/01	Reviewer/Inspector Complying Work				plying Work
Street or Route	Teleph	one Number	Noncomplying Work				complying Work
1 Science Court	(608) 2	.31-4747	Follow-up Necessary //				
City, State, Zip Code							

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Madison, Wisconsin 53711

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY	(2) FACILITY NAME				
Well/Drillhole/Borehole	County	Original W	ell Owner	· (If Known)			
Location	Milwaukee	St. Frar	ncis Auto				
NT 1/4 of NW 1/4 of Sec		, Present we	ll Owner				
<u>NE</u> 1/4 01 <u>INW</u> 1/4 01 Stc.	; IIN, K [] ''	Otreat or Di	ICIS Auto				
(If applicable)	Crid Number	Street or Ku	Donneyly	and Ava			
		4043 G	. Pennsyrv	/ania Ave.			
Grid Location $f \square N \square S$	θ Γις Γιw	City, State, St. Frat		52025			
		Dallian Wal	1C1S, WI 5)3233	- • 、	1	
Civil Town manie		Facility wein SB08	i No. and or	r Name (II Appnea	ole)	WI Unique wen No.	
Street Address of Well		Reason for	Abandom	ment			
4043 S. Pennsylvania Ave.		Soil Bc	orin <u>g</u> - Soi	I Sampling Comp	olete		
City, Village		Date of Ab	andonmen	nt			
St. Francis		//18/01	<u> </u>				
WELL/DRILLHOLE/BUREHULE IN	NFORMATION	A Danth to W	* · - /East	NY A			
(3) Original well/Drilliole/Boreliole	Construction Completed on	(4) Depui to w	ater (reci		-	—	
(Date) 7/18/01		Pump & Pu	ping Remo	oved? ∐ Yes ∟		Not Applicable	
Monitoring Well Con	struction Deport Available?	Liner(s) Ke	movea:	$\square \operatorname{res} \square$		Not Applicable	
Water Well	struction report Avanable:	Casing Lef	t in Place?	$\gamma \qquad \Box \qquad Yes \blacksquare$	No	NOt Applicable	
	Yes No	If No, Expl	lain	Sampler Remove	ed		
Borehole							
		Was Casing	g Cut Off	Below Surface?		Yes No	
Construction Type:		Did Sealing	g Materiai	Rise to Surface?		Yes II No	
Drilled Drive Other (Specify) Direc	n (Sandpoint) Li Jug	Did Materia	al Settle A	After 24 Hours:	ц гар П	Yes No	
			11 100, 1	Vas Hoie Retoppe	u		
		(5) <u>R</u> equired N	Aethod of	Placing Sealing N	Aaterial		
Formation Type:	—		ctor Pipe-(Gravity 📙	Conducto	or Pipe-Pumped	
Unconsolidated Formation	L Bedrock		Bailer	Ear m	Other (E	xplain) Gravity	
Total Well Denth (ft.) 4	Casing Diameter (ins.) 2	(6) Seating ivia	iteriais	FOI III monit	Onitoring oring we	g wells and	
(From groundsurface)		Neat C	ement Gr	nut	ung ve	II UDICHUICS UMJ	
		Sand-C	Sand-Cement (Concrete) Grout Bentonite Pellets				
Casing Depth (ft.)4	_	Concre	Concrete Granular Bentonite				
Mar Maril Assession Opener Courter			and Slurry	y L	⊥ Bent	onite-Cement Grout	
Was Well Annular Space Grouter If Ves To What Depth?	$\frac{1?}{4} \qquad \text{Feet}$		ilte-Sano a	Slurry jto			
11 105, 10 What Depth.	<u> </u>			ne			
(7)				No. Yards,			
Sealing Mater	rial Used	From (Ft.)	To (Ft.)	Sacks Sealant	(Circle	Mix Ratio	
·			<u> </u>	OF VOlume	Ulicy	OI IVIUU WEIGHT	
Bentonite Chips (3/8")		Surface	4	4 lb		Drv	
		-		1			
	:		'				
(8) Comments:							
	· · · · · · · · · · · · · · · · · · ·		FOD	SUD OD COUN	THE LIGE		
(9) Name of Person of Firm Doing St Travor Bannister, MWH Ir	ealing Work	(10) Date Recei	FUK	DNR UR COUN	TY USE		
Signature of Person Doing Work	Date Signed	- Date Meter	Weu/mape	cieu	DISTICT	County	
1 MAR Drus	10/5/01	Reviewer/	Inspector		Con	nolying Work	
Street or Route	Telephone Number					complying Work	
1 Science Court	(608) 231-4747	Follow-up Necessary				K	
City, State, Zip Code					U		

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WELL/DRILLHOLE/BOREHOLE	ABANDONMENT
Form 3300-5B	Rev. 12-91

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION	.	(2) FACILITY	NAME				
Well/Drillhole/Borehole	County	Original W	ell Owner	(If Known)			
Location	Milwaukee	St. Fran	ncis Auto				
		E Present We	ll Owner				
<u>NE</u> 1/4 of <u>NW</u> 1/4 of Sec.	<u>; T6N; R22 </u>	W St. Frai	ncis Auto	- · · · · · · · · · · · · · · · · · · ·			
(If applicable)		Street or Ro	oute				
Gov't Loi	Grid Number	4043 S	. Pennsylv	ania Ave.			
Grid Location		City, State,	Zip Code				
ft [] N. [] S.,	ft. [] E. [] W.	St. Fra	ncis, WI 5	53235			
Civil Town Name		Facility Wel	I No. and/or	r Name (If Applicable)	WI Unique Well No.		
Charact Address of Wall		SB09	Abandant	mont			
4043 S. Pennsylvania Ave		Soil Be	ring - Soi	l Sampling Complete	a		
City. Village	.	Date of Ab	andonmen	it			
St. Francis		7/18/01	l				
WELL/DRILLHOLE/BOREHOLE I	NFORMATION						
(3) Original Well/Drillhole/Borehole	Construction Completed on	(4) Depth to W	ater (Feet) NA			
(Date) 7/18/01		Pumn & Pi	ning Remo	oved? Yes	No Not Applicable		
		Liner(s) Re	moved?	\Box Yes \Box	No Not Applicable		
Monitoring Well Cor	struction Report Available?	Screen Ren	noved?	🔲 Yes 🗖	No 📕 Not Applicable		
Water Well		Casing Lef	t in Place?	P 🗆 Yes 🗖	No		
Drillhole	Yes No	If No, Expl	ain	Sampler Removed			
Borehole							
O an adversa tions Transa		Was Casin	g Cut Off.	Below Surface?	Yes No		
Construction Type:	en (Sandnoint) 🔲 Dug	Did Sealing Did Materi	al Sattla A	Kise to Surface?	$\square Yes \square No$		
Other (Specify)	ct Push Sampler	Did Materi	If Yes. W	Vas Hole Retopped?	\square Yes \square No		
	<u>, , , , , , , , , , , , , , , , , , , </u>			as note notepped.			
		(5) Required N	Aethod of	Placing Sealing Mate	erial		
Formation Type:		Condu	ctor Pipe-0	Gravity 🛛 🗌 Cor	nductor Pipe-Pumped		
Unconsolidated Formation	Bedrock	L Dump	Dump Bailer Other (Explain) Gravity				
	Casing Discuster (inc.)	(6) Sealing Ma	aterials	For moni	toring wells and		
(From groundsurface)	_Casing Diameter (Ins.)3	Neat C	ement Gro	monnom	ig well borenoies only		
(110m groundsurface)			Cement (C	oncrete) Grout	Bentonite Pellets		
Casing Depth (ft.) 5		Concre	ete		Granular Bentonite		
	_	Clay-S	and Slurry	y 🗆	Bentonite-Cement Grout		
Was Well Annular Space Groute	.d? Yes No Unknown	Bentor	nite-Sand S	Slurry			
If Yes, To What Depth?	5 Feet	Chippe	ed Bentoni	ite			
(7)			Г	No. Yards,	T T		
Sealing Mate	erial Used	From (Ft.)	To (Ft.)	Sacks Sealant (C	Circle Mix Ratio		
· · · · · · · · · · · · · · · · · · ·				or Volume C	One) or Mud Weight		
			_				
Bentonite Chips (3/8")		Surface	5	7.5 lb	Dry		
			1				
				<u> </u>			
2							
(8) Comments:							
(0) Name of Barron or Firm Daine S	Saaling Work	(10)	EOD	DND OD COLINEY	USE ONLY		
(9) Name of Person of Pinn Doing S Trevor Rannister MWH 1	ne work	(10) Date Recei	FUK		strict/County		
Signature of Person Doing Work	Date Signed		i cu mspe		Since County		
I make book	10/5/01	Reviewer/	Inspector	Ir1	Complying Work		
Street or Route	Telephone Number				Noncomplying Work		
1 Science Court	(608) 231-4747	Follow-up	Necessary	y i	a		
City, State, Zip Code					7-end		
Madison, Wisconsin 53711					N:\jobs\208\2394\01\gint\sb09-abn.xl		

Monitoring Well Construction Forms

State of Wisconsin Department of Natural Resources	Route to:	Watershed Remediatio	/wastewater	Waste Manag en ⊡ Other⊡_	emer itt	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 7-98
Facility/Project Name	Local Grid	Location of	Well			Well Name
St. Francis Auto Wreckers			∐ N. # □ S	₩ ₩		MW01 Wis Unique Well No. IDNB Well ID No.
Facility License, Permit or Monitoring No.	Local Grid	Origin	(estimated:	or Well Location	on	PO 666
· · · · · · · · · · · · · · · · · · ·	Lat		Long		or	Date Well Installed
Facility ID	St. Plane		ft. N <u>,</u>	ft. E.	S/C/N	
Type of Well	Section Lo	cation of Wa	Iste/Source S22 T6N B	22	E.	//1//01 Well Installed By: (Name (first last) and Firm
Well Code OW	Location o	f Well Relativ	ve to Waste/Sou	Irce Gov. Lot N	umber	
Distance from Waste/ Enf. Stds.	u 🗌 Upgr	adient s	Sidegradient			T. Bannister - MWH
Source ft. Apply X		igradient n	Not Known			J. Rich - BSD
A. Protective pipe, top elevation		ft. MSL		ī] <u> </u>	Cap a	nd lock? Yes 🗌 No
B. Well casing, top elevation	676.52	ft. MSL -		2.	Protec	tive cover pipe:
	070.00	-		a.	Inside	diameter: <u>4.0</u> in.
C. Land surface elevation	673.82	_11. MSL		D. c.	Materi	al: 5.0 ft.
D. Surface Seal, bottom	ft. MSL or	<u> 1.0</u> ft.			-	Other 🔲
12 USCS classification of soil near scre	en:		ı 🔨 📋 🗍		Additio	bnal protection? Yes Ves Ves Ves
GP 📕 GM 🗌 GC 🗍 GW	/ SW [SP		\mathbb{N}		
		СН		` 3.	Surfac	ce seal: Bentonite 3 0 Concrete 1 01
					_	Other 🔲
13. Sieve analysis attached?]Yes	No		` 4.	Materi	al between well casing and protective pipe:
14. Drilling method used:	Rotar	/ 🗂 50				Annular space seal
Hollow	Stem Auge	r 📕 41		-		Filter Sand Other
	_ Othe	ſЦ		5. b.	Annula	Lbs/gal mud weight.Bentonite-sand slurry 7 35
15. Drilling fluid used: Water	02 Ai	r 🔲 01		c.	·	Lbs/gal mud weightBentonite slurry
Drilling Mud	03 None	99		а. е.	3	- % BentoniteBentonite-cement grout □ 50
16. Drilling additives used?]Yes	No		f.	. How in	nstalled: Tremie 🗌 01
Describe						Tremie pumped D 02 Gravity D 08
				, ^{6.}	Bento	nite seal:a. Bentonite granules 33
17. Source of water (attach analysis, if re	equired):			/ b.	. ∐1/4 2/9" B	l in. 3/8 ih. 1/2 in. Bentonite pellets 32
- <u> </u>				7.	Fine s	and material: Manufacturer, product name & mesh
E Pontenite cool top # MS		10 #		/ a.		BMC 4000
E. Dentonne seal, top		1.0 n.			Filter	pack material: Manufacturer, product name & mesh
F. Fine sand, topft. MS	SL or	6.9ft.、		/ / a	. <u></u>	BMC 5
G. Filter pack, top ft. MS	SL or	8.3 ft.		р. 9.	. voium Well c	casing: Flush threaded PVC schedule 40 23
				V/		Flush threaded PVC schedule 80 24
H. Screen joint, topft. MS	SL or	10.0 ft.≻		10	Scree	Other Other
I. Well bottomft. MS	SL or	25.0 ft.		1 10. a	. Scree	n type: Factory cut 11
I Filter pack bottom 4 MC	SL or	255 4				Continuous slot
J. The pack, boltom		20.0		Ь	. Manu	facturer Timco
K. Borehole, bottomft. MS	SL or	25.5 ft.	< \/////	c d	. Slot si	ize:
L. Borehole, diameter 8.0 in.				a d	. Slotte Backf	ill material (below filter pack): 14.5 ft.
M. O.D. well casing 2.40 in.					t	Other
IN. I.D. Well Casing 2.00 In.	s form is tru	e and correc	t to the heet of	my knowloge		
Signature A Mark A		Firm	A to the Dest Of	my knowlege.		1045
MATION			Montg	omery Watso	n	N:\jobs\208\2394\01\gint\mw01-mwc.xls

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these rpoerts is reuqire 283, 289, 291, 292, 293, 295, and 299. Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299. Wis. these forms may result in a forfeiture of between \$10 and \$25,000 or imprisonment for up to one year, depending on the program and conduct involved. Pe information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the comple

Facility/Project Name Local Grid Location of Well Well Name St. Francis Auto Wreckers n s. tr. U. W. Facility/Project Name Local Grid Location of Well (St. U. W. Well Name Facility/Project Name Local Grid Crigin (estimate: or Well Location of Well Hole Well Installed Facility/Project Name Local Grid Orgin (estimate: or Well Location of Well Hole Well Installed Facility/Project Name N. M. M. T. Barnister 7/1601 Type of Well Ne N.Y. T. E. SCAN 7/1601 Type of Well Ne Ne Ne Ne Build Code OW Location of Well Relative to WashedSource Co. Landward Mell Mell Ne Source 1. A Protective point, top elevation 67.12 ft. MSL T. Barnister Mell D. Burface elevation 67.21 ft. MSL T. Mell Sterem Ne 12. UESC classification of sol near eceseer: Ne Ne Ne Ne 13. Sive analysis attached? Yes No Ne Ne Ne 14. Drilling method used: Hollw Stein Nager 0 Ne Ne Ne Ne <	State of Wisconsin Department of Natural Resources	Route to:	Waters Remedi	hed/wastewater	Wast	e Managemer Other] MONITORING WELL CONSTI Form 4400-113A Rev	RUCTION 1. 7-98
St. Francis Auto Wreekers t N t N MM22 NMM22 NMM22 Facility License, Permit or Monitoring No. Local Grid Origin (estimated: or Well Lootion or Date Well Installed) NMM22 NMM22 NMM22 NMM22 Facility License, Permit or Monitoring No. St. Prance In N In N In N Date Well Installed Tribio No. Date Well Installed Dr. (None (first, last) and Firm Type of Well NE NE NE NE NE NE NE Tribio No. Tribio No. Tribio No. Tribio No. Tribio No. Tribio No. No No No Tribio No. Tribio No. Tribio No. No Tribio No. No Tribio No. No Tribio No. Tribio No. No Tribio No. Tribio No. No	Facility/Project Name	Local Grid	Location	of Well			Well Name	
etally Lense, Permittic Models for the line of the line line of the line of the line of the line of the line o	St. Example Auto Mirookors	-		⊔ N. #□s		. □ E. 	MW02 Wie Upique Well No. DNR Wel	
Facility ID St. Plane n. N	Facility License Permit or Monitoring No.	Local Grid	Origin	(estimated:	or W	ell Location	PO(67)	TID NO.
Facility ID Stephene n.N. t.E. Schwarz Type of Well NW Sec_2, T8N, R22 W.W. Well installed By: (Name (first, last) and Firm Type of Well OW Sec_2, T8N, R22 W.W. Well installed By: (Name (first, last) and Firm Source M.M. Sec_17 nl. NSL Image: Sec_17 nl. NSL T. Banrister - MWH Source M.P. Toteknike ID, Source (sec_10 km Sec_17 nl. NSL Image: Sec_17 nl. NSL Image: Sec_17 nl. NSL Image: Sec_17 nl. NSL A. Protective pipe, reactive devalue 0751.7 nl. NSL Image: Sec_17 nl. NSL Image: Sec_17 nl. NSL Image: Sec_17 nl. NSL B. Well casing, top elevation 072.1 2 nl. NSL Image: Sec_17 nl. NSL Image: Sec_17 nl. NSL Image: Sec_17 nl. NSL D. Surface Seal, bottom ft. NSL or		Lat.	g	Lona.		с. <u>-</u> сссс.	r Date Well Installed	
Bestion Location of MassRo@cores E 71/601 Well Code OW Location of Meil Pelative to WastRo@corres Well Installed By: (Name (Fist, Last) and Firm Distance from Waster Enit Side. Upperform Source The monitor of MassRo@corres A. Protective pipe, top elevation E. MSL Image demonstration of MassRo@corres No C. Cap and tock? Yes No B. Well casing, top elevation E72.12 R. MSL Image demonstration of MassRo@corres Image demonstration of MassRo@corres Image demonstration of MassRo@corres Image demonstration of MassRo@corres Image demonstration of Source	Facility ID	St. Plane		ft. N,		ft. E. S/C/I	N	
Type of Well NW S22_TEN, R22 UW Well cheated By: (Name (first, last) and Firm Well Apply to Well Relative to Well Assets/Source and the apply and the fiber of the sets/Source and the apply and the fiber of the sets/Source and the apply and the apply and the apply and the sets/Source and the apply and the apply and the sets/Source and the apply and the apply and the sets/Source and the apply and the sets/Source and the sets/Source and the apply and the apply and the sets/Source apply and the sets/		Section Lo	cation of	Waste/Source		E.	7/16/01	
Well Code OW Councation of Well Polative to WasterSource Gav. Lat Number T. Bannister - MWH Source of Waster (T, H, Sto, Market (T, H, Sto, Market (T, H, Sto)) Designation (T, H, Sto) T. Capa and loc? Yes No A. Protective pipe, top elevation 675.17 ft. MSL Protective court pipe: a. India doc/ft. Store of Well Store	Type of Well	NE	NW	S22, T6N,	R22	W	Well Installed By: (Name (first, last) and	J Firm
Detained from Waste/ End. Side. U	Well Code OW	Location o	f Well Re	elative to Waste/So	ource	Gov. Lot Number		
Source in protocol (in processing) in the intervention (in the interventio	Distance from Waste/ Enf. Stds.		adient	s Sidegradien			T. Bannister - MWH	<u></u>
A. Protective pipe, top elevation n. MSL B. Well casing, top elevation 675.17 f. Land surface elevation 672.12 f. K. MSL or 3.0 f. Z. USCS classification of soil near screen: Steel GP MM S. M Steel Bedrack MM Silve analysis attached? Yes Yes No 14. Drilling method used: Fotary S0 Hollow Stem Auger 11 Silve analysis attached? Yes Yes								
B. Well casing, top elevation 675.17 ft. MSL C. Land surface elevation 675.17 ft. MSL D. Surface Seal, bottom ft. MSL or 3.0 ft. MSL D. Surface Seal, bottom ft. MSL or 3.0 ft. D. Surface Seal, bottom ft. MSL or 3.0 ft. D. Surface Seal, bottom ft. MSL or 3.0 ft. D. Surface Seal, bottom ft. MSL or 3.0 ft. D. USCS classification of soil near soreer: Gt. Gt. Gt. S. Surface Seal, bottom ft. ML mHI CL Gt. 13. Sieve analysis sttached? Yes No No Bentonite 30 14. Drilling method used: Water C2 Air of the solution	A. Protective pipe, top elevation		_ft. MSL		ㅋ ~	1. Cap	and lock?	3 🗌 NO
C. Land surface elevation 672.12 ft. MSL D. Surface Seal, bottom ft. MSL or 3.0 ft. D. Surface Seal, bottom ft. MSL or 3.0 ft. GP GM GC GW SV SP GN SC GW GW SV SP Startace Seal, bottom ft. ML GW SV SP GR GM GC GW SV SP GW Startace Seal, bottom ft. GW SV SP GW GW GW Startace Seal, bottom GW SW SP GW	B. Well casing, top elevation	675.17	ft. MSL		$\left \right\rangle$	2. Prote	ective cover pipe:	
C. Land surface elevation 672.12 ft. MSL or 3.0 ft. D. Surface Seal, bottom ft. MSL or 3.0 ft. ft. C. Material: Conterial: Con			-			a. Insid	e diameter:4	.5in.
D. Surface Seal, bottom ft. MSL or 3.0 ft 12. USCS classification of soil near screen: GP GM GC GW SW SP 13. Steve analysis attached? Ves No No No No 14. Drilling method used: Rotary 60 Annular space seal: Concrete 01 15. Drilling fluid used: Water 02 Air 01 Dilling fluid used: Termite 30 16. Drilling additives used? Ves No No Seal	C. Land surface elevation	672.12	_ft. MSL		F	b. Leng	th: <u>5</u>	.0 ft.
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GP GM GC GM SW SP SM SC ML MH CL CH Steve analysis attached? Yes No 13. Sieve analysis attached? Yes No No Annular space seal: Generative of the above 14. Drilling method used: Retary 50 Annular space seal: Generative of the above 15. Drilling fluid used: Water C2 Air 01 15. Drilling fluid used: Water C2 Air 01 16. Drilling fluid used: Water (attach analysis, if required): Tremie purped 02 17. Source of water (attach analysis, if required): 30 ft. Source of water (attach analysis, if required): 30 18. Filter pack, top ft. MSL or 30 ft. Source of water (attach analysis, if required): 30 ft. 19. Well casing ft. MSL or 30 ft. Source of water (attach analysis, if required): Source of water (attach analysis), if required):	12. USCS classification of soil near scre	en:			V V	∖ If y	ves, describe: 2 bumper posts	
Sol Sol Me Sol Me Mercer Me		/∐ SW[_ SP	님 뉳 !	s /	2 0114	Popton	ito 📕 20
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Hollow Stem Auger 41 Other - Other - 15. Drilling fluid used: Water 02 Drilling Mud 03 None 99 0. - - 16. Drilling additives used? Ves No Describe 0. - - 17. Source of water (attach analysis, if required): - - 17. Source of water (attach analysis, if required): - - 17. Fine sand, top ft. MSL or - - 18. Filter pack, top ft. MSL or - - 19. Well casing: Ft. MSL or - - 10. Screen noint, top ft. MSL or - - 11. Well bottom ft. MSL or - - - 12. Well casing: - - - - - 13. Other - - - - - - 14. If Casing: - - - - - - - - - - - - - -	14 Drilling method used:	Botan		50	ŝ		Benton Annular space se	
Other	Hollow	Stem Auge	r 📕	41	ä		Filter Sand Oth	er 📕
15. Drilling fluid used: Water 02 Air 01 15. Drilling fluid used: Water 02 Air 01 16. Drilling duditives used? Yes No No Sector		_ Othe	r 🗖	📓	×	5. Annu	lar space seal: a. Granular Benton	ite 📕 33
10. Drilling Mud 03 Non 99 16. Drilling additives used? Yes No Describe	15 Drilling fluid used: Water	02 Ai	r 🗖	01	÷	b	Lbs/gal mud weight.Bentonite-sand slui	ry [] 35 rry □ 31
16. Drilling additives used? Yes No 16. Drilling additives used? Yes No 17. Source of water (attach analysis, if required): Tremie pumped 02 17. Source of water (attach analysis, if required): Gravity 08 18. Bentonite seal, top ft. MSL or 3.0 ft. 19. Bentonite seal, top ft. MSL or 3.0 ft. 10. Filter pack, top ft. MSL or 9.0 ft. 11. Screen joint, top ft. MSL or 13.0 ft. 1. Well bottom ft. MSL or 23.0 ft. 19. Well casing FLMSL or 23.0 ft. 10. Screen material: PVC a. Screen type: Factory cut 11 11. J. Filter pack, bottom ft. MSL or 23.0 ft. 10 11. Borehole, diameter 6.0 in. 010 in. 11. D. well casing 2.40 in. 010 in. 11. D. well casing 2.40 in. 010 in. 11. D. well casing 2.40 in. 010 in. 11. D. well casing 2.40 <td>Drilling Mud</td> <td>03 None</td> <td>' 🖵</td> <td>99</td> <td>ŝ</td> <td>d.</td> <td>% BentoniteBentonite-cement gro</td> <td>out 50</td>	Drilling Mud	03 None	' 🖵	99	ŝ	d.	% BentoniteBentonite-cement gro	out 50
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Describe	16. Drilling additives used?	Yes	No		<u> </u>	f. How	installed: Trem	
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H. Scheen joint, top It. MSL of	LL Corportion top ft MS	SI or	12.0	*			Flush threaded PVC schedule	
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	Signature		Firm	Mont	aomer	v Watson	N+11-0-12 2001 011	

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these rpoerts is reuqire 283, 289, 291, 292, 293, 295, and 299. Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299. Wis. these forms may result in a forfeiture of between \$10 and \$25,000 or imprisonment for up to one year, depending on the program and conduct involved. Pet information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the comple

Facility/Project Name Local Grid Location of Wall N. Image: Strength St	State of Wisconsin Department of Natural Resources	Route to:	Watershed/ Remediation	wastewater 🗖 n/Redevelopme	Waste Manage en ⊡ Other⊡	menti	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 7-98
St. Francis Auto Wreckers n. N. T. W. Unit well too. DNR Well Too. Focility Liennes, Permit or Monitoring No. Local Grid Origin (estimated: or Well Location or Well Coation or Date Well Installed. Date Well Installed. Date Well Installed. Date Well Installed. Trippo of Well N. Trippo of Well N. N. N. N. N. Trippo of Well N.	Facility/Project Name	Local Grid	Location of V	Vell		·]	Well Name
Paolity Loente, Permit or Monitoring No. Load Card Grigin (estimated) or Well Location of Well Location of Well Location of Well Selection Under Selection Location of Well Selection Under Selection Location of Well Selection Under Selection Location of Well Selection Well Selection Under Selection Location of Well Selection Well Selection Under Selection Location of Well Selection Under Selection Location of Well Selection Well Selection Under Selection Location of Well Selection Under Selection Location of Well Selection Well Selection Under Selection Control Selection Control Well Selection Selection Control Selection Selection Control Sele	St Francis Auto Wreckers		•	∐N. #□S	t⊥ E. tt.□w.		MW03 Wis Unique Well No. DNB Well ID No.
Lat Long. or Date Well Naturelia Type of Well St. Plane ft. B. St. Plane 7/12/01 Type of Well NE WW S22.19N, R22 WW Well isolated By: (Name (first, last) and Firm Delations form Wester ft. B. St. Plane T. Bannitation - MWH Location of Well Heistweith to MateRSource T. Bannitation - MWH Source ft. Apply BX d Drongtadont n NK from 1. Cap and look? Y est No A. Floractive pipe, top elevation 664.29 ft. MSL - Elevation of woll rearrants - Elevation of woll rearrants - MuH C. Land surface selevation 666.29 ft. MSL - Elevation of woll rearrants	Facility License, Permit or Monitoring No.	Local Grid	Origin	(estimated:	or Well Locatio	n	POC68
Facility ID St. Praine tt. N. m. m. m. m. m. St.		Lat.		Long		or	Date Well Installed
Type of Well DeckNot Declared for Weaker Courts Well Installed Dr. Name (first, last) and Firm Well Code OW Endance from Weaker Courts of Well Relative to Waster@ourse Gould Location of Well Relative to Waster@ourse Gould Location of Well Relative to Waster@ourse Gould Location of Well Relative to Waster@ourse T. Barnister - MWH Source the Apply goint m Net Knows Installed Dr. Net Knows Installed Dr. Net Knows A. Protective pipe, top elevation ft. MSL m Net Knows Installed location of the State of the MSL or the Knows Installed location of the State of the Knows Installed location of the Knows Installed location of the State of the Knows Installed location of the Knows	Facility ID	St. Plane		ft. N <u>,</u>	ft. E.	S/C/N	7/17/01
Well Code CW Location of Well Relative to Wastel/Source Concention of Well Relative to Wastel/Source Concention of Well Relative to Wastel/Source Concention of Well Relative to Wastel/Source Source at. Protective pipe, top elevation ft. Apply go m. Mst. or 1. Cap and tock? Yes No A. Protective over pipe: india damater: Source india damater: Fush 8.0 india damater: Fush	Type of Well		NW	Ste/Source S22, T6N, R	22 [Well Installed By: (Name (first, last) and Firm
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Collice In Protective pipe, top elevation In Protective pipe, top elevation In Cap and tools? Yes No A. Protective pipe, top elevation 664.95 ft. MSL I. Cap and tools? Yes No C. Land surface elevation 665.29 ft. MSL I. Cap and tools? Yes No D. Surface Seal, bottom ft. MSL or 1.0 ft. Main factor in the formular space seal. ft. Main factor in the form of the space seal. ft. Main factor in the form of the space seal. ft. Main factor in the form of the space seal. ft. MSL or 1.0	Distance from Waste/ Enf. Stds.		adient s	Sidegradient			T. Bannister - MWH
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B. Well casing, top elevation 664.95 ft. MSL 2. Protective cover pipe: C. Land surface elevation 665.29 ft. MSL 10 ft. D. Surface Seal, bottom ft. MSL or 1.0 ft. ft. D. Surface Seal, bottom ft. MSL or 1.0 ft. ft. D. Surface Seal, bottom ft. MSL or 1.0 ft. ft. D. Surface Seal, bottom ft. ft. ft. ft. ft. D. Surface Seal, bottom ft. ft. ft. ft. ft. ft. D. Surface Seal, bottom ft. ft. ft. ft. ft. ft. D. Surface Seal, bottom ft. ft. ft. ft. ft. ft. 13. Sieve analysis attached? Yes No No ft.					<u> </u>	Uap ai	
C. Land surface elevation 665.29 ft. MSL D. Surface Seal, bottom ft. MSL or 1.0 ft. S. Surface Seal, bottom ft. MSL or 1.0 ft. I2. USCS classification of soli near screen: GC GW SW SP SM SC ML MH CL CH Additional protection? Yes No No No 14. Drilling Muldi used: Water CA Annular Space seat: A Granular Benchonite Solita 15. Drilling Muldi used: Water O Air O Difficita O Difficita Ch Ch Ch Ch Ch Ch	B. Well casing, top elevation	664.95	_ft. MSL -		2.	Protec	tive cover pipe:
D. Surface Seal, bottom ft. MSL or 1.0 ft. 12. USCS classification of soll near screen: GC GW SP 13. Siove analysis attached? Yes No 14. Drilling method used: Rotary 50 15. Drilling fluid used: Water 02 Air 16. Drilling fluid used: Water 02 Air 17. Source of water (attach analysis, if required): 1.0 ft. 17. Source of water (attach analysis, if required): 1.0 ft. 18. Bentonite seal: a. Bentonite seal: a. Bentonite seal: 17. Source of water (attach analysis, if required): 1.0 ft. 18. Screen joint, top ft. MSL or 1.0 ft. 19. Value added pVC schedule 40 3. Surface Seal: a. Bentonite seal: 10. Screen iype: ft. MSL or 1.0 ft. 11. Berchole, bottom ft. MSL or 1.0. ft. 12. Well bottom ft. MSL or 20.5 ft. 13. Source or water (attach analysis, if the quired): 20.5 ft. 10. Screen ipint, top ft. MSL or 20.5 ft. </td <td>C. Land surface elevation</td> <td>665.29</td> <td>ft. MSL 🔨</td> <td></td> <td>b.</td> <td>Length</td> <td>$\frac{1.0 \text{ ft.}}{1.0 \text{ ft.}}$</td>	C. Land surface elevation	665.29	ft. MSL 🔨		b.	Length	$\frac{1.0 \text{ ft.}}{1.0 \text{ ft.}}$
D. Surface Seal, bottom n. M.SL or 1.0 n. 12. USCS classification of soil near screen: GR			- ``		c.	Materia	al: Steel 04
12 USCS dissification of soil near sorren: GP	D. Surface Seal, bottom	_ ft. MSL or	<u> </u>		d.	Additic	onal protection?
GP GM GC GW SW SP SM SC ML MH CL CH 13. Size analysis attached? Yes No 14. Drilling method used: Rotary 50 14. Drilling method used: Rotary 50 15. Drilling fluid used: Water 02 16. Drilling fluid used: Water 02 17. Source of water (attach analysis, if required): Imaular space seal: a. Granular Bentonite search starry 17. Source of water (attach analysis, if required): The sand The sand 18. Bentonite seal, top ft. MSL or 7.6 17. Fine sand, top ft. MSL or 7.6 18. Screen joint, top ft. MSL or 7.6 19. Well bottom ft. MSL or 7.6 19. Well casing ft. MSL or 10. J. Filter pack, top ft. MSL or 10. J. Filter pack, top ft. MSL or 11. Borehole, bottom ft. MSL or 12. Borehole, bottom ft. MSL or 13. Burchide seal; ft. MSL or 14. Borehole, bottom ft. MSL or 15. Drilling additives used? 20.5 16. Bentonite seal; ft. MSL or 17. Source of water (attach analysis, if required): 18. Screen joint, top ft. MSL or 19. Well casing ft. MSL or 10. D. C. L. Borehole, bottom ft. MSL or 10. D. D. M. L. Borehole, bottom ft. MSL or 11. Backill material (below filter pack): 12. Screen ig	12. USCS classification of soil near scre	en:		\\ `	$\langle \rangle$	lf ye	es, describe: 2 bumper posts
Bedrock Concrete 01 13. Sleve analysis attached? Yes No 14. Drilling method used: Rotary 50 Holtow Stem Auger 41 Other 10 15. Drilling fluid used: Water 02 Air 01 Diffing Mud 03 None 99 99 16. Drilling dudtives used? Yes No Describe	I GP I GM I GC I GW SM ■ SC □ ML ■ MH	/∐ SW[H⊟ CL[S₽ ⊣_сн			Surfac	e seal: Bentonite 🗖 30
13. Sieve analysis attached? Yes No 14. Drilling method used: Rotary 50 15. Drilling fluid used: Water 02 16. Drilling dditives used? Yes No 17. Source of water (attach analysis, if required):						currac	Concrete 🔳 01
14. Drilling method used: Rotary 50 14. Drilling method used: Rotary 50 15. Drilling fluid used: Water 02 16. Drilling fluid used: Water 02 17. Dorilling Mud 03 None 99 16. Drilling didtives used? Yes No 17. Source of water (attach analysis, if required): Tremie pumped 17. Source of water (attach analysis, if required): Tremie pumped 17. Source of water (attach analysis, if required): Tremie pumped 18. Dentonite seal, top 1.0 ft. 17. Source of water (attach analysis, if required): Tremie pumped 18. Dentonite seal, top 1.0 ft. 19. E. Bentonite seal, top 1.0 ft. 19. Filer pack, nop ft. MSL or 7.5 ft. 19. Well casing: Flush threaded PVC schedule 40 23 19. Filer pack, top ft. MSL or 19. Well bottom ft. MSL or 20.5 ft. 19. Well casing 2.00 ft. 19. Bortonite casing 2.00 ft. 19. None 14. 19. Well casing 2.00 19. None 14. 19. Screen ipp: 19. None 19. None 19. Number casing 19. None	13 Slove analysis attached?		No			Materi	
14. Drilling method used: Rotary50 Hollow Stem Auger0ther41 0.ther0ther11 15. Drilling fluid used: Water02 Air01 16. Drilling additives used? 17. Source of water (attach analysis, if required): 17. Source of water (attach analysis, if required): 18. Filter pack, topft. MSL orft. MSL orft. MSL or]163			7.	Match	Bentonite 30
Holdword Stein Auger 41 Other Other Other Granular Bentonite 15. Drilling fluid used: Water 02 Drilling Mud 03 None 99 99 16. Drilling additives used? Yes No Describe	14. Drilling method used:	Rotar	y 🔲 50				Annular space seal
15. Drilling fluid used: Water 02 Air 01 16. Drilling Mud 03 None 99 16. Drilling additives used? Yes No 17. Source of water (attach analysis, if required):	Hollow	Stem Auge Othe	er 📕 41 er 🥅		5.	Annula	ar space seal: a. Granular Bentonite
15. Drilling fluid used: Water 02 Air 01 15. Drilling fluid used: Water 02 Air 01 16. Drilling additives used? Ves No 17. Source of water (attach analysis, if required):		-			b.		Lbs/gal mud weight.Bentonite-sand slurry
16. Drilling additives used? Yes No 16. Drilling additives used? Yes No 17. Source of water (attach analysis, if required): Tremie [] 01 17. Source of water (attach analysis, if required): 6. Bentonite seal: a. Bentonite granules 33 17. Source of water (attach analysis, if required): 7. Fine sand material: Manufacturer, product name & mesh a. Bentonite granules 32 c. 3/8" Bentonite seal, top 1.0 ft. BMC 4000 BMC 4000 Describe E. Bentonite seal, top ft. MSL or 7.5 ft. BMC 5 BMC 4000 b. Classing Filter pack, top ft. MSL or 8.5 ft. BMC 5 BMC 4000 b. Volume added 2.5 ft" 9. Well casing: Flush threaded PVC schedule 40 23 Filter pack, top ft. MSL or 20.0 ft. 10. Screen material: PVC 11. I. Well bottom ft. MSL or 20.5 ft. 10. Screen type: Factory cut 11. J. Filter pack, bottom ft. MSL or 20.5 ft. 11. Backfill material (below filter pack): 010 10.	15. Drilling fluid used: Water	02 Ai 03 Non	ir 🚺 01 e 📕 99		c. d		_Lbs/gal mud weightBentonite slurry 31 % Bentonite Bentonite-cement grout 50
16. Drilling additives used? Yes No 16. Drilling additives used? Yes No 17. Source of water (attach analysis, if required): 10. 17. Source of water (attach analysis, if required): 10. 18. Bentonite seal, top 11.0 19. Bentonite seal, top 11.0 11. Fine sand, top 11.0 11. Screen joint, top 11.0. 11. Well bottom 11.0. 12. Well bottom 11.0. 13. Filter pack, bottom 11.0. 14. Borehole, diameter 8.0 15. Borehole, diameter 8.0 16. Dentonite seal, top 11.0. 17. Fine sand, top 11.0. 18. Filter pack, top 11.0. 19. Well casing 20.0 10. Screen nuterial: Manufacturer, product name & mesh 11. Borehole, diameter 8.0 12. Borehole, diameter 8.0 13. Filter pack, bottom 11. MSL or 14. Borehole, diameter 8.0 15. Borehole, diameter 8.0 16. Borehole, diameter 8.0 17. Source of that the information on this form is true and correct to the best of my knowlege.		-			e.	2	Ft ³ volume added for any of the above
Describe Gravity 08 17. Source of water (attach analysis, if required): 6. Bentonite seal: a. Bentonite granules 33 17. Source of water (attach analysis, if required): 6. Bentonite seal: a. Bentonite seal: a. Bentonite pelletel 32 17. Source of water (attach analysis, if required): 6. Bentonite seal: a. Bentonite seal: a. Bentonite pelletel 32 17. Source of water (attach analysis, if required): 7. Fine sand Manufacturer, product name & mesh a. 17. Source of water (attach analysis, if required): 7. Fine sand Manufacturer, product name & mesh a. 18. Filter pack, top ft. MSL or 7.5 ft. 8. Filter pack material: Manufacturer, product name & mesh a. BMC 5 b. Volume added _2.5 ft ^a 9. Well casing: Flush threaded PVC schedule 40 23 Filter pack, top ft. MSL or 10.0 ft. 10. Screen material: PVC 10. I. Well bottom ft. MSL or 20.5 ft. 0. Soreen material: PVC 11 J. Filter pack, bottom ft. MSL or 20.5 ft. 0. 0. 0. 0. J. Filter pack, bottom	16. Drilling additives used?	Yes	No		f.	How ir	nstalled: Tremie 01
17. Source of water (attach analysis, if required): 6. Bentonite seal: a. Bentonite granules 33 17. Source of water (attach analysis, if required):	Describe						Gravity 🔳 08
17. Source of water (attach analysis, if required): 32 17. Source of water (attach analysis, if required): 32 17. Source of water (attach analysis, if required): 32 17. Source of water (attach analysis, if required): 32 17. Source of water (attach analysis, if required): 32 17. Source of water (attach analysis, if required): 32 17. Fine sand material: Manufacturer, product name & mesh a. 17. Fine sand material: Manufacturer, product name & mesh a. 17. Fine sand material: Manufacturer, product name & mesh a. 17. Fine sand material: Manufacturer, product name & mesh a. 17. Fine sand material: Manufacturer, product name & mesh a. 17. Fine sand material: Manufacturer, product name & mesh a. 17. Streng pack, top 10.0 18. Filter pack, top 10.0 19. Well casing: 10.0 10. Screen material: PVC 10. 10. Screen material: PVC 11 10. Screen type: Factory cut 11. Backfill material (below filter pack): 010 11. Backfill material (below filter pack): 010 11. Backfill material (below filter pack): 010		a an sina al tr			/ ^{6.}	Bento	nite seal: a. Bentonite granules 33
F. Bentonite seal, top ft. MSL or 1.0 ft. F. Fine sand, top ft. MSL or 7.5 ft. G. Filter pack, top ft. MSL or 7.5 ft. H. Screen joint, top ft. MSL or 10.0 ft. I. Well bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. I. Well bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Well bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Borehole, diameter 8.0 in. 0.10 in. M. O.D. well casing 2.40 in. 0.10	17. Source of water (attach analysis, if r	equirea):			D. C.	3/8" B	entonite Chips Other
E. Bentonite seal, top ft. MSL or 1.0 ft. F. Fine sand, top ft. MSL or 7.5 ft. G. Filter pack, top ft. MSL or 8.5 ft. H. Screen joint, top ft. MSL or 10.0 ft. I. Well bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Borehole, diameter 8.0 in. in.					.7 / ۲	Fine s	and material: Manufacturer, product name & mesh
F. Fine sand, top ft. MSL or 7.5 ft. G. Filter pack, top ft. MSL or 8.5 ft. H. Screen joint, top ft. MSL or 10.0 ft. J. Filter pack, bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. K. Borehole, bottom ft. MSL or 20.5 ft. K. Borehole, diameter 8.0 in. 0.10 M. O.D. well casing 2.40 in. 9.6 ft. M. O.D. well casing 2.00 in. 11. Backfill material (below filter pack): None I hereby certify that the information on this form is true and correct to the best of my knowlege. 5 7 7	E Bentonite seal ton ft. MS	SL or	1.0 ft.		/ a. b.	Volum	BMC 4000
F. Fine sand, top ft. MSL or 7.5 ft. G. Filter pack, top ft. MSL or 8.5 ft. H. Screen joint, top ft. MSL or 10.0 ft. I. Well bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. I. Well bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. K. Borehole, bottom ft. MSL or 20.5 ft. L. Borehole, diameter 8.0 in. in. M. O.D. well casing 2.40 in. in. N. I.D. well casing 2.00 in. in. Firm Maxteenerse Wetter 3					8.	Filter p	pack material: Manufacturer, product name & mesh
G. Filter pack, top ft. MSL or 8.5 ft. H. Screen joint, top ft. MSL or 10.0 ft. I. Well bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. M. Borehole, bottom ft. MSL or 20.5 ft. M. D.D. well casing 2.40 in. in. N. I.D. well casing 2.00 in. in. N. I.D. well casing 2.00 in. in. M. O.D. well casing 2.00 in. in. M. I.D. well casing 2.00	F. Fine sand, topft. MS	SL or	7.5 ft.		/ / a.	Volum	BMC 5
H. Screen joint, top ft. MSL or 10.0 ft. 10.0 ft. I. Well bottom ft. MSL or 20.0 ft. 10. Screen material: PVC I. Well bottom ft. MSL or 20.0 ft. 10. Screen material: PVC J. Filter pack, bottom ft. MSL or 20.5 ft. 01 Continuous slot 01 J. Filter pack, bottom ft. MSL or 20.5 ft. 0 Manufacturer Timco K. Borehole, bottom ft. MSL or 20.5 ft. 010 in. N. O.D. well casing 2.40 in. 9.6 ft. N. I.D. well casing 2.00 in. None 14 Other grad firm 010 in. 010 M. o.D. well casing 2.00 in. 01 01 01 01 N. I.D. well casing 2.00 in. 01 01 01 01 01 M. otherement Watered firm Manufacturer firm 01 01 01 01 01 <td>G. Filter pack, top ft. MS</td> <td>SL or</td> <td>8.5 ft.</td> <td></td> <td>// D. 9.</td> <td>Well c</td> <td>casing: Flush threaded PVC schedule 40 23</td>	G. Filter pack, top ft. MS	SL or	8.5 ft.		// D. 9.	Well c	casing: Flush threaded PVC schedule 40 23
I. Well bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. K. Borehole, bottom ft. MSL or 20.5 ft. L. Borehole, diameter 8.0 in. in. N. I.D. well casing 2.00 in. I. Hereby certify that the information on this form is true and correct to the best of my knowlege. Generation of the best of my knowlege.	H Screen joint ton ft MS	SL or	10.0 # \		//		Flush threaded PVC schedule 80 24
I. Well bottom ft. MSL or 20.0 ft. J. Filter pack, bottom ft. MSL or 20.5 ft. K. Borehole, bottom ft. MSL or 20.5 ft. K. Borehole, bottom ft. MSL or 20.5 ft. L. Borehole, diameter 8.0 in. 9.6 ft. M. O.D. well casing 2.40 in. None 14 Other Other 9.6 ft. 0ther 9.6 I hereby certify that the information on this form is true and correct to the best of my knowlege. None 3			10.0 11. \		10.	Scree	n material: PVC
J. Filter pack, bottomft. MSL orft. MSL or	I. Well bottomft. MS	SL or	20.0 ft. •		a.	Scree	n type: Factory cut 11
K. Borehole, bottom ft. MSL or 20.5 ft. b. Manufacturer Timco c. Slot size: .010 in. .010 in. L. Borehole, diameter 8.0 in. 11. Backfill material (below filter pack): 9.6 ft. M. O.D. well casing 2.40 in. 11. Backfill material (below filter pack): None II 4 Other	J. Filter pack, bottom ft. MS	SL or	20.5 ft.				Other
K. Borehole, bottom tt. MSL or 20.5 tt. c. Slot size: .010 in. L. Borehole, diameter 8.0 in. in. 11. Backfill material (below filter pack): 9.6 ft. M. O.D. well casing 2.40 in. 11. Backfill material (below filter pack): None II 14 Other				VIIII	b.	Manut	facturer
L. Borehole, diameter 8.0 in. M. O.D. well casing 2.40 in. N. I.D. well casing 2.00 in. Thereby certify that the information on this form is true and correct to the best of my knowlege. Signature T Min 2.00 Firm 33	K. Borehole, bottom	⊃∟ or	20.5 tt. 、	\\/////	.o h	Slot si Slotte	ize:
M. O.D. well casing 2.40 in. N. I.D. well casing 2.00 in. I hereby certify that the information on this form is true and correct to the best of my knowlege. Signature T M B 3	L. Borehole, diameter 8.0 in.			<u></u>	• <u>11.</u>	Backfi	ill material (below filter pack): None 14
N. I.D. well casing 2.00 in. I hereby certify that the information on this form is true and correct to the best of my knowlege. Signature Firm Application Firm	M. O.D. well casing 2.40 in.						
I hereby certify that the information on this form is true and correct to the best of my knowlege. Signature Firm Apple	N. I.D. well casing 2.00 in.						
Signature Timbra Firm 3	I hereby certify that the information on thi	is form is tru	e and correc	t to the best of	my knowlege.		
	Signature		Firm	Mant-	omony Moto		3

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these roperts is reuqire 283, 289, 291, 292, 293, 295, and 299. Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299. Wis. these forms may result in a forfeiture of between \$10 and \$25,000 or imprisonment for up to one year, depending on the program and conduct involved. Pe information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the comple

State of Wisconsin Department of Natural Resources	Route to:	Watershed Remediati	d/wastewater 🗋 on/Redevelopme	Waste Mar en E Other[nagemen [[]	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 7-98
Facility/Project Name	Local Grid	Location of	Well		- annear	Well Name
St. Francis Auto Wreckers	-		∐ N. ft. □ S.	ft. 🗋	E. W.	MW04 Wis, Unique Well No. DNB Well ID No.
Facility License, Permit or Monitoring No	Local Grid	Origin	(estimated:	or Well Loc	ation	P0669
	Lat		Long		or	Date Well Installed
Facility ID	St. Plane		ft. N,	ft.	. E. S/C/N	7/10/01
Type of Well	Section Lo	ocation of W NW	aste/Source S22, T6N, F	322	E.	Well Installed By: (Name (first, last) and Firm
Well Code OW	Location of	of Well Relat	ive to Waste/Sor	urce Gov. Lo	ot Number	
Distance from Waste/ Enf. Stds.	u 🗌 Upgr	adient	s 🔲 Sidegradient			T. Bannister - MWH
Source ft. Apply 🔀		ngradient	n Not Known			J. Rich - BSD
A. Protective pipe, top elevation		ft. MSL		<u></u> آ	1. Cap a	nd lock? Yes 🗋 No
B. Well casing, top elevation	672.27	ft. MSL		ÞÝ ,	2. Protec	tive cover pipe:
		-			a. Inside	diameter: <u>7.0</u> in.
C. Land surface elevation	669.97	_ft. MSL		[b. Lengti c. Materi	n: <u>5.0</u> ft.
D. Surface Seal, bottom	_ft. MSL or	<u> 1.0 f</u>				Other
10 USCS algorithmatics of apil poor age			┓╲╲┋╡┊╴╡		d. Additio	onal protection? Yes Ves No
	√SW [SP		$\mathcal{K} \setminus$	пус	es, describe. Dumper post
		СН		$\langle \rangle$	3. Surfac	ce seal: Bentonite 📕 30
Bedrock						Concrete [] 01 Other []
13. Sieve analysis attached?	Yes	No			4. Materi	al between well casing and protective pipe:
14 Drilling mothod used:	Rotar	v F-1 50				Bentonite 30
Hollow	Stem Auge	er 📕 41				Filter Sand Other
	_ Othe	r 🗖 _			5. Annul	ar space seal: a. Granular Bentonite 2 33
15. Drilling fluid used: Water	02 A	ir 🗖 01			D c.	Lbs/gal mud weightBentonite-sand slurry 35
Drilling Mud	03 Non	e 📕 99			d	% BentoniteBentonite-cement grout 50
16 Drilling additives used?		No			e. 2.5	5 Ft volume added for any of the above
					1. 11044 1	Tremie pumped 02
Describe					C Danta	Gravity 08
17. Source of water (attach analysis, if r	equired):			/	 b. □1/4 	l in. 3/8 in. 1/2 in. Bentonite granules ■ 33
					c. <u>3/8"</u> B	entonite Chips Other
					 Fines a. 	BMC 4000
E. Bentonite seal, topft. M	SL or	1.0ft.			b. Volum	ne added <u>0.5</u> ft ³
E Eine cand top ft M	SLor	70 f f			8. Filter	pack material: Manufacturer, product name & mesh
		7.0 n			b. Volum	ne added <u>2.5</u> ft ³
G. Filter pack, topft. M	SL or	8.5 ft.			9. Well c	casing: Flush threaded PVC schedule 40 23
H. Screen joint, top ft. M	SL or	10.0 ft.	\mathbf{N}	¥/		Flush threaded PVC schedule 80 24
					10. Scree	n material: PVC
I. Well bottomft. M	SL or	20.0 ft.		\square	a. Scree	n type: Factory cut 🛄 11
J. Filter pack, bottom ft. M	SL or	21.0 ft.				Other
			VIIII	3	b. Manu	facturer Timco
K. Borehole, bottomft. M	SL or	21.0 ft.	\\/////		c. Slotis d. Slotte	12e:
L. Borehole, diameter 8.0 in.				•	11. Backf	ill material (below filter pack): None 1 4
		•				Other
w. O.D. wen casing 2.40 In.						
N. I.D. well casing 2.00 in.						
I hereby certify that the information on th	is form is tru	e and corre	ct to the best of	my knowleg	e.	······
Signature		⊢ırm	Monta	omerv Wat	tson	N:\jobs\208\2394\01\aint\mw04-mwc.xls

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these rpoerts is reuqire 283, 289, 291, 292, 293, 295, and 299. Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299. Wis. these forms may result in a forfeiture of between \$10 and \$25,000 or imprisonment for up to one year, depending on the program and conduct involved. Pe information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the comple

State of Wisconsin Department of Natural Resources	<u>Route to;</u> Waters Reme	shed/wastewater 🔲 V diation/Redevelopmen	Vaste Managemer ⊡ ☐ Other⊡	MONITORING WELL Form 4400-113A	CONSTRUCTION Rev. 7-98
Facility/Project Name	Local Grid Locatio	n of Well		Well Name	
St. Francis Auto Wreckers		□ N. ft. □ S.	Ш. Е. ft. П.W.	MW05 Wis, Unique Well No.	DNR Well ID No.
Facility License, Permit or Monitoring No.	Local Grid Origin	(estimated: o	r Well Location	P0670	
Ecolities ID	Lat.	Long	or	Date Well Installed	
Facility ID	Section Location (it. N,	it. E. 3/0/N	7/16/01	
Type of Well	NE NW	S22, T6N, R2	2 <u> </u>	Well Installed By: (Name (firs	t, last) and Firm
Well Code OW	Location of Well R	lelative to Waste/Sourc	Gov. Lot Number		
Distance from Waste/ Ent. Stds.	d Downgradient	s Sidegradient		J. Bannister - MWH	
	ft MSI			nd lock?	
	1. MOI		1. Cap a		
B. Well casing, top elevation	<u>671.74</u> ft. MSI		2. Protec	tive cover pipe:	
C Land surface elevation	669.14 ft. MS		a. Inside b. Length	diameter:	$\frac{4.0}{5.0}$ ft.
			c. Materi	al:	Steel 04
D. Surface Seal, bottom	_ft. MSL or1.0	<u>p</u> #	d Addition	anal protection?	
12. USCS classification of soil near scre	en:	─ ─ ┓ <u>∖∖</u> ┊ ↓		es, describe:	
			3. Surfac	e seal:	Bentonite M 30
					Other
13. Sieve analysis attached?	Yes 📕 No		4. Materi	al between well casing and pro	tective pipe:
14. Drilling method used:	Rotary 🗖	50		Annula	Bentonite 1 30
Hollow	Stem Auger	41		Filter Sand	Other
	Other		5. Annula	ar space seal: a. Granul	ar Bentonite 23
15. Drilling fluid used: Water	02 Air 🗂	01	ь с.	Lbs/gal mud weightBer	itonite slurry 35
Drilling Mud	03 None	99	d	% BentoniteBentonite-c	ement grout 🗍 50
16 Drilling additives used?			e. 2.5	Ft° volume added for any of the	Tremio 1
			1. 110W II	Trei	nie pumped 02
Describe	<u></u>				Gravity 08
17 Source of water (attach analysis, if r	equired):		6. Bento	nite seal: a. Bentor	onite pellets 33
······································	- 1/.		c. <u>3/8"</u> B	entonite Chips	Other
			7. Fine s	and material: Manufacturer, pr	oduct name & mesh :
E. Bentonite seal, top ft. MS	SL or 1.0	ft. 🗙 🗱 👹	b. Volum	e added _0.5ft ³	
			/ 8. Filter	pack material: Manufacturer, pr	roduct name & mesh
F. Fine sand, top	3L or 6.5	·- ^{π.} 🕅 🕅	a. b. Volum	BMC 5 ne added 2.5 ft ³	<u></u>
G. Filter pack, topft. MS	3L. or 7.9	ft. 🔪 📓	9. Well c	asing: Flush threaded PVC	schedule 40 📕 23
11 Covers is int top 4 MS			//	Flush threaded PVC	schedule 80 24
H. Screen joint, top	SL OF 19.3	-"	/ 10. Scree	n material: PVC	
I. Well bottomft. MS	3L or24.3	ft	a. Scree	n type:	Factory cut 11
L Eilter pook bettern ft MS	Plor 055			Coi	ntinuous slot 01 0ther
J. Filler pack, bollom	20.0		b. Manu	facturer Timco	
K. Borehole, bottomft. MS	3L or25.5	ft. 🥄 🛛	c. Slot s	ize:	
I Borehole diameter 90 in			d. Slotte	d length: ill material (below filter pack):	14.6 ft.
			TI. DACKI	in material (Delow iller pack):	Other
M. O.D. well casing 2.40 in.				······································	- L
N. I.D. well casing 2.00 in.					
I hereby certify that the information on thi	s form is true and c	orrect to the best of m	y knowlege.		
Signature T.M.	Firm			· · · · · · · · · · · · · · · · · · ·	5-Pna
1 NOIN LANXS	J	Montgor	nery Watson	N:\lobs\208\2394	1\01\aint\mw05-mwc.xls

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these rpoerts is reuqire 283, 289, 291, 292, 293, 295, and 299. Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299. Wis. these forms may result in a forfeiture of between \$10 and \$25,000 or imprisonment for up to one year, depending on the program and conduct involved. Pe information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the comple

Monitoring Well Development Forms

MONITORING WELL DEVELOPMENT

Form 4400-113B

Rev. 7-98

Route to: Watershed/Wastewater 🗆 Waste Management 🗖

Remediation/Redevelopment

Other 🗖 🔜

Facility/Project Name	County Name		Well Nar	ne			
St. Francis Auto	Milwa	aukee	MW01				
acility License, Permit or Monitoring Number	County Code 41	Wis. Unique Well Number		DNR Well ID N	Number		
↑. Can this well be purged dry?	es 🔳 No		Before De	velopment	After Development		
∠. Well development method		11. Depth to Water (from top of a wen casing)	ı. <u>1</u>	<u>8.08</u> ft.	<u> 1 8 . 1 0 ft</u> .		
surged with bailer and bailed surged with bailer and pumped surged with block and bailed surged with block and pumped surged with block, bailed and pumped compressed air bailed only pumped only pumped slowly Other 7. Time spent developing well 4. Depth of well (from top of well casing) . Inside diameter of well 6. Volume of water in filter pack and well casing . Volume of water removed from well 8. Volume of water added (if any) Source of water added	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Wein casing) Date: Time: Time: 12. Sediment in well bottom: 13. Water Clarity: 13. Water Clarity: Color Odor Turbidity HNu Fill in if drilling fluids were 14. Total suspended solids 15. COD	b. <u>7 /</u> mm c. <u>14</u> : Clear Turbid (Describe Brown Petroleur Turbid used and w	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		
0. Analysis performed on water added?	Yes 🗆 No	16. Well developed by: Nat First Name: Firm:	me (first, las Last	st) and Firm			
16 Additional comments on development:		1 • • • • • • • • • • • • • • • • • • •		· · · · · · · · · · · ·			
Jame and Address of Facility Contact/Owner/Respo	nsible Party	I hereby certify that the all of my knowledge	bove inform	nation is true and	l correct to the best		
Name: ROBERT Name: MELT	TON	Signature:	Abrt	5	1147 - 1786)		
racility/Firm: <u>ST FRANCIS AUTO</u> Street:	99	Print Name:	Frevor P. B	annister			
City/State/Zip:		Firm: MWH, Inc.					
NOTE: Shaded areas are for DNR use only. See ins	structions for more ir	nformation including a list of c	ounty codes	6. N	Njobs\208\239401\gint\mw01-dcv.xls 105-5		

Form 4400-113B

Rev. 7-98

Route to: Watershed/Wastewater 🗆 Waste Management 🗖

Remediation/Redevelopment

Other 🗖 🔜

Facility/Project Name	County Name	······································	Well Name			
St. Francis Auto	Milwa	aukee	MW02			
cility License, Permit or Monitoring Number	County Code 41	Wis. Unique Well Number	DNR Well ID I	Number		
Can this well be purged dry? Y 2. Well development method surged with bailer and pumped surged with block and pumped surged with block and pumped surged with block, bailed and pumped compressed air bailed only pumped only pumped slowly Other Time spent developing well 4. Depth of well (from top of well casing) Inside diameter of well 6. Volume of water in filter pack and well casing Volume of water removed from well 8. Volume of water added (if any) Source of water added). Analysis performed on water added? (If yes, attach results) 16. Additional comments on development:	41 61 42 62 70 20 10 51 50 8 0 min. 2 5 6 2 5 6 $ft.$ 2 2 0 0 2 2 0 0 2 2 0 0 2 2 0 0 2 2 0 0 2 2 0 0 2 2 0 0 2 2 0 0 2 0 0 0 2 0 0 0 2 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	 11. Depth to Water (from top of wen casing) Date: Date: Time: 12. Sediment in well bottom: 13. Water Clarity: 13. Water Clarity: Color Odor Turbidity HNu Fill in if drilling fluids were 14. Total suspended solids 15. COD 16. Well developed by: Na First Name: Firm: 	Before Development a. 1 7 5 2 ft. b. 7 / 17 / 01 mm dd yy \Box a.m. \Box a.m. \Box a.m. c. 12 : 15 \blacksquare p.m. 0 inches 10 Clear 10 15 (Describe) 15 Brown	After Development 1 7 5 0 ft. 1 7 / 18 / 01 mm dd yy 1 1		
ame and Address of Facility Contact/Owner/Responses First Last Mame: MELTD, Mame: MELTD,	nsible Party	I hereby certify that the a of my knowledge Signature:	bove information is true and	l correct to the best		
Facility/Firm: <u>S7-FRAMUS AUTO</u> Street: ity/State/Zip:		Print Name: Firm:	Trevor P. Bannister			
NOTE: Shaded areas are for DNR use only. See ins	tructions for more ir		county codes.	N:\jobs\208\2394\01\gin\\mw02-dcv.xls		

Form 4400-113B

Rev. 7-98

Remediation/Redevelopment

Other 🔲 🔔

Facility/Project Name	County Name		Well Na	ne			
St. Francis Auto	Milwa	aukee	MW03				
acility License, Permit or Monitoring Number	County Code 41	Wis. Unique Well Number	-	DNR Well ID N	Number		
Can this well be purged dry?	es 🔳 No		Before De	velopment	After Development		
2. Well development method		(from top of wen casing)	a. <u>1</u>	<u>4 . 1 5 ft.</u>	$\underline{\qquad 1 \underline{4 \cdot 2 6 \text{ft.}}}$		
surged with bailer and bailed surged with block and bailed surged with block and pumped surged with block, bailed and pumped compressed air bailed only pumped only pumped slowly Other . Time spent developing well 4. Depth of well (from top of well casing) . Inside diameter of well 6. Volume of water in filter pack and well casing . Volume of water removed from well 8. Volume of water added (if any)	$\begin{array}{c} 41\\ 61\\ 42\\ 62\\ 70\\ 20\\ 10\\ 51\\ 50\\ \hline \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	 wen casing; Date: Time: 12. Sediment in well bottom: 13. Water Clarity: 13. Water Clarity: Color Odor Turbidity HNu Fill in if drilling fluids were 14. Total suspended solids 	b. <u>7 /</u> mm c. <u>10</u> : Clear Turbid (Describ Brown Petroleun High	19 / 01 dd yy a.m. 30 □ p.m. 0 _ inches □ 10 ■ 15 e) 15 m	7 / 19 / 01 mm dd yy □ a.m. 12 : 25 □ nn. 0 inches Clear 20 Turbid 25 (Describe) None		
Source of water added		15. COD 16. Well developed by: Na	ame (first, la	mg/1	mg/l		
0. Analysis performed on water added? [] (If yes, attach results) [] 16. Additional comments on development: []]Yes 🗆 No	First Name: Firm:		Name:			
lame and Address of Facility Contact/Owner/Respo	nsible Party	I hereby certify that the a of my knowledge	bove inform	nation is true and	correct to the best		
Name: <u>ROBER7</u> Last MEL72)N	Signature:	AB-A-				
Facility/Firm: <u>ST_FRANCIS</u> AUTO		Print Name:	Trevor P. B	annister			
City/State/Zip:		Firm: <u>MWH, Inc.</u>					
NOTE: Shaded areas are for DNR use only. See ins	tructions for more in	formation including a list of o	county codes	S. N	k:\jobs\208\2394\01\gint\mw03-dev.xls		

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Lopartment of Natural Resources

Form 4400-113B

Rev. 7-98

Watershed/Wastewater 🔲 Waste Management 🗖 Route to: Remediation/Redevelopment Other 🔲 🔜

Facility/Project Name	County Name		Well Name	
St. Francis Auto	Milwa	aukee	MW04	
cility License, Permit or Monitoring Number	County Code 41	Wis. Unique Well Number	DNR Well ID I	Number
Can this well be purged dry?	es 🔳 No	11. Depth to Water	Before Development	After Development
	41	wen casing)		$\left - \frac{1}{2} - \frac{7}{2} \cdot \frac{3}{2} \cdot \frac{3}{2} \right ^{-1}$
surged with bailer and bailed surged with bailer and pumped surged with block and bailed surged with block, bailed and pumped compressed air bailed only pumped only pumped slowly	41 61 42 62 70 20 10 51 50	Date: H Time: d 12. Sediment in well bottom:	b. $\frac{7 / 17 / 01}{mm}$ dd yy \Box a.m. c. 12 : 15 \blacksquare p.m. 0. inches	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Other		13. Water Clarity:	Clear ☐ 10 Turbid ■ 15 (Describe)	Clear ■ 20 Turbid □ 25 (Describe)
4. Depth of well (from top of well casing)	2 2 . 6 ft.	Color Odor Turbiditu	Brown None	None Slight Petroleum
	$-\frac{2}{2}$, $\frac{0}{0}$, $\frac{0}{0}$ m.	HNu	Hign	Clear
 Volume of water in filter pack and well casing 	<u>4.4</u> gal.	Fill in if drilling fluids were	used and well is at solid wa	este facility:
Volume of water removed from well	<u>6 0.0</u> gal.			asic facility.
⁸ Volume of water added (if any)	0 gal.	solids	mg/1	mg/1
Source of water added		15. COD	mg/l	mg/l
). Analysis performed on water added?]Yes 🗆 No	16. Well developed by: Na First Name: Firm:	me (first, last) and Firm Last Name:	
-5. Additional comments on development:				
ame and Address of Facility Contact/Owner/Respon	nsible Party	I hereby certify that the a of my knowledge	bove information is true and	l correct to the best
ame: <u>ROBERT</u> Last <u>MELTON</u>)		April	
Facility/Firm: ST FRANCIS BUTU		Print Name:	Trevor P. Bannister	
ity/State/Zip:		Firm: <u>MWH, Inc.</u>		
OTE: Shaded areas are for DNR use only. See inst	tructions for more in	formation including a list of c	ounty codes.	N:\jobs\208\239401\gint\mw04-dev.x1s 4

ite of Wisconsin

Form 4400-113B

Rev. 7-98

Route to:	Watershed/Wastewater 🗖	Waste Management 🗖
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Remediation/Redevelopment \Box

Other

Facility/Project Name	County Name		Well Nar	/ell Name			
St. Francis Auto	Milwa	nukee					
cility License, Permit or Monitoring Number	County Code 41	Wis. Unique Well Number		DNR Well ID N	Number		
cility License, Permit or Monitoring Number Can this well be purged dry? Ya 2. Well development method surged with bailer and bailed surged with bailer and pumped surged with block and pumped surged with block and pumped surged with block, bailed and pumped surged with block, bailed and pumped surged with block, bailed and pumped surged with block, bailed and pumped pumped on pumped pumped only pumped only pumped slowly Other Time spent developing well 4 4. Depth of well (from top of well casing) Inside diameter of well 6. Volume of water in filter pack and well casing Ya 7. Analysis performed on water added (if any) Source of water added 9. Analysis performed on water added? [If yes, attach results) 16. Additional comments on development: 16.	County Code 41 PS No A1 61 42 62 70 20 10 51 50 	Wis. Unique Well Number PO 670 11. Depth to Water (from top of wen casing) Date: II. Depth to Water (from top of wen casing) Date: II. Date: II. Depth to Water (from top of wen casing) Date: II. Depth to Water (from top of wen casing) Date: II. Date: II. Depth to Water (from top of wen casing) Date: II. Depth to Water (from top of wen casing) Date: II. Date: II. Depth to Water (from top of wen casing) Date: II. Ocolor Odor Turbidity HNu Fill in if drilling fluids were 14. Total suspended solids 15. COD 16. Well developed by: Na First Name: Firm:	Before De a1 b7 / mm c2 : Clear Turbid (Describe Black Weathere High used and w me (first, last	DNR Well ID N velopment 8.35 ft. 19 / 01 dd yy □ a.m. 40 ■ p.m. 0inches □ 10 ■ 15 ed Petroleum mg/l mg/l st) and Firm Name:	After Development		
lame and Address of Facility Contact/Owner/Responses First Last Last MECT	nsible Party	I hereby certify that the a of my knowledge Signature: Twi	bove inform	nation is true and	l correct to the best		

Print Name: Trevor P. Bannister

Firm: MWH, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

ST FRANCIS AUTO

Facility/Firm: Street:

City/State/Zip:

SOIL AND GROUNDWATER LABORATORY REPORTS

С

Soil Analytical Reports

CTLaboratories

MONTGOMERY WATSON

STEVE WISKES

ONE SCIENCE CT

MADISON, WI 53711

1230 Lange Court Baraboo, WI 53913-3109 Phone: (800) 228-3012 Fax: (608) 356-2766 www.ctlaboratories.com

ANALYTICAL REPORT

1 of 6

Project Name: ST FRANCIS AUTO WREC Contract #: 1510 Project #: 2082394.01160101 Folder #: 18381 Purchase Order #: Arrival Temperature: See COC Report Date: 8/7/01 Date Received: 7/23/01 Reprint Date:

CTI LAB#:	79092	Sample Des	cription:	SB09 4-4.5				Sampled:	7	/18/01 (0850
nalyte		Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analys	st Metho	d
Solids, Percent		80.8	%	N/A	N/A	× 1		7/24/01	KLM	EPA 503	0A
rganic Results											
Aroclor-1016		<0.050	mg/kg	0.050	0.14	1	7/26/01	8/5/01	JRC	EPA 808	2
roclor-1221		<0.050	mg/kg	0.050	0.15	i 1	7/26/01	8/5/01	JRC	EPA 808	2
roclor-1232		<0.037	mg/kg	0.037	0.11	1	7/26/01	8/5/01	JRC	EPA 808	2
Aroclor-1242		<0.062	mg/kg	0.062	0.17	′ 1	7/26/01	8/5/01	JRC	EPA 808	2
roclor-1248		<0.037	mg/kg	0.037	0.11	1	7/26/01	8/5/01	JRC	EPA 808	2
Aroclor-1254		<0.025	mg/kg	0.025	0.062	2 1	7/26/01	8/5/01	JRC	EPA 808	2
roclor-1260		<0.050	mg/kg	0.050	0.14	1	7/26/01	8/5/01	JRC	EPA 808	2
CTI LAB#:	79093	Sample Des	cription:	SB02 4-5				Sampled:	7	/18/01	0910
^.nalyte		Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	_Analy	st Metho	d
Solids, Percent		82.3	%	N/A	N/A	× 1		7/24/01	KLM	EPA 503	0A
letals Results hromium		56.0	mg/kg	0.074	0.25	5 1	7/24/01	7/25/01	NAH	EPA 601	0B
Lead		216	mg/kg	0.26	0.87	' 1	7/24/01	7/25/01	NAH	EPA 601	0B
CTI LAB#:	79095	Sample Des	cription:	SB02 4-5				Sampled:	7	/18/01	0910
nalyte		Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analy	st <u>Metho</u>	d

Metals Results

1059

CTLaboratories

Project #: 2082394.01160101

Project Name: ST FRANCIS AUTO WREC

Contract #: 1510 Folder #: 18381

2 of 6

CTI LAB#:	79095	Sample Des	cription:	SB02 4-5				Sampleo	d: 7	7/18/01 0910	
r nalyte		Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analy	st Method	
LP Chromium		0.00230	mg/L	0.00071 *	0.0024	1	7/25/01	7/26/01	NAH	EPA 6010B	
TCLP Lead		8.32	mg/L	0.0014	0.0046	1	7/25/01	7/26/01	NAH	EPA 6010B	
CTI LAB#:	79096	Sample Des	cription:	SB01 0-0.5				Sampleo	d:	7/18/01 0920	_
nalyte		Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analy	st Method	
Solids, Percent		89.1	%	N/A	N/A	. 1		7/24/01	KLM	EPA 5030A	
Aroclor-1016		<0.044	mg/kg	0.044	0.12	: 1	7/26/01	8/5/01	JRC	EPA 8082	
·oclor-1221		<0.044	mg/kg	0.044	0.13	i 1	7/26/01	8/5/01	JRC	EPA 8082	
Aroclor-1232		<0.033	mg/kg	0.033	0.10) 1	7/26/01	8/5/01	JRC	EPA 8082	
[*] coclor-1242		<0.056	mg/kg	0.056	0.16	6 1	7/26/01	8/5/01	JRC	EPA 8082	
roclor-1248		<0.033	mg/kg	0.033	0.10) 1	7/26/01	8/5/01	JRC	EPA 8082	
Aroclor-1254		<0.022	mg/kg	0.022	0.056	6 1	7/26/01	8/5/01	JRC	EPA 8082	
roclor-1260		<0.044	mg/kg	0.044	0.12	2 1	7/26/01	8/5/01	JRC	EPA 8082	
CTI LAB#:	79097	Sample Des	cription:	SB01 4-5				Sample	d:	7/18/01 0925	
nalyte		Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analy	vst Method	
Solids, Percent		78.6	%	Ņ/A	N/A	× 1		7/24/01	KLM	EPA 5030A	
letals Results		13.0	mg/kg	0.019	0.063	3 1	7/24/01	7/25/01	NAH	EPA 6010B	
, ead		1280	mg/kg	0.17	0.58	3 1	7/24/01	7/25/01	NAH	EPA 6010B	
lercury		3.7	mg/kg	0.75	2.5	5 100	7/28/01	7/30/01	NAH	EPA 7471	
Organic Results roclor-1016		<0.051	mg/kg	0.051	0.14	1 1	7/26/01	8/5/01	JRC	EPA 8082	
Aroclor-1221		<0.051	mg/kg	0.051	0.15	5 1	7/26/01	8/5/01	JRC	EPA 8082	
[^] roclor-1232		<0.038	mg/kg	0.038	0.11	1	7/26/01	8/5/01	JRC	EPA 8082	
roclor-1242		<0.063	mg/kg	0.063	0.18	3 1	7/26/01	8/5/01	JRC	EPA 8082	
Aroclor-1248		<0.038	mg/kg	0.038	0.11	1	7/26/01	8/5/01	JRC	EPA 8082	
roclor-1254		27	mg/kg	1.3	3.2	2 50	7/26/01	8/5/01	JRC	EPA 8082	
Aroclor-1260		<2.5	mg/kg	2.5	7.0) 50	7/26/01	8/5/01	JRC	EPA 8082	

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

2

CTLaboratories Project Name: ST FRANCIS AUTO WREC

MONTGOMERY WATSON

Project #: 2082394.01160101

Contract #: 1510 Folder #: 18381

3 of 6

CTI LAB#:	79097	Sample Des	cription:	SB01 4-5					Sampled:		7/18/01	0925
^ <u>nalyte</u>		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analy	st Meti	nod
CTI LAB#:	7909 8	Sample Des	cription:	SB01 4-5					Sampled:		7/18/01	0925
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analy	st Meti	nod
*1etals Results CLP Cadmium		0.363	mg/L	0.00035	0.0012	2 1	7/	/25/01	7/26/01	NAH	EPA 6	010B
TCLP Lead		2.04	mg/L	0.0014	0.0046	5 1	7/	/25/01	7/26/01	NAH	EPA 6	010B
CLP Mercury		<0.00014	mg/L	0.00014	0.00047	' 1	7/	/25/01	7/30/01	NAH	EPA 7	470
CTI LAB#:	7909 9	Sample Des	cription:	SB0 3 4-5					Sampled:	7	7/18/01	0940
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analy	st Meti	nod
olids, Percent		94.8	%	N/A	N/A	\ 1			7/24/01	KLM	EPA 5	030A
Metals Results ≏admium		0.13	mg/kg	0.018	0.061	1	7/	/24/01	7/25/01	NAH	EPA 6	010B
əad		25.2	mg/kg	0.17	0.56	6 1	7.	/24/01	7/25/01	NAH	EPA 6	010B
CTI LAB#:	7910 0	Sample Des	cription:	SB03 4-5					Sampled:		7/18/01	0940
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analy	st Meti	hod
letals Results	·	0.00613	mg/L	0.00035	0.0012	2 1	7.	/25/01	7/26/01	NAH	EPA 6	010B
TCLP Lead		0.292	mg/L	0.0014	0.0046	6 1	7.	/25/01	7/26/01	NAH	EPA 6	010B
CTI LAB#:	79101	Sample Des	cription:	SB04 0-0.5					Sampled:		7/18/01	0955
nalyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analy	st Met	hod
≏olids, Percent		91.6	%	N/A	N/A	A 1			7/24/01	KLM	EPA 5	6030A
rganic Results Aroclor-1016		<0.043	mg/kg	0.043	0.12	2 1	7.	/26/01	8/5/01	JRC	EPA 8	082
roclor-1221		<0.043	mg/kg	0.043	0.13	3 1	7.	/26/01	8/5/01	JRC	EPA 8	0 82
Aroclor-1232		<0.033	mg/kg	0.033	0.098	3 1	7.	/26/01	8/5/01	JRC	EPA 8	80 82
roclor-1242		<0.054	mg/kg	0.054	0.15	5 1	7.	/26/01	8/5/01	JRC	EPA 8	80 82
nroclor-1248		<0.033	mg/kg	0.033	0.098	3 1	7.	/26/01	8/5/01	JRC	EPA 8	082

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

3

CTLaboratories Project Name: ST FRANCIS AUTO WREC

MONTGOMERY WATSON

Project #: 2082394.01160101

Contract #: 1510 Folder #: 18381

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CTI LAB#:	79101	Sample Des	cription:	SB04 0-0.5				Sample	ed:	7/18/01 0955
^nalyte		Result	Units	LOD	LOQ	Dilution	Pre Qualifier Da	p Analysis te Date	Anal	yst_Method
roclor-1254		<0.022	mg/kg	0.022	0.054	1	7/26/0	1 8/5/01	JRC	EPA 8082
Aroclor-1260		<0.043	mg/kg	0.043	0.12	1	7/26/0	1 8/5/01	JRC	EPA 8082
CTI LAB#:	79102	Sample Des	cription:	SB04 4-5				Sample	ed:	7/18/01 0958
Analyte		Result	Units	LOD	LOQ	Dilution	Pre Qualifier Da	ep Analysis te Date	Anal	yst Method
		07.0	0/	51/A		4		7/04/04		EDA 5000A
olids, Percent		97.6	%	N/A	N/A	. 1		//24/01	KLM	EPA 5030A
Jetals Results ead		35.4	mg/kg	0.15	0.50	1	7/24/0	1 7/25/01	NAH	EPA 6010B
rganic Results Aroclor-1016		<0.041	mg/kg	0.041	0.11	1	7/26/0	1 8/5/01	JRC	EPA 8082
roclor-1221		<0.041	mg/kg	0.041	0.12	1	7/26/0	1 8/5/01	JRC	EPA 8082
Aroclor-1232		<0.031	mg/kg	0.031	0.092	1	7/26/0	1 8/5/01	JRC	EPA 8082
roclor-1242		<0.051	mg/kg	0.051	0.14	1	7/26/0	1 8/5/01	JRC	EPA 8082
roclor-1248		<0.031	mg/kg	0.031	0.092	1	7/26/0	1 8/5/01	JRC	EPA 8082
Aroclor-1254		<0.020	mg/kg	0.020	0.051	1	7/26/0	1 8/5/01	JRC	EPA 8082
roclor-1260		<0.041	mg/kg	0.041	0.11	1	7/26/0	1 8/5/01	JRC	EPA 8082
CTI LAB#:	79103	Sample Des	cription:	SB04 4-5				Sample	ed:	7/18/01 0958
nalyte		Result	Units	LOD	LOQ	Dilution	Pro Qualifier Da	ep Analysis te Date	Anal	yst Method
letals Results										
CLP Lead		0.0261	mg/L	0.0014	0.0046	1	7/25/0)1 7/26/01	NAH	EPA 6010B
CTI LAB#:	79104	Sample Des	cription:	SB05 3-4				Sample	ed:	7/18/01 1050
nalyte		Result	Units	LOD	LOQ	Dilution	Pro Qualifier Da	ep Analysis te Date	Anal	yst Method
Solids, Percent		60.0	%	N/A	N/A	. 1		7/24/01	KLM	EPA 5030A
Ietals Results		168	ma/ka	በ በ7ዓ	0 27	[.] 1	7/24/()1 7/25/01	МАН	EPA 6010B
ead		1120	ma/ka	0.28	0.93	, 1	7/24/0)1 7/25/01	NAH	EPA 6010B
lercury		26.3	ma/ka	1.0	3.00	100	7/2410)1 7/30/01	МАН	FPA 7471
noroury		20.0	пулу	1.0	0.0	100	11200		11/4/17	

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Contract #: 1510 Folder #: 18381

Project Name: ST FRANCIS AUTO WREC Project #: 2082394.01160101

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CTI LAB#:	79104	Sample Des	scription:	SB05 3-4				Sam	pled:	7/18/01 105	50
nalyte		Result	Units	LOD	LOQ	Dilution	Pr Qualifier Da	ep Analysis ate Date	Anal	yst Method	
an er tradan de la											
Qualifiers applying to	all Analyte	es of Method	EPA 8082:	V							
oclor-1016		<3.3	mg/kg	3.3	9.2	50	7/26/	01 8/5/01	JRC	EPA 8082	
Aroclor-1221		<3.3	mg/kg	3.3	10	50	7/26/	01 8/5/01	JRC	EPA 8082	
[*] roclor-1232		<2.5	mg/kg	2.5	7.5	50	7/26/	01 8/5/01	JRC	EPA 8082	
oclor-1242		<4.2	mg/kg	4.2	12	50	7/26/	01 8/5/01	JRC	EPA 8082	
Aroclor-1248		<0.050	mg/kg	0.050	0.15	1	7/26/	01 8/5/01	JRC	EPA 8082	
oclor-1254		<0.033	mg/kg	0.033	0.083	1	7/26/	01 8/5/01	JRC	EPA 8082	
Aroclor-1260		<0.067	mg/kg	0.067	0.18	1	7/26/	01 8/5/01	JRC	EPA 8082	
CTI LAB#:	79105	Sample Des	scription:	SB05 3-4				Sam	pled:	7/18/01 10	50
analyte		Posult	Unite		100	Dilution	Pr Oualifier D	rep Analysis	Anal	vst Mathod	
Metals Results		Neguit				Dilution				yst methou	
CLP Chromium		0.0302	mg/L	0.00071	0.0024	1	7/25/	01 7/26/01	NAH	EPA 6010B	
TCLP Lead		1.12	mg/L	0.0014	0.0046	i 1	7/25/	01 7/26/01	NAH	EPA 6010B	
CLP Mercury		<0.00014	mg/L	0.00014	0.00047	1	7/25/	01 7/30/01	NAH	EPA 7470	
CTI LAB#:	79106	Sample Des	scription:	SB06 3-4				Sam	pled:	7/18/01 11:	25
analyte		Result	Units	LOD	LOQ	Dilution	Pı Qualifier D	ep Analysis ate Date	Anal	yst Method	
olids, Percent		51.4	%	N/A	N/A	. 1		7/24/01	KLM	EPA 5030A	
Metals Results Cadmium		2.0	ma/kg	0.035	0.12	2 1	7/24/	/01 7/25/01	NAH	EPA 6010B	
ad		108	mg/kg	0.33	1.1	1	7/24/	01 7/25/01	NAH	EPA 6010B	
CTI LAB#:	79107	Sample Des	scription:	SB06 3-4				Sam	pled:	7/18/01 11	25
							Pi	rep Analvsis			
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier D	ate Date	Anal	yst Method	
etals Results CLP Cadmium		0.0107	mg/L	0.00035	0.0012	! 1	7/25/	/01 7/26/01	NAH	EPA 6010B	ł
TCLP Lead		0.0105	mg/L	0.0014	0.0046	; 1	7/25	/01 7/26/01	NAH	EPA 6010B	1



Project #: 2082394.01160101

ST FRANCIS AUTO WREC

Contract #: 1510 Folder #: 18381

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CTI LAB#:	79108	Sample Des	cription:	SB07 4-5					Sampled		7/18/01	1210
* nalyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analy	yst Meth	nod
Solids, Percent		85.5	%	N/A	N/A	. 1			7/24/01	KLM	EPA 5	030A
etals Results		94.5	mg/kg	0.055	0.18	1		7/24/01	7/25/01	NAH	EPA 6	010B
Lead		1710	mg/kg	0.19	0.64	1		7/24/01	7/25/01	NAH	EPA 6	010B
CTI LAB#:	79109	Sample Des	cription:	SB07 4-5					Sampled	:	7/18/01	1210
nalyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Anal	yst Meti	ıod
Metals Results TCLP Chromium	- <u> </u>	0.0619	mg/L	0.00071	0.0024	1		7/25/01	7/26/01	NAH	EPA 6	010B
CLP Lead		10.1	mg/L	0.0014	0.0046	i 1		7/25/01	7/26/01	NAH	EPA 6	010B
CTI LAB#:	79110	Sample Des	cription:	SB08 3-4					Sampled	:	7/18/01	1225
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Anal	yst Metl	nod
olids, Percent		90.5	%	N/A	N/A	. 1			7/24/01	KLM	EPA 5	6030A
Organic Results roclor-1016		<0.044	mg/kg	0.044	0.12	! 1		7/26/01	8/5/01	JRC	EPA 8	082
Aroclor-1221		<0.044	mg/kg	0.044	0.13	; 1		7/26/01	8/5/01	JRC	EPA 8	082
roclor-1232		<0.033	mg/kg	0.033	0.10) 1		7/26/01	8/5/01	JRC	EPA 8	082
Groclor-1242		<0.056	mg/kg	0.056	0.16	i 1		7/26/01	8/5/01	JRC	EPA 8	082
Aroclor-1248		<0.033	mg/kg	0.033	0.10) 1		7/26/01	8/5/01	JRC	EPA 8	8082
rector 1254									o / T / O /			000
100101-1234		<0.022	mg/kg	0.022	0.056	5 1		7/26/01	8/5/01	JRC	EPA 8	3082

otes: * Indicates Value in between LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is ttached.

PML

Submitted by:

Record Reviewer

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Code Description

- Analyte averaged calibration criteria within acceptable limits.
- Analyte detected in associated Method Blank.
- C Toxicity present in BOD sample.
 - Diluted Out.

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- Safe, No Total Coliform detected.
- Unsafe, Total Coliform detected, no E. Coli detected.
- Unsafe, Total Coliform detected and E. Coli detected.
- Holding time exceeded.
- Estimated value. The result is less than the reporting limit, but greater than the MDL.
- Significant peaks were detected outside the chromatographic window.
- M Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
- Insufficient BOD oxygen depletion.
-) Complete BOD oxygen depletion.
- Concentration of analyte differs more than 40% between primary and confirmation analysis.
- **Q** Laboratory Control Sample outside acceptance limits.
- **See Narrative at end of report.**
 - Surrogate and/or internal standard recovery outside acceptance limits due to apparent matrix effects.
 - Sample received with improper preservation or temperature.
 - Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
 - Sample amount received was below program minimum.
 - Analyte exceeded calibration range.
 - Replicate/Duplicate precision outside acceptance limits.
 - Calibration criteria exceeded.

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NAME OF COURIER: _____

AIRBILL NUMBER:

Groundwater Analytical Results

CTLaboratories

MONTGOMERY WATSON

MARK PAULI

ONE SCIENCE CT

MADISON, WI 53711

1230 Lange Court Baraboo, WI 53913-3109 Phone: (800) 228-3012 Fax: (608) 356-2766 www.ctlaboratories.com

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ANALYTICAL REPORT

1 of 32

Project Name: ST FRANCIS AUTO Contract #: 1510 Project #: 2082394.01160101 Folder #: 18561 Purchase Order #: Arrival Temperature: See COC Report Date: 8/16/01 Date Received: 7/27/01 Reprint Date:

CTI LAB#: 79863	Sample Des	cription:	TRIP BLANK			·		Sample	ed: 7/:	26/01	0700
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Metho	od
Organic Results											
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA 82	260
1,1,1-Trichloroethane	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA 82	860
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.20	0.50) 1			8/7/01	RLD	EPA 82	260
1,1,2-Trichloroethane	<0.10	ug/L	0.10	0.40) 1			8/7/01	RLD	EPA 82	860
1,1-Dichloroethane	<0.10	ug/L	0.10	0.40) 1			8/7/01	RLD	EPA 82	60
1,1-Dichloroethene	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA 82	80
1,1-Dichloropropene	<0.20	ug/L	0.20	0.50) 1			8/7/01	RLD	EPA 82	80
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.80) 1			8/7/01	RLD	EPA 82	260
1,2,3-Trichloropropane	<0.10	ug/L	0.10	0.40) 1			8/7/01	RLD	EPA 82	260
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.70) 1			8/7/01	RLD	EPA 82	260
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA 82	260
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	1.2	2 1			8/7/01	RLD	EPA 82	260
1,2-Dibromoethane	<0.10	ug/L	0.10	0.20) 1			8/7/01	RLD	EPA 82	260
1,2-Dichlorobenzene	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA 82	260
1,2-Dichloroethane	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA 82	260
cis-1,2-Dichloroethene	<0.20	ug/L	0.20	0.50) 1			8/7/01	RLD	EPA 82	260
trans-1,2-Dichloroethene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA 82	260
1,2-Dichloropropane	<0.20	ug/L	0.20	0.60) 1			8/7/01	RLD	EPA 82	260
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA 82	260
1,3-Dichlorobenzene	<0.10	ug/L	0.10	0.20) 1			8/7/01	RLD	EPA 82	260
cis-1,3-Dichloropropene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA 82	260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561



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Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

CTI LAB#: 79863	Sample Des	scription:	TRIP BLANK					Sampl	ed:	7/26/01	0700
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Anal	lyst Met	hod
1,3-Dichloropropane	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
trans-1,3-Dichloropropene	<0.10	ug/L	0.10	0.20) 1			8/7/01	RLD	EPA	8260
1,4-Dichlorobenzene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
2,2-Dichloropropane	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA	8260
2-Chlorotoluene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
4-Chlorotoluene	<0.20	ug/L	0.20	0.50) 1			8/7/01	RLD	EPA	8260
Benzene	<0.10	ug/L	0.10	0.20) 1			8/7/01	RLD	EPA	8260
Bromobenzene	<0.10	ug/L	0.10	0.20) 1			8/7/01	RLD	EPA	8260
Bromochloromethane	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
Bromodichloromethane	<0.10	ug/L	0.10	0.40) 1			8/7/01	RLD	EPA	8260
Bromoform	<0.20	ug/L	0.20	0.50) 1			8/7/01	RLD	EPA	8260
Bromomethane	<0.40	ug/L	0.40	1.3	3 1			8/7/01	RLD	EPA	8260
n-Butylbenzene	<0.10	ug/L	0.10	0.40) 1			8/7/01	RLD	EPA	8260
sec-Butylbenzene	<0.20	ug/L	0.20	0.60) 1			8/7/01	RLD	EPA	8260
ert-Butylbenzene	<0.10	ug/L	0.10	0.20) 1			8/7/01	RLD	EPA	8260
Carbon tetrachloride	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
Chlorobenzene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
Chloroethane	<0.40	ug/L	0.40	1.2	2 1			8/7/01	RLD	EPA	8260
Chloroform	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
Chloromethane	<0.20	ug/L	0.20	0.50) 1			8/7/01	RLD	EPA	8260
Dibromochloromethane	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA	8260
Dibromomethane	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA	8260
Dichlorodifluoromethane	<0.10	ug/L	0.10	0.40) 1			8/7/01	RLD	EPA	8260
Diisopropyl ether	<0.10	ug/L	0.10	0.40) 1			8/7/01	RLD	EPA	8260
Ethylbenzene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
lexachlorobutadiene	<0.20	ug/L	0.20	0.60) 1			6/7/01	RLD	EPA	8260
sopropylbenzene	<0.10	ug/L	0.10	0.20) 1			8/7/01	RLD	EPA	8260
o-Isopropyltoluene	<0.10	ug/L	0.10	0.30) 1			8/7/01	RLD	EPA	8260
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.0) 1			8/7/01	RLD	EPA	8260
Nethylene chloride	<0.40	ug/L	0.40	1.2	2 1			8/7/01	RLD	EPA	8260
laphthalene	<0.20	ug/L	0.20	0.40) 1			8/7/01	RLD	EPA	8260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

CTLaboratories

Sec. Sec. 17

49.11-045585

MONTGOMERY WATSON

Project Name: ST FRANCIS AUTO

Project #: 2082394.01160101

Contract #: 1510 Folder #: 18561

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CTI LAB#:	79863	Sample Des	scription:	TRIP BL	ANK					Sampleo	i: 7/:	26/01	0700
Analyte		Result	Units		LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analysi	Met	hod
n-Propylbenzene		<0.10	ug/L		0.10	0.20) 1			8/7/01	RLD	EPA 8	3260
Styrene		<0.10	ug/L		0.10	0.30) 1			8/7/01	RLD	EPA 8	8260
Tetrachloroethene		<0.10	ug/L		0.10	0.30) 1			8/7/01	RLD	EPA 8	8260
Toluene		<0.20	ug/L		0.20	0.40) 1			8/7/01	RLD	EPA 8	3260
Trichloroethene		<0.20	ug/L		0.20	0.40) 1			8/7/01	RLD	EPA 8	3260
Trichlorofluoromethane	е	<0.20	ug/L		0.20	0.50) 1			8/7/01	RLD	EPA 8	8260
Vinyl chloride		<0.10	ug/L		0.10	0.30) 1			8/7/01	RLD	EPA 8	8260
m & p-Xylene		<0.20	ug/L		0.20	0.70) 1			8/7/01	RLD	EPA 8	3260
o-Xylene		<0.10	ug/L		0.10	0.30) 1			8/7/01	RLD	EPA 8	3260
CTI LAB#:	79864	Sample Des	cription:	MW02						Sampleo	i: 7/:	26/01	1005
Analyte		Result	Units		LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	Met	hod
Metals Results			· . · · ·										
Dissolved Arsenic		13.5	ug/L		1.3	4.4	1		7/31/01	8/2/01	NAH	EPA 7	7060
Dissolved Antimony		<3.4	ug/L		3.4	11	1			7/30/01	NAH	EPA 6	6010B
Dissolved Beryllium		0.76	ug/L		0.37 *	1.2	2 1			7/30/01	NAH	EPA 6	6010B
Dissolved Cadmium		0.44	ug/L		0.42 *	1.4	1			7/30/01	NAH	EPA 6	6010B
Dissolved Chromium		<0.61	ug/L		0.61	2.1	1			7/30/01	NAH	EPA (6010B
Dissolved Copper		4.8	ug/L		2.9 *	9.5	1			7/30/01	NAH	EPA 6	6010B
Dissolved Lead		2.6	ug/L		1.4 *	4.7	′1			7/30/01	NAH	EPA (6010B
Dissolved Nickel		16.7	ug/L		5.0 *	17	' 1			7/30/01	NAH	EPA (6010B
Dissolved Selenium		<5.2	ug/L		5.2	17	1			7/30/01	NAH	EPA 6	6010B
Dissolved Silver		<0.62	ug/L		0.62	2.1	1			7/30/01	NAH	EPA (6010B
Dissolved Thallium		<5.4	ug/L		5.4	18	; 1			7/30/01	NAH	EPA (6010B
Dissolved Zinc		34.4	ug/L		1.8	5.8	: 1			7/30/01	NAH	EPA (6010B
Dissolved Mercury		<0.14	ug/L		0.14	0.47	'1		7/28/01	7/30/01	NAH	EPA 7	7470
Organic Results Aroclor-1016		<0.0030	ug/L	0	.0030	0.0080) 1		7/30/01	8/4/01	JRC	EPA 8	8082
Aroclor-1221		<0.0020	ug/L	0	.0020	0.0050) 1		7/30/01	8/4/01	JRC	EPA I	8082
Aroclor-1232		<0.0030	ug/L	0	.0030	0.0090) 1		7/30/01	8/4/01	JRC	EPA 8	8082

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

0.0030

0.0080

1

7/30/01

8/4/01

JRC

EPA 8082

Solid sample results reported on a Dry Weight Basis

< 0.0030

ug/L

Aroclor-1242

3

CTLaboratories

MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

4

Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

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CTI LAB#: 79864	Sample Des	scription:	MW02				Samp	led: 7/:	26/01 1005
Analyte	Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analyst	Method
Aroclor-1248	<0.0030	ug/L	0.0030	0.0090	1	7/30/01	8/4/01	JRC	EPA 8082
Aroclor-1254	<0.0020	ug/L	0.0020	0.0050	1	7/30/01	8/4/01	JRC	EPA 8082
Aroclor-1260	<0.0030	ug/L	0.0030	0.0090	1	7/30/01	8/4/01	JRC	EPA 8082
1,2,4,5-Tetrachlorobenzene	<0.19	ug/L	0.19	0.63	1	8/2/01	8/7/01	KMC	EPA 8270
1,2,4-Trichlorobenzene	<0.95	ug/L	0.95	3.2	1	8/2/01	8/7/01	KMC	EPA 8270
1,2-Dichlorobenzene	<0.19	ug/L	0.19	0.64	1	8/2/01	8/7/01	KMC	EPA 8270
1,3-Dichlorobenzene	<0.20	ug/L	0.20	0.68	1	8/2/01	8/7/01	KMC	EPA 8270
1,4-Dichlorobenzene	<0.21	ug/L	0.21	0.71	1	8/2/01	8/7/01	KMC	EPA 8270
2,4,5-Trichlorophenol	<0.18	ug/L	0.18	0.59	1	8/2/01	8/7/01	KMC	EPA 8270
2,4,6-Trichlorophenol	<0.28	ug/L	0.28	0.95	1	8/2/01	8/7/01	KMC	EPA 8270
2,4-Dichlorophenol	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
2,4-Dimethylphenol	<0.28	ug/L	0.28	0.95	1	8/2/01	8/7/01	KMC	EPA 8270
2,4-Dinitrophenol	<0.090	ug/L	0.090	0.30	1	8/2/01	8/7/01	KMC	EPA 8270
2,4-Dinitrotoluene	<0.21	ug/L	0.21	0.72	1	8/2/01	8/7/01	KMC	EPA 8270
2,6-Dichlorophenol	<0.20	ug/L	0.20	0.67	1	8/2/01	8/7/01	KMC	EPA 8270
2,6-Dinitrotoluene	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
2-Chloronaphthalene	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8270
2-Chlorophenol	<0.18	ug/L	0.18	0.60	1	8/2/01	8/7/01	KMC	EPA 8270
2-Methylnaphthalene	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
2-Methylphenol	<0.45	ug/L	0.45	1.5	1	8/2/01	8/7/01	KMC	EPA 8270
2-Naphthylamine	<1.2	ug/L	1.2	4.0	1	8/2/01	8/7/01	KMC	EPA 8270
2-Nitroaniline	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8270
2-Nitrophenol	<0.45	ug/L	0.45	1.5	1	8/2/01	8/7/01	KMC	EPA 8270
3 & 4-Methylphenol	<0.38	ug/L	0.38	1.3	1	8/2/01	8/7/01	KMC	EPA 8270
3,3'-Dichlorobenzidine	<0.40	ug/L	0.40	1.3	1	8/2/01	8/7/01	KMC	EF.4 8270
3-Nitroaniline	<0.14	ug/L	0.14	0.46	1	8/2/01	8/7/01	КМС	EPA 8270
4,6-Dinitro-2-methylphenol	<0.13	ug/L	0.13	0.43	1	8/2/01	8/7/01	KMC	EPA 8270
4-Bromophenyl-phenyl ether	<0.52	ug/L	0.52	1.8	1	8/2/01	8/7/01	KMC	EPA 8270
4-Bromophenyl-phenyl ether	<0.52	ug/L	0.52	1.8	1	8/2/01	8/7/01	КМС	EPA 8270
4-Chloro-3-methylphenol	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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31⁰⁴¹19885390

CTLaboratories Project Name: ST FRANCIS AUTO

Contract #: 1510 Folder #: 18561

1

5

Project #: 2082394.01160101

CTI LAB#: 79864	Sample Des	cription:	MW02				Sampl	ed: 7/	26/01 1005
Analyte	Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analys	Method
4-Chloroaniline	<0.61	ug/L	0.61	2.0	1	8 2/01	8/7/01	KMC	EPA 8270
4-Chlorophenyl-phenyl ether	<0.52	ug/L	0.52	1.7	1	82/01	8/7/01	КМС	EPA 8270
4-Nitroaniline	<0.44	ug/L	0.44	1.5	1	82/01	8/7/01	KMC	EPA 8270
4-Nitrophenol	<0.28	ug/L	0.28	0.92	1	8:2/01	8/7/01	KMC	EPA 8270
Acenaphthene	<0.48	ug/L	0.48	1.6	1	82/01	8/7/01	KMC	EPA 8270
Acenaphthylene	<0.50	ug/L	0.50	1.7	1	8.2/01	8/7/01	KMC	EPA 8270
Acetophenone	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	КМС	EPA 8270
Aniline	<0.58	ug/L	0.58	1.9	1	8/2/01	8/7/01	KMC	EPA 8270
Anthracene	<0.48	ug/L	0.48	1.6	1	82/01	8/7/01	KMC	EPA 8270
Azobenzene &	<0.35	ug/L	0.35	1.2	1	82/01	8/7/01	KMC	EPA 8270
senzidine	<0.48	ug/L	0.48	1.6	1	82/01	8/7/01	KMC	EPA 8270
Benzo(a)anthracene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
Benzo(a)pyrene	<0.43	ug/L	0.43	1.4	1	82/01	8/7/01	KMC	EPA 8270
Benzo(b)fluoranthene	<0.41	ug/L	0.41	1.4	1	8-2/01	8/7/01	KMC	EPA 8270
Benzo(g,h,i)perylene	<0.43	ug/L	0.43	1.1	1	8-2/01	8/7/01	KMC	EPA 8270
Benzo(k)fluoranthene	<0.41	ug/L	0.41	1.4	1	8/2/01	8/7/01	КМС	EPA 8270
Benzoic acid	<0.070	ug/L	0.070	0.23	1	8/2/01	8/7/01	КМС	EPA 8270
Benzyl alcohol	<0.34	ug/L	0.34	1.1	1	8-2/01	8/7/01	КМС	EPA 8270
Bis(2-chloroethoxy)methane	<0.50	ug/L	0.50	1.7	1	8.2/01	8/7/01	KMC	EPA 8270
Bis(2-chloroethyl)ether	<0.24	ug/L	0.24	0.79	1	8/2/01	8/7/01	KMC	EPA 8270
Bis(2-chloroisopropyl)ether	<0.52	ug/L	0.52	1.7	1	8/2/01	8/7/01	KMC	EPA 8270
3is(2-ethylhexyl)phthalate	1.6	ug/L	1.4 *	4.7	1	8/2/01	8/7/01	КМС	EPA 8270
Butylbenzylphthalate	<0.41	ug/L	0.41	1.4	1	8/2/01	8/7/01	КМС	EPA 8270
Carbazole	<0.55	ug/L	0.55	1.8	1	8/2/01	8/7/01	KMC	EPA 8270
Chrysene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
i-n-butylphthalate	<0.68	ug/L	0.68	2.3	1	8/2/01	8/7/01	KMC	EPA 8270
i-n-octylphthalate	<0.32	ug/L	0.32	1.1	1	8/2/01	8/7/01	КМС	EPA 8270
Dibenzo(a,h)anthracene	<0.84	ug/L	0.84	2.8	1	8/2/01	8/7/01	KMC	EPA 8270
libenzofuran	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	КМС	EPA 8270
Diethylphthalate	<0.51	ug/L	0.51	1.7	1	8/2/01	8/7/01	КМС	EPA 8270
Dimethylphthalate	<0.49	ug/L	0.49	1.7	1	8/2/01	8/7/01	KMC	EPA 8270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

CTLaboratories

< 0.34

< 0.28

< 0.48

<0.47

<0.21

<0.50

<0.23

< 0.46

<0.66

<0.20

<0.20

< 0.20

<0.10

0.94

<0.20

<0.20

< 0.30

<0.10

< 0.30

ug/L

0.34

0.28

0.48

0.47

0.21

0.50

0.23

0.46

0.66

0.20

0.20

0.20

0.10

0.10

0.20

0.20

0.30

0.10

0.30

1.1

0.90

1.6

1.6

0.68

1.7

0.76

1.5

2.2

0.40

0.40

0.50

0.40

0.40

0.40

0.50

0.80

0.40

0.70

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

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8/7/01

8/7/01

8/7/01

8/7/01

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8/7/01

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8/8/01

KMC

KMC

KMC

KMC

KMC

KMC

KMC

KMC

KMC

RLD

EPA 8270

EPA 8260

6

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

Sampled: CTI LAB#: 79864 Sample Description: MW02 7/26/01 1005 Prep Analysis Dilution Qualifier Date Date Result Units LOD 1.00 Analyst Method Fluoranthene <0.50 ug/L 0.50 1.7 8/2/01 8/7/01 KMC EPA 8270 1 <0.49 ug/L 0.49 1.6 1 8/2/01 8/7/01 KMC EPA 8270 0.47 < 0.47 KMC Hexachlorobenzene ug/L 1.6 1 8/2/01 8/7/01 EPA 8270 Hexachlorobutadiene < 0.21 ug/L 0.21 3.3 1 8/2/01 8/7/01 KMC EPA 8270 Hexachlorocyclopentadiene <0.16 ug/L 0.16 0.52 8/2/01 8/7/01 KMC EPA 8270 1 <0.22 Hexachloroethane ug/L 0.22 0.73 1 8/2/01 8/7/01 KMC EPA 8270 Hexachloropropene < 0.18 ug/L 0.18 0.60 1 8/2/01 8/7/01 KMC EPA 8270 Indeno(1,2,3-cd)pyrene <0.85 0.85 8/7/01 KMC ug/L 2.8 1 8/2/01 EPA 8270 <0.51 ug/L 0.51 1.7 1 8/2/01 8/7/01 KMC EPA 8270 N-Nitroso-di-n-propylamine <0.48 ug/L 0.48 1.6 1 8/2/01 8/7/01 KMC EPA 8270 N-Nitrosodimethylamine <0.27 ug/L 0.27 0.90 1 8/2/01 8/7/01 KMC EPA 8270

Secondaria.	

12013892	Pe

-24 88 92	Pe

Analyte

Fluorene

Isophorone

Diphn

Phenol

Pyrene

N-Nitrosodiphenylamine &

N-Nitrosopyrrolidine

Naphthalene

Nitrobenzene

rad88ia	Pentachlorophenol
	Phenanthrene

Pyridine
1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene

1,1-Dichloropropene

1,2,3-Trichlorobenzene

1,2,3-Trichloropropane

1.2.4-Trichlorobenzene

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

CTLaboratories

1

49⁵³9553888

MONTGOMERY WATSON

Project #: 2082394.01160101

Project Name: ST FRANCIS AUTO

Contract #: 1510 Folder #: 18561

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CTI LAB#: 7986	Sample Description:		MW02					Sample	ed: 7/2	7/26/01 1005	
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Meth	nođ
1,2,4-Trimethylbenzene	0.11	ug/L	0.10 *	0.30	1			8/8/01	RLD	EPA 8	260
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	1.2	1			8/8/01	RLD	EPA 8	260
1,2-Dibromoethane	<0.10	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
1,2-Dichlorobenzene	<0.20	ug/L	0.20	0.40	• 1			8/8/01	RLD	EPA 8	260
1,2-Dichloroethane	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
cis-1,2-Dichloroethene	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8	260
trans-1,2-Dichloroethene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
1,2-Dichloropropane	<0.20	ug/L	0.20	0.60	1			8/8/01	RLD	EPA 8	260
1,3,5-Trimethylbenzene	0.11	ug/L	0.10 *	0.30	1			8/8/01	RLD	EPA 8	260
1,3-Dichlorobenzene	<0.10	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
cis-1,3-Dichloropropene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
1,3-Dichloropropane	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
trans-1,3-Dichloropropene	<0.10	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
1,4-Dichlorobenzene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
2,2-Dichloropropane	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
2-Chlorotoluene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
4-Chlorotoluene	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8	260
Benzene	0.35	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
Bromobenzene	<0.10	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
Bromochloromethane	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
Bromodichloromethane	<0.10	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8	260
Bromoform	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8	260
Bromomethane	<0.40	ug/L	0.40	1.3	1			8/8/01	RLD	EPA 8	260
n-Butylbenzene	<0.10	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8	260
sec-Butylbenzene	0.47	ug/L	0.20 *	0.60	1			8/8/01	RLD	EPA 8	260
tert-Butylbenzene	1.J	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
Carbon tetrachloride	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
Chlorobenzene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
Chioroethane	<0.40	ug/L	0.40	1.2	1			8/8/01	RLD	EPA 8	260
Chloroform	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
Chloromethane	0.35	ug/L	0.20 *	0.50	1			8/8/01	RLD	EPA 8	260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

2
Contract #: 1510 Folder #: 18561

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Project #: 2082394.01160101

CTI LAB#: 79864	Sample Descr	iption: MW	02					Sample	d: 7/	26/01	1005
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Method	i
Dibromochloromethane	<0.20	ug/L	0.20	0.40) 1			8/8/01	RLD	EPA 826	0
Dibromomethane	<0.20	ug/L	0.20	0.40) 1			8/8/01	RLD	EPA 826	0
Dichlorodifluoromethane	<0.10	ug/L	0.10	0.40) 1			8/8/01	RLD	EPA 826	0
Diisopropyl ether	<0.10	ug/L	0.10	0.40) 1			8/8/01	RLD	EPA 826	0
Ethylbenzene	<0.10	ug/L	0.10	0.30) 1			8/8/01	RLD	EPA 826	0
Hexachlorobutadiene	<0.20	ug/L	0.20	0.60) 1			8/8/01	RLD	EPA 826	0
Isopropylbenzene	0.32	ug/L	0.10	0.20) 1			8/8/01	RLD	EPA 826	0
p-Isopropyltoluene	0.72	ug/L	0.10	0.30) 1			8/8/01	RLD	EPA 826	0
Methyl tert-butyl ether	0.95	ug/L	0.30	1.0) 1			8/8/01	RLD	EPA 826	0
Methylene chloride	<0.40	ug/L	0.40	1.2	2 1			8/8/01	RLD	EPA 826	0
Naphthalene	<0.20	ug/L	0.20	0.40) 1			8/8/01	RLD	EPA 826	0
n-Propylbenzene	0.15	ug/L	0.10	0.20) 1			8/8/01	RLD	EPA 826	0
Styrene	<0.10	ug/L	0.10	0.30) 1			8/8/01	RLD	EPA 826	0
Tetrachloroethene	<0.10	ug/L	0.10	0.30) 1			8/8/01	RLD	EPA 826	0
Toluene	<0.20	ug/L	0.20	0.40) 1			8/8/01	RLD	EPA 826	0
Trichloroethene	<0.20	ug/L	0.20	0.40) 1			8/8/01	RLD	EPA 826	0
Trichlorofluoromethane	<0.20	ug/L	0.20	0.50) 1			8/8/01	RLD	EPA 826	0
Vinyl chloride	0.46	ug/L	0.10	0.30) 1			8/8/01	RLD	EPA 826	0
m & p-Xylene	<0.20	ug/L	0.20	0.70) 1			8/8/01	RLD	EPA 826	0
o-Xylene	<0.10	ug/L	0.10	0.30) 1			8/8/01	RLD	EPA 826	0

CTI LAB#:	79865	Sample Des	scription:	MW01					Sampl	ed: 7/	/26/01 1115
Analyte		Result	Units		LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analys	it Method
Metals Results			- 11. Lev								
Dissolved Arsenic		<1.3	ug/L		1.3	4.4	⊧ 1	7/31/01	8/2/01	NAH	EPA 7060
Dissolved Antimony		<3.4	ug/L		3.4	11	1		7/30/01	NAH	EPA 6010B
Dissolved Beryllium		0.68	ug/L		0.37 *	1.2	2 1		7/30/01	NAH	EPA 6010B
Dissolved Cadmium		0.84	ug/L		0.42 *	1.4	i 1		7/30/01	NAH	EPA 6010B
Dissolved Chromium		1.4	ug/L		0.61 *	2.1	i 1		7/30/01	NAH	EPA 6010B
Dissolved Copper		<2.9	ug/L		2.9	9.5	5 1		7/30/01	NAH	EPA 6010B
Dissolved Lead		<1.4	ug/L		1.4	4.7	7 1		7/30/01	NAH	EPA 6010B

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

Contract #: 1510 Folder #: 18561

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Project #: 2082394.01160101

CTI LAB#: 79865	Sample Desc	ription:	MW01					Sample	ed: 7/	26/01 1115	
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	Method	
Dissolved Nickel	10.2	ug/L	5.0 *	17	1			7/30/01	NAH	EPA 6010B	****
Dissolved Selenium	<5.2	ug/L	5.2	17	1			7/30/01	NAH	EPA 6010B	
Dissolved Silver	<0.62	ug/L	0.62	2.1	1			7/30/01	NAH	EPA 6010B	
Dissolved Thallium	<5.4	ug/L	5.4	18	1			7/30/01	NAH	EPA 6010B	
Dissolved Zinc	22.7	ug/L	1.8	5.8	1			7/30/01	NAH	EPA 6010B	
Dissolved Mercury	<0.14	ug/L	0.14	0.47	1		7/28/01	7/30/01	NAH	EPA 7470	
Organic Results Aroclor-1016	<0.00 30	ug/L	0.0030	0.0080	1		7/30/01	8/4/01	JRC	EPA 8082	
Aroclor-1221	<0.00 20	ug/L	0.0020	0.0050	1		7/30/01	8/4/01	JRC	EPA 8082	
Aroclor-1232	<0.00 30	ug/L	0.0030	0.0090	1		7/30/01	8/4/01	JRC	EPA 8082	
Aroctor-1242	<0.00 30	ug/L	0.0030	0.0080	1		7/30/01	8/4/01	JRC	EPA 8082	
Aroclor-1248	<0.0030	ug/L	0.0030	0.0090	1		7/30/01	8/4/01	JRC	EPA 8082	
Aroclor-1254	<0.0020	ug/L	0.0020	0.0050	1		7/30/01	8/4/01	JRC	EPA 8082	
Aroclor-1260	<0.0030	ug/L	0.0030	0.0090	1		7/30/01	8/4/01	JRC	EPA 8082	
1,2,4,5-Tetrachlorobenzene	<0.38	ug/L	0.38	1.3	2		8/2/01	8/7/01	KMC	EPA 8270	
1,2,4-Trichlorobenzene	<1.9	ug/L	1.9	6.4	2		8/2/01	8/7/01	KMC	EPA 8270	
1,2-Dichlorobenzene	<0.38	ug/L	0.38	1.3	2		8/2/01	8/7/01	KMC	EPA 8270	
1,3-Dichlorobenzene	<0.40	ug/L	0.40	1.4	2		8/2/01	8/7/01	KMC	EPA 8270	
1,4-Dichlorobenzene	<0.42	ug/L	0.42	1.4	2		8/2/01	8/7/01	KMC	EPA 8270	
2,4,5-Trichlorophenol	<0.36	ug/L	0.36	1.2	2		8/2/01	8/7/01	KMC	EPA 8270	
2,4,6-Trichlorophenol	<0.56	ug/L	0.56	1.9	2		8/2/01	8/7/01	KMC	EPA 8270	
2,4-Dichlorophenol	<0.98	ug/L	0.98	3.2	2		8/2/01	8/7/01	KMC	EPA 8270	
2,4-Dimethylphenol	18	ug/L	0.56	1.9	2		8/2/01	8/7/01	KMC	EPA 8270	
2,4-Dinitrophenol	<0.18	ug/L	0.18	0.60	2		8/2/01	8/7/01	KMC	EPA 8270	
2,4-Dinitrotoluene	<0.42	ug/L	0.42	1.4	2		8/2/01	8/7/01	KMC	EPA 8270	
2,6-Dichlorophenol	<0.40	ug/L	0.40	1.3	2		8/2/01	8/7/01	KMC	EPA 8270	
2,6-Dinitrotoluene	<0.98	ug/L	0.98	3.2	2		8/2/01	8/7/01	KMC	EPA 8270	
2-Chloronaphthalene	<1.0	ug/L	1.0	3.4	2		8/2/01	8/7/01	KMC	EPA 8270	
2-Chlorophenol	<0.36	ug/L	0.36	1.2	2		8/2/01	8/7/01	KMC	EPA 8270	
2-Methylnaphthalene	<0.98	ug/L	0.98	3.2	2		8/2/01	8/7/01	KMC	EPA 8270	
2-Methylphenol	34	ug/L	0.90	3.0	2		8/2/01	8/7/01	KMC	EPA 8270	

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

Project #: 2082394.01160101

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CTI LAB#: 79865	5 Sample De	scription:	MW01					Sampl	led: 7/2	26/01	1115
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Meth	od
2-Naphthylamine	<2.4	ug/L	2.4	8.0	2	i	8/2/01	8/7/01	KMC	EPA 82	270
2-Nitroaniline	<1.0	ug/L	1.0	3.4	2	:	8/2/01	8/7/01	KMC	EPA 82	270
2-Nitrophenol	<0.90	ug/L	0.90	3.0	2	:	8/2/01	8/7/01	KMC	EPA 82	270
3 & 4-Methylphenol	29	ug/L	0.76	2.6	2	1	8/2/01	8/7/01	KMC	EPA 82	270
3,3'-Dichlorobenzidine	<0.80	ug/L	0.80	2.6	2	:	8/2/01	8/7/01	KMC	EPA 82	270
3-Nitroaniline	<0.28	ug/L	0.28	0.92	2	4	8/2/01	8/7/01	KMC	EPA 82	270
4,6-Dinitro-2-methylphenol	<0.26	ug/L	0.26	0.86	2	1	8/2/01	8/7/01	KMC	EPA 82	270
4-Bromophenyl-phenyl ether	<1.0	ug/L	1.0	3.6	2	8	8/2/01	8/7/01	КМС	EPA 82	270
4-Bromophenyl-phenyl ether	<1.0	ug/L	1.0	3.6	2	4	8/2/01	8/7/01	KMC	EPA 82	270
4-Chloro-3-methylphenol	<0.98	ug/L	0.98	3.2	2	1	8/2/01	8/7/01	KMC	EPA 82	270
4-Chloroaniline	<1.2	ug/L	1.2	4.0	2	1	8/2/01	8/7/01	KMC	EPA 82	270
4-Chlorophenyl-phenyl ether	<1.0	ug/L	1.0	3.4	2	1	8/2/01	8/7/01	KMC	EPA 82	270
4-Nitroaniline	<0.88	ug/L	0.88	3.0	2		8/2/01	8/7/01	KMC	EPA 82	270
4-Nitrophenol	<0.56	ug/L	0.56	1.8	2		8/2/01	8/7/01	KMC	EPA 82	270
Acenaphthene	<0.96	ug/L	0.96	3.2	2		8/2/01	8/7/01	KMC	EPA 82	270
Acenaphthylene	<1.0	ug/L	1.0	3.4	2	4	8/2/01	8/7/01	KMC	EPA 82	270
Acetophenone	2.7	ug/L	1.0	3.4	2	:	8/2/01	8/7/01	KMC	EPA 82	270
Aniline	<1.2	ug/L	1.2	3.8	2		8/2/01	8/7/01	KMC	EPA 82	270
Anthracene	<0.96	ug/L	0.96	3.2	2		8/2/01	8/7/01	KMC	EPA 82	270
Azobenzene &	<0.70	ug/L	0.70	2.4	2		8/2/01	8/7/01	KMC	EPA 82	270
Benzidine	<0.96	ug/L	0.96	3.2	2	:	8/2/01	8/7/01	КМС	EPA 82	270
Benzo(a)anthracene	<0.96	ug/L	0.96	3.2	2	:	8/2/01	8/7/01	KMC	EPA 8	270
Benzo(a)pyrene	<0.86	ug/L	0.86	2.8	2	1	8/2/01	8/7/01	КМС	EPA 8	270
Benzo(b)fluoranthene	<0.82	ug/L	0.82	2.8	2	i	8/2/01	8/7/01	КМС	EPA 8	270
Benzo(g,h,i)perylene	<0.86	ug/L	0.86	2.2	2	i	8/2/01	8/7/01	КМС	EPA 8	270
Benzo(k)fluoranthene	<0.82	ug/L	0.82	2.8	2		8/2/01	8/7/01	КМС	EPA 8	270
Benzoic acid	<0.14	ug/L	0.14	0.46	2		8/2/01	8/7/01	KMC	EPA 8	270
3enzyl alcohol	<0.68	ug/L	0.68	2.2	2		8/2/01	8/7/01	KMC	EPA 8	270
3is(2-chloroethoxy)methane	<1.0	ug/L	1.0	3.4	2		8/2/01	8/7/01	KMC	EPA 8	270
3is(2-chloroethyl)ether	<0.48	ug/L	0.48	1.6	2	1	8/2/01	8/7/01	КМС	EPA 8	270
3is(2-chloroisopropyl)ether	<1.0	ug/L	1.0	3.4	2	i	8/2/01	8/7/01	KMC	EPA 8	270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

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Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

CTI LAB#: 79865	Sample Des	scription:	MW01			· · · · · · · · · · · · · · · · · · ·	Sampl	ed: 7/	26/01 11	15
Analyte	Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analys	t Method	
Bis(2-ethylhexyl)phthalate	<2.8	ug/L	2.8	9.4	2	8/2/01	8/7/01	KMC	EPA 8270	
Butylbenzylphthalate	<0.82	ug/L	0.82	2.8	8 2	8/2/01	8/7/01	KMC	EPA 8270	
Carbazole	<1.1	ug/L	1.1	3.6	6 2	8/2/01	8/7/01	KMC	EPA 8270	
Chrysene	<0.96	ug/L	0.96	3.2	2 2	8/2/01	8/7/01	КМС	EPA 8270	
Di-n-butylphthalate	<1.4	ug/L	1.4	4.6	5 2	8/2/01	8/7/01	КМС	EPA 8270	
Di-n-octylphthalate	<0.64	ug/L	0.64	2.2	2 2	8/2/01	8/7/01	КМС	EPA 8270	
Dibenzo(a,h)anthracene	<1.7	ug/L	1.7	5.6	2	8/2/01	8/7/01	KMC	EPA 8270	
Dibenzofuran	<1.0	ug/L	1.0	3.4	2	8/2/01	8/7/01	KMC	EPA 8270	
Diethylphthalate	<1.0	ug/L	1.0	3.4	2	8/2/01	8/7/01	KMC	EPA 8270	
Dimethylphthalate	<0.98	ug/L	0.98	3.4	2	8/2/01	8/7/01	КМС	EPA 8270	
Fluoranthene	<1.0	ug/L	1.0	3.4	2	8/2/01	8/7/01	КМС	EPA 8270	
Fluorene	<0.98	ug/L	0.98	3.2	2	8/2/01	8/7/01	КМС	EPA 8270	
Hexachlorobenzene	<0.94	ug/L	0.94	3.2	2	8/2/01	8/7/01	КМС	EPA 8270	
Hexachlorobutadiene	<0.42	ug/L	0.42	6.6	2	8/2/01	8/7/01	KMC	EPA 8270	
Hexachlorocyclopentadiene	<0.32	ug/L	0.32	1.0	2	8/2/01	8/7/01	КМС	EPA 8270	
Hexachloroethane	<0.44	ug/L	0.44	1.5	2	8/2/01	8/7/01	KMC	EPA 8270	
Hexachloropropene	<0.36	ug/L	0.36	1.2	2	8/2/01	8/7/01	КМС	EPA 8270	
Indeno(1,2,3-cd)pyrene	<1.7	ug/L	1.7	5.6	2	8/2/01	8/7/01	KMC	EPA 8270	
Isophorone	<1.0	ug/L	1.0	3.4	2	8/2/0 i	8/7/01	KMC	EPA 8270	
N-Nitroso-di-n-propylamine	1.3	ug/L	0.96	* 3.2	2	8/2/01	8/7/01	KMC	EPA 8270	
N-Nitrosodimethylamine	<0.54	ug/L	0.54	1.8	2	8/2/01	8/7/01	КМС	EPA 8270	
N-Nitrosodiphenylamine &	<0.68	ug/L	0.68	2.2	2	8/2/01	8/7/01	KMC	EPA 8270	
N-Nitrosopyrrolidine	<0.56	ug/L	0.56	1.8	2	8/2/01	8/7/01	KMC	EPA 8270	
Naphthalene	13	ug/L	0.96	3.2	2	8/2/01	8/7/01	KMC	EPA 8270	
Nitrobenzene	<0.94	ug/L	0.94	3.2	2	8/2/01	8/7/01	KMC	EPA 8270	
Pentachlorophenol	<0.42	ug/L	0.42	1.4	2	8/2/01	8/7/01	KMC	EPA 8270	
Phenanthrene	<1.0	ug/L	1.0	3.4	2	8/2/01	8/7/01	KMC	EPA 8270	
Phenol	3.0	ug/L	0.46	1.5	2	8/2/01	8/7/01	KMC	EPA 8270	
Pyrene	<0.92	ug/L	0.92	3.0	2	8/2/01	8/7/01	КМС	EPA 8270	
Pyridine	<1.3	ug/L	1.3	4.4	2	8/2/01	8/7/01	KMC	EPA 8270	

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

Contract #: 1510 Folder #: 18561

Project #: 2082394.01160101

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CTI LAB#: 79865	Sample Desc	ription:	MW01					Sample	ed: 7/	26/01	1115
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Meth	nod
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
1,1,1-Trichloroethane	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8	260
1,1,2-Trichloroethane	<0.10	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8	260
1,1-Dichloroethane	0.86	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8	260
1,1-Dichloroethene	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
1,1-Dichloropropene	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8	260
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.80	1			8/8/01	RLD	EPA 8	260
1,2,3-Trichloropropane	<0.10	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8	260
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.70	1			8/8/01	RLD	EPA 8	260
1,2,4-Trimethylbenzene	6.4	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	1.2	1			8/8/01	RLD	EPA 8	260
1,2-Dibromoethane	<0.10	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
1,2-Dichlorobenzene	0.40	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
1,2-Dichloroethane	0.40	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
cis-1,2-Dichloroethene	4.1	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8	260
trans-1,2-Dichloroethene	0.19	ug/L	0.10	* 0.30	1			8/8/01	RLD	EPA 8	260
1,2-Dichloropropane	<0.20	ug/L	0.20	0.60	1			8/8/01	RLD	EPA 8	260
1,3,5-Trimethylbenzene	1.7	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
1,3-Dichlorobenzene	0.16	ug/L	0.10	* 0.20	1			8/8/01	RLD	EPA 8	260
cis-1,3-Dichloropropene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
1,3-Dichloropropane	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
trans-1,3-Dichloropropene	<0.10	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	260
1,4-Dichlorobenzene	0.50	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
2,2-Dichloropropane	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8	260
2-Chlorotoluene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	260
4-Chlorotoluene	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8	260
Benzene	4.4	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	3260
Bromobenzene	<0.10	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8	3260
Bromochloromethane	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8	3260
Bromodichloromethane	<0.10	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8	260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

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CTI LAB#: 7986	55 Sample Des	cription:	MW01					Sampl	ed: 7/:	26/01 1115
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	Method
Bromoform	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8260
Bromomethane	<0.40	ug/L	0.40	1.3	1			8/8/01	RLD	EPA 8260
n-Butylbenzene	1.3	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8260
sec-Butylbenzene	0.86	ug/L.	0.20	0.60	1			8/8/01	RLD	EPA 8260
tert-Butylbenzene	0.23	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8260
Carbon tetrachloride	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
Chlorobenzene	0.38	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
Chloroethane	1.5	ug/L	0.40	1.2	1			8/8/01	RLD	EPA 8260
Chloroform	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
Chloromethane	0.34	ug/L	0.20 *	0.50	1			8/8/01	RLD	EPA 8260
Dibromochloromethane	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8260
Dibromomethane	<0.20	ug/L	0.20	0.40	1	,		8/8/01	RLD	EPA 8260
Dichlorodifluoromethane	<0.10	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8260
Diisopropyl ether	<0.10	ug/L	0.10	0.40	1			8/8/01	RLD	EPA 8260
Ethylbenzene	1.3	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
Hexachlorobutadiene	<0.20	ug/L	0.20	0.60	1			8/8/01	RLD	EPA 8260
isopropylbenzene	5.4	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8260
p-isopropyltoluene	6.8	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
Methyl tert-butyl ether	2.3	ug/L	0.30	1.0	1			8/8/01	RLD	EPA 8260
Methylene chloride	<0.40	ug/L	0.40	1.2	1			8/8/01	RLD	EPA 8260
Naphthalene	26	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8260
n-Propylbenzene	2.7	ug/L	0.10	0.20	1			8/8/01	RLD	EPA 8260
Styrene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
Tetrachloroethene	<0.10	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
Toluene	1.7	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8260
Trichloroethene	<0.20	ug/L	0.20	0.40	1			8/8/01	RLD	EPA 8260
Frichlorofluoromethane	<0.20	ug/L	0.20	0.50	1			8/8/01	RLD	EPA 8260
Vinyl chloride	0.33	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260
m & p-Xylene	71	ug/L	0.20	0.70	1			8/8/01	RLD	EPA 8260
o-Xylene	0.67	ug/L	0.10	0.30	1			8/8/01	RLD	EPA 8260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

61~06885

Contract #: 1510 Folder #: 18561

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Project #: 2082394.01160101

CTI LAB#: 79866	Sample Des	cription:	MW04	<u></u>				Sampled	: 7/:	26/01	1230
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	Meth	od
Metals Results	-1.2		10				7/01/04	0/0/01	NIAL1		
Dissolved Arsenic	<1.3	ug/L	1.3	4.4	· I		//31/01	8/2/01			
Dissolved Antimony	<3.4	ug/L	3.4	11	1			//30/01	NAH	EPA 60	010B
Dissolved Beryllium	0.62	ug/L	0.37	1.2	: 1			7/30/01	NAH	EPA 60	10B
Dissolved Cadmium	<0.42	ug/L	0.42	1.4	1			7/30/01	NAH	EPA 60	10B
Dissolved Chromium	<0.61	ug/L	0.61	2.1	1			7/30/01	NAH	EPA 60)10B
Dissolved Copper	<2.9	ug/L	2.9	9.5	1			7/30/01	NAH	EPA 60)10B
Dissolved Lead	<1.4	ug/L	1.4	4.7	1			7/30/01	NAH	EPA 60	10B
Dissolved Nickel	6.7	ug/L	5.0 *	17	1			7/30/01	NAH	EPA 60	10B
Dissolved Selenium	<5.2	ug/L	5.2	17	1			7/30/01	NAH	EPA 60	10B
Dissolved Silver	<0.62	ug/L	0.62	2.1	1			7/30/01	NAH	EPA 60	10B
Dissolved Thallium	<5.4	ug/L	5.4	18	1			7/30/01	NAH	EPA 60	010B
Dissolved Zinc	16.3	ug/L	1.8	5.8	1			7/30/01	NAH	EPA 60)10B
Dissolved Mercury	<0.14	ug/L	0.14	0.47	' 1		7/28/01	7/30/01	NAH	EPA 74	70
Organic Results Aroclor-1016	<0.0030	ug/L	0.0030	0.0080	1		7/30/01	8/4/01	JRC	EPA 80)82
Aroclor-1221	<0.0020	ug/L	0.0020	0.0050	1		7/30/01	8/4/01	JRC	EPA 80)82
Aroclor-1232	<0.0030	ug/L	0.0030	0.0090	1		7/30/01	8/4/01	JRC	EPA 8)82
Aroclor-1242	<0.0030	ug/L	0.0030	0.0080	1		7/30/01	8/4/01	JRC	EPA 8)82
Aroclor-1248	<0.0030	ug/L	0.0030	0.0090	1		7/30/01	8/4/01	JRC	EPA 80	082
Aroclor-1254	<0.0020	ug/L.	0.0020	0.0050	1		7/30/01	8/4/01	JRC	EPA 8)82
Aroclor-1260	<0.0030	ug/L	0.0030	0.0090	1		7/30/01	8/4/01	JRC	EPA 8)82
1,2,4,5-Tetrachlorobenzene	<0.19	ug/L	0.19	0.63	1		8/2/01	8/7/01	KMC	EPA 8	270
1,2,4-Trichlorobenzene	<0.95	ug/L	0.95	3.2	1		8/2/01	8/7/01	КМС	EPA 8	270
1,2-Dichlorobenzene	<0.19	ug/L	0.19	0.64	. 1		8/2/01	8/7/01	KMC	EPA 8	270
1,3-Dichlorobenzene	<0.20	ug/L	0.20	0.68	1		8/2/01	8/7/01	КМС	EPA 8	270
1,4-Dichlorobenzene	<0.21	ug/L	0.21	0.71	1		8/2/01	8/7/01	KMC	EPA 8	270
2,4,5-Trichlorophenol	<0.18	ug/L	0.18	0.59	i 1		8/2/01	8/7/01	КМС	EPA 8	270
2,4,6-Trichlorophenol	<0.28	ug/L	0.28	0.95	1		8/2/01	8/7/01	KMC	EPA 8	270
2,4-Dichlorophenol	<0.49	ug/L	0.49	1.6	; 1		8/2/01	8/7/01	КМС	EPA 8	270
2,4-Dimethylphenol	<0.28	ua/L	0.28	0.95	5 1		8/2/01	8/7/01	КМС	EPA 8	270

WI DNR Lab Certification Number: 15-70 66030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

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Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

CTI LAB#: 7986	6 Sample Des	scription:	MW04				Samp	led: 7	7/26/01	1230
Analyte	Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analy	st Metł	nod
2,4-Dinitrophenol	<0.090	ug/L	0.090	0.30	1	8/2/01	8/7/01	KMC	EPA 8	270
2,4-Dinitrotoluene	<0.21	ug/L	0.21	0.72	1	8/2/01	8/7/01	KMC	EPA 8	270
2,6-Dichlorophenol	<0.20	ug/L	0.20	0.67	1	8/2/01	8/7/01	КМС	EPA 8	270
2,6-Dinitrotoluene	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	КМС	EPA 8	270
2-Chloronaphthalene	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	КМС	EPA 8	270
2-Chlorophenol	<0.18	ug/L	0.18	0.60	1	8/2/01	8/7/01	КМС	EPA 8	270
2-Methylnaphthalene	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
2-Methylphenol	<0.45	ug/L	0.45	1.5	1	8/2/01	8/7/01	КМС	EPA 8	270
2-Naphthylamine	<1.2	ug/L	1.2	4.0	1	8/2/01	8/7/01	KMC	EPA 8	270
2-Nitroaniline	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	КМС	EPA 8	270
2-Nitrophenol	<0.45	ug/L	0.45	1.5	1	8/2/01	8/7/01	KMC	EPA 8	270
3 & 4-Methylphenol	<0.38	ug/L	0.38	1.3	1	8/2/01	8/7/01	KMC	EPA 8	270
3,3'-Dichlorobenzidine	<0.40	ug/L	0.40	1.3	1	8/2/01	8/7/01	KMC	EPA 8	270
3-Nitroaniline	<0.14	ug/L	0.14	0.46	1	8/2/01	8/7/01	KMC	EPA 8	270
4,6-Dinitro-2-methylphenol	<0.13	ug/L	0.13	0.43	1	8/2/01	8/7/01	KMC	EPA 8	270
4-Bromophenyl-phenyl ether	<0.52	ug/L	0.52	1.8	1	8/2/01	8/7/01	КМС	EPA 8	270
4-Bromophenyl-phenyl ether	<0.52	ug/L	0.52	1.8	1	8/2/01	8/7/01	KMC	EPA 8	270
4-Chloro-3-methylphenol	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
4-Chloroaniline	<0.61	ug/L	0.61	2.0	1	8/2/01	8/7/01	KMC	EPA 8	270
4-Chlorophenyl-phenyl ether	<0.52	ug/L	0.52	1.7	1	8/2/01	8/7/01	КМС	EPA 8	270
4-Nitroaniline	<0.44	ug/L	0.44	1.5	1	8/2/01	8/7/01	KMC	EPA 8	270
4-Nitrophenol	<0.28	ug/L	0.28	0.92	1	8/2/01	8/7/01	KMC	EPA 8	270
Acenaphthene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
Acenaphthylene	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8	270
Acetophenone	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8	270
Aniline	<0.58	ug/L	0.58	1.9	1	8/2/01	8/7/01	KMC	EPA 8	270
Anthracene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
Azobenzene & 1,2-Diphenylhydra	<0.35	ug/L	0.35	1.2	1	8/2/01	8/7/01	KMC	EPA 8	270
Benzidine	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
Benzo(a)anthracene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
Benzo(a)pyrene	<0.43	ug/L	0.43	1.4	1	8/2/01	8/7/01	KMC	EPA 8	270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

85^{m-88}0094

Contract #: 1510 Folder #: 18561

Project #: 2082394.01160101

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CTI LAB#: 79866	Sample De	scription:	MW04					Sampl	ed: 7/	26/01	1230
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Metł	ıod
Benzo(b)fluoranthene	<0.41	ug/L	0.41	1.4	+ 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Benzo(g,h,i)perylene	<0.43	ug/L	0.43	1.1	1	8/2	2/01	8/7/01	КМС	EPA 8	270
Benzo(k)fluoranthene	<0.41	ug/L	0.41	1.4	1	8/2	2/01	8/7/01	KMC	EPA 8	270
Benzoic acid	<0.070	ug/L	0.070	0.23	3 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Benzyl alcohol	<0.34	ug/L	0.34	1.1	1	8/2	2/01	8/7/01	KMC	EPA 8	270
Bis(2-chloroethoxy)methane	<0.50	ug/L	0.50	1.7	′ 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Bis(2-chloroethyl)ether	<0.24	ug/L	0.24	0.79) 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Bis(2-chloroisopropyl)ether	<0.52	ug/L	0.52	1.7	1	8/2	2/01	8/7/01	КМС	EPA 8	270
Bis(2-ethylhexyl)phthalate	1.4	ug/L	1.4 *	4.7	1	8/2	2/01	8/7/01	KMC	EPA 8	270
Butylbenzylphthalate	<0.41	ug/L	0.41	1.4	1	8/2	2/01	8/7/01	КМС	EPA 8	270
Carbazole	<0.55	ug/L	0.55	1.8	3 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Chrysene	<0.48	ug/L.	0.48	1.6	5 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Di-n-butylphthalate	<0.68	ug/L	0.68	2.3	3 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Di-n-octylphthalate	<0.32	ug/L	0.32	1.1	1	8/2	2/01	8/7/01	KMC	EPA 8	270
Dibenzo(a,h)anthracene	<0.84	ug/L	0.84	2.8	3 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Dibenzofuran	<0.50	ug/L	0.50	1.7	7 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Diethylphthalate	<0.51	ug/L	0.51	1.7	' 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Dimethylphthalate	<0.49	ug/L	0.49	1.7	r 1	8/2	2/01	8/7/01	KMC	EPA 8	270
Fluoranthene	<0.30	ug/L	0.50	1.7	7 1	8/2	2/01	8/7/01	КМС	EPA 8	270
Fluorene	<0.49	ug/L	0.49	1.6	5 1	8/2	2/01	8/7/01	КМС	EPA 8	3270
Hexachlorobenzene	<0.47	ug/L	0.47	1.6	6 1	8/2	2/01	8/7/01	KMC .	EPA 8	3270
Hexachlorobutadiene	<0.21	ug/L	0.21	3.3	31	8/2	2/01	8/7/01	KMC	EPA 8	3270
Hexachlorocyclopentadiene	<0.16	ug/L	0.16	0.52	2 1	8/2	2/01	8/7/01	KMC	EPA 8	3270
Hexachloroethane	<0.22	ug/L	0.22	0.73	3 1	8/2	2/01	8/7/01	KMC	EPA 8	3270
Hexachloropropene	<0.18	ug/L	0.18	0.60) 1	8/2	2/01	8/7/01	KMC	EPA 8	3270
Indeno(1,2,3-cd)pyrene	<0.85	ug/L	0.85	2.8	3 1	8/2	2/01	8/7/01	КМС	EPA 8	3270
Isophorone	<0.51	ug/L	0.51	1.7	7 1	8/2	2/01	8/7/01	КМС	EPA 8	3270
N-Nitroso-di-n-propylamine	<0.48	ug/L	0.48	1.6	5 1	8/2	2/01	8/7/01	КМС	EPA 8	3270
N-Nitrosodimethylamine	<0.27	ug/L.	0.27	0.90) 1	8/2	2/01	8/7/01	KMC	EPA 8	3270
N-Nitrosodiphenylamine & Diphn	<0.34	ug/L	0.34	1.1	1	8/2	2/01	8/7/01	KMC	EPA 8	3270
N-Nitrosopyrrolidine	<0.28	ug/L	0.28	0.90) 1	8/2	2/01	8/7/01	КМС	EPA 8	3270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON



Project Name: ST FRANCIS AUTO Project #: 2082394.01160101 Contract #: 1510 Folder #: 18561

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CTI LAB#: 79866	Sample Des	cription:	MW04				Samp	oled: 7	/26/01 12	230
Analyte	Result	Units	LOD	LOQ	Dilution	Pr Qualifier Da	ep Analysis ite Date	Analys	st_Method	
Naphthalene	<0.48	ug/L	0.48	1.6	1	8/2/0	1 8/7/01	KMC	EPA 8270	
Nitrobenzene	<0.47	ug/L	0.47	1.6	1	8/2/0	1 8/7/01	KMC	EPA 8270	
Pentachlorophenol	<0.21	ug/L	0.21	0.68	1	8/2/0	1 8/7/01	KMC	EPA 8270	
Phenanthrene	<0.50	ug/L	0.50	1.7	1	8/2/0	1 8/7/01	KMC	EPA 8270	
Phenol	<0.23	ug/L	0.23	0.76	; 1	8/2/0	1 8/7/01	KMC	EPA 8270	
Pyrene	<0.46	ug/L	0.46	1.5	1	8/2/0	1 8/7/01	KMC	EPA 8270	
Pyridine	<0.66	ug/L	0.66	2.2	1	8/2/0	1 8/7/01	KMC	EPA 8270	
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260	
1,1,1-Trichloroethane	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260	
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.20	0.50	1		8/8/01	RLD	EPA 8260	
1,1,2-Trichloroethane	<0.10	ug/L	0.10	0.40	1		8/8/01	RLD	EPA 8260	
1,1-Dichloroethane	0.13	ug/L	0.10	0.40	1		8/8/01	RLD	EPA 8260	
1,1-Dichloroethene	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260	
1,1-Dichloropropene	<0.20	ug/L	0.20	0.50	1		8/8/01	RLD	EPA 8260	
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.80	1		8/8/01	RLD	EPA 8260	
1,2,3-Trichloropropane	<0.10	ug/L	0.10	0.40	1		8/8/01	RLD	EPA 8260	
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.70	1		8/8/01	RLD	EPA 8260	
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260	
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	1.2	1		8/8/01	RLD	EPA 8260	
1,2-Dibromoethane	<0.10	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260	
1,2-Dichlorobenzene	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260	
1,2-Dichloroethane	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260	
cis-1,2-Dichloroethene	<0.20	ug/L	0.20	0.50	1		8/8/01	RLD	EPA 8260	
rans-1,2-Dichloroethene	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260	
1,2-Dichloropropane	<0.20	ug/L	0.20	0.60	1		8/8/01	RLD	EPA 8260	
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260	
1,3-Dichlorobenzene	<0.10	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260	
cis-1,3-Dichloropropene	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260	
I,3-Dichloropropane	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260	
rans-1,3-Dichloropropene	<0.10	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260	

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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Project #: 2082394.01160101

Contract #: 1510 Folder #: 18561

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CTI LAB#: 7986	6 Sample Des	cription:	MW04				Sampl	ed: 7/	26/01 1230
Analyte	Result	Units	LOD		Dilution Qualifier	Prep Date	Analysis Date	Analysi	Method
1,4-Dichlorobenzene	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260
2,2-Dichloropropane	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260
2-Chlorotoluene	<0.10	ug/L.	0.10	0.30	1		8/8/01	RLD	EPA 8260
4-Chlorotoluene	<0.20	ug/L	0.20	0.50	1		8/8/01	RLD	EPA 8260
Benzene	2.5	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260
Bromobenzene	<0.10	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260
Bromochloromethane	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260
Bromodichloromethane	<0.10	ug/L.	0.10	0.40	1		8/8/01	RLD	EPA 8260
Bromoform	<0.20	ug/L	0.20	0.50	1		8/8/01	RLD	EPA 8260
Bromomethane	<0.40	ug/L	0.40	1.3	1		8/8/01	RLD	EPA 8260
n-Butylbenzene	<0.10	ug/L	0.10	0.40	1		8/8/01	RLD	EPA 8260
sec-Butylbenzene	<0.20	ug/L	0.20	0.60	1		8/8/01	RLD	EPA 8260
ert-Butylbenzene	<0.10	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260
Carbon tetrachloride	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260
Chlorobenzene	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260
Chloroethane	0.54	ug/L	0.40 *	1.2	1		8/8/01	RLD	EPA 8260
Chloroform	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260
Chloromethane	0.32	ug/L	0.20 *	0.50	1		8/8/01	RLD	EPA 8260
Dibromochloromethane	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260
Dibromomethane	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260
Dichlorodifluoromethane	<0.10	ug/L	0.10	0.40	1		8/8/01	RLD	EPA 8260
Diisopropyl ether	<0.10	ug/L	0.10	0.40	1		8/8/01	RLD	EPA 8260
Ethylbenzene	<0.10	ug/L	0.10	0.30	1		8/8/01	RLD	EPA 8260
lexachlorobutadiene	<0.20	ug/L	0.20	0.60	1		8/8/01	RLD	EPA 8260
sopropylbenzene	<0.10	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260
Isopropyltoluene	<0.10	ug/L	ü.10	0.30	1		8/8/01	RLD	EPA 8260
Nethyl tert-butyl ether	2.3	ug/L	0.30	1.0	1		8/8/01	RLD	EPA 8260
Methylene chloride	<0.40	ug/L	0.40	1.2	1		8/8/01	RLD	EPA 8260
Japhthalene	<0.20	ug/L	0.20	0.40	1		8/8/01	RLD	EPA 8260
ı-Propylbenzene	<0.10	ug/L	0.10	0.20	1		8/8/01	RLD	EPA 8260
Styrene	<0.10	ua/L	0.10	0.30	1		8/8/01	BLD	EPA 8260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

at Second

5.5 35.70

MONTGOMERY WATSON

Project #: 2082394.01160101

Contract #: 1510 Folder #: 18561

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CTI LAB#:	79866	Sample Des	scription:	MW04						Sampl	ed: 7/:	26/01 1230
Analyte		Result	Units	L	OD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Tetrachloroethene		<0.10	ug/L		0.10	0.30	1			8/8/01	RLD	EPA 8260
Toluene		<0.20	ug/L		0.20	0.40	1			8/8/01	RLD	EPA 8260
Trichloroethene		<0.20	ug/L	1	0.20	0.40	1			8/8/01	RLD	EPA 8260
Trichlorofluoromethane		<0.20	ug/L		0.20	0.50	1			8/8/01	RLD	EPA 8260
Vinyl chloride		<0.10	ug/L	!	0.10	0.30	1			8/8/01	RLD	EPA 8260
m & p-Xylene		<0.20	ug/L		0.20	0.70	1			8/8/01	RLD	EPA 8260
o-Xylene		<0.10	ug/L		0.10	0.30	1			8/8/01	RLD	EPA 8260

CTI LAB#:	79867	Sample Des	cription:	MW03						Sampled	: 7/2	26/01 1315
Analyte		Result	Units		LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Metals Results												
Dissolved Arsenic		4.4	ug/L		1.3	4.4	• 1		7/31/01	8/2/01	NAH	EPA 7060
Dissolved Antimony		<3.4	ug/L		3.4	11	1			7/30/01	NAH	EPA 6010B
Dissolved Beryllium		0.64	ug/L		0.37 *	1.2	! 1			7/30/01	NAH	EPA 6010B
Dissolved Cadmium		<0.42	ug/L		0.42	1.4	- 1			7/30/01	NAH	EPA 6010B
Dissolved Chromium		1.2	ug/L		0.61 *	2.1	1			7/30/01	NAH	EPA 6010B
Dissolved Copper		<2.9	ug/L		2.9	9.5	1			7/30/01	NAH	EPA 6010B
Dissolved Lead		<1.4	ug/L		1.4	4.7	' 1			7/30/01	NAH	EPA 6010B
Dissolved Nickel		9.1	ug/L		5.0 *	17	' 1			7/30/01	NAH	EPA 6010B
Dissolved Selenium		<5.2	ug/L		5.2	17	' 1			7/30/01	NAH	EPA 6010B
Dissolved Silver		<0.62	ug/L		0.62	2.1	1			7/30/01	NAH	EPA 6010B
Dissolved Thallium		<5.4	ug/L		5.4	18	; 1			7/30/01	NAH	EPA 6010B
Dissolved Zinc		13.2	ug/L		1.8	5.8	1			7/30/01	NAH	EPA 6010B
Dissolved Mercury		<0.14	ug/L		0.14	0.47	' 1		7/28/01	7/30/01	NAH	EPA 7470
Organic Results												
Aroclor-1016		<0.0030	ug/L	(0.0030	0.0080) 1		7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1221		<0.0020	ug/L	(0.0020	0.0050) 1		7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1232		<0.0030	ug/L	(0.0030	0.0090) 1		7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1242		<0.0030	ug/L	(0.0030	0.0080) 1		7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1248		<0.0030	ug/L	(0.0030	0.0090) 1		7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1254		<0.0020	ug/L	(0.0020	0.0050) 1		7/30/01	8/5/01	JRC	EPA 8082

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

Sample Description:

79867

CTI LAB#:

28

3-Nitroaniline

4-Chloroaniline

4,6-Dinitro-2-methylphenol

4-Bromophenyl-phenyl ether

4-Bromophenyl-phenyl ether

4-Chlorophenyl-phenyl ether

4-Chloro-3-methylphenol

MONTGOMERY WATSON

MW03

Contract #: 1510 Folder #: 18561

20 of 32

Sampled:

7/26/01

1315

Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

	Analyte	Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analys	Method
•	Aroclor-1260	<0.0030	ug/L	0.0030	0.0090	1	7/30/01	8/5/01	JRC	EPA 8082
	1,2,4,5-Tetrachlorobenzene	<0.19	ug/L	0.19	0.63	1	8/2/01	8/7/01	КМС	EPA 8270
	1,2,4-Trichlorobenzene	<0.95	ug/L	0.95	3.2	1	8/2/01	8/7/01	KMC	EPA 8270
	1,2-Dichlorobenzene	0.46	ug/L	0.19 *	0.64	1	8/2/01	8/7/01	KMC	EPA 8270
	1,3-Dichlorobenzene	<0.20	ug/L	0.20	0.68	1	8/2/01	8/7/01	KMC	EPA 8270
	1,4-Dichlorobenzene	<0.21	ug/L	0.21	0.71	1	8/2/01	8/7/01	KMC	EPA 8270
	2,4,5-Trichlorophenol	<0.18	ug/L	0.18	0.59	1	8/2/01	8/7/01	KMC	EPA 8270
	2,4,6-Trichlorophenol	<0.28	ug/L	0.28	0.95	1	8/2/01	8/7/01	KMC	EPA 8270
	2,4-Dichlorophenol	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
	2,4-Dimethylphenol	<0.28	ug/L	0.28	0.95	1	8/2/01	8/7/01	KMC	EPA 8270
	2,4-Dinitrophenol	<0.090	ug/L	0.090	0.30	1	8/2/01	8/7/01	KMC	EPA 8270
	2,4-Dinitrotoluene	<0.21	ug/L.	0.21	0.72	1	8/2/01	8/7/01	KMC	EPA 8270
	2,6-Dichlorophenol	<0.20	ug/L	0.20	0.67	1	8/2/01	8/7/01	KMC	EPA 8270
	2,6-Dinitrotoluene	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
200505	2-Chloronaphthalene	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8270
	2-Chlorophenol	<0.18	ug/L	0.18	0.60	1	8/2/01	8/7/01	KMC	EPA 8270
	2-Methylnaphthalene	<0.49	ug/L	0.49	1.6	1	8/2/01	8/7/01	KMC	EPA 8270
	2-Methylphenol	<0.45	ug/L	0.45	1.5	1	8/2/01	8/7/01	KMC	EPA 8270
	2-Naphthylamine	<1.2	ug/L	1.2	4.0	1	8/2/01	8/7/01	KMC	EPA 8270
	2-Nitroaniline	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8270
	2-Nitrophenol	<0.45	ug/L	0.45	1.5	1	8/2/01	8/7/01	KMC	EPA 8270
	3 & 4-Methylphenol	<0.38	ug/L	0.38	1.3	1	8/2/01	8/7/01	KMC	EPA 8270
	3,3'-Dichlorobenzidine	<0.40	ug/L	0.40	1.3	1	8/2/01	8/7/01	KMC	EPA 8270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

0.14

0.13

0.52

0.52

0.49

0.61

0.52

0.46

0.43

1.8

1.8

1.6

2.0

1.7

1

1

1

1

1

1

1

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/7/01

8/7/01

8/7/01

8/7/01

8/7/01

8/7/01

8/7/01

KMC

KMC

KMC

KMC

KMC

KMC

KMC

EPA 8270

Solid sample results reported on a Dry Weight Basis

<0.14

<0.13

<0.52

<0.52

<0.49

<0.61

< 0.52

ug/L

ug/L.

ug/L

ug/L

ug/L

ug/L

ug/L

MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

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Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

CTI LAB#: 79867	Sample Des	scription:	MW03				Sampl	ed: 7/	26/01	1315
Analyte	Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analysi	t Meth	od
4-Nitroaniline	<0.44	ug/L	0.44	1.5	1	8/2/01	8/7/01	КМС	EPA 8	270
4-Nitrophenol	<0.28	ug/L	0.28	0.92	1	8/2/01	8/7/01	KMC	EPA 8	270
Acenaphthene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
Acenaphthylene	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 82	270
Acetophenone	<0.50	ug/L	Q.50	1.7	1	8/2/01	8/7/01	KMC	EPA 82	270
Aniline	<0.58	ug/L	0.58	1.9	1	8/2/01	8/7/01	KMC	EPA 82	270
Anthracene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
Azobenzene &	<0.35	ug/L	0.35	1.2	1	8/2/01	8/7/01	KMC	EPA 82	270
1,2-Dipnenyinyora Benzidine	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 82	270
Benzo(a)anthracene	<0.48	ug/L	0.48	1.€	1	8/2/01	8/7/01	KMC	EPA 82	270
Benzo(a)pyrene	<0.43	ug/L	0.43	1.4	1	8/2/01	8/7/01	KMC	EPA 8	270
Benzo(b)fluoranthene	<0.41	ug/L	0.41	1.4	1	8/2/01	8/7/01	KMC	EPA 8	270
Benzo(g,h,i)perylene	<0.43	ug/L	0.43	1.1	1	8/2/01	8/7/01	KMC	EPA 8	270
Benzo(k)fluoranthene	<0.41	ug/L	0.41	1.4	. 1	8/2/01	8/7/01	KMC	EPA 8	270
Benzoic acid	<0.070	ug/L	0.070	0.23	1	8/2/01	8/7/01	KMC	EPA 8	270
Benzyl alcohol	<0.34	ug/L	0.34	1.1	1	8/2/01	8/7/01	KMC	EPA 8	270
Bis(2-chloroethoxy)methane	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8	270
Bis(2-chloroethyl)ether	<0.24	ug/L	0.24	0.79	1	8/2/01	8/7/01	KMC	EPA 82	270
Bis(2-chloroisopropyl)ether	<0.52	ug/L	0.52	1.7	1	8/2/01	8/7/01	KMC	EPA 8	270
Bis(2-ethylhexyl)phthalate	1.9	ug/L	1.4 *	4.7	1	8/2/01	8/7/01	KMC	EPA 82	270
Butylbenzylphthalate	<0.41	ug/L	0.41	1.4	1	8/2/01	8/7/01	KMC	EPA 8	270
Carbazole	<0.55	ug/L	0.55	1.8	1	8/2/01	8/7/01	KMC	EPA 8	270
Chrysene	<0.48	ug/L	0.48	1.6	1	8/2/01	8/7/01	KMC	EPA 8	270
Di-n-butylphthalate	1.2	ug/L	0.68 *	2.3	1	8/2/01	8/7/01	KMC	EPA 8	270
Di-n-octylphthalate	0.69	ug/L	0.32 *	1.1	1	8/2/01	8/7/01	KMC	EPA 8	270
Dibenzo(a,h)anthracene	<0.84	ug/L	0.84	2.8	1	8/2/01	8/7/01	KMC	EPA 8	270
Dibenzofuran	<0.50	ug/L	0.50	1.7	1	8/2/01	8/7/01	КМС	EPA 8	270
Diethylphthalate	0.52	ug/L	0.51 *	1.7	1	8/2/01	8/7/01	KMC	EPA 8	270
Dimethylphthalate	<0.49	ug/L	0.49	1.7	1	8/2/01	8/7/01	КМС	EPA 8	270
Fluoranthene	<0.50	ug/L	` 0.50	1.7	1	8/2/01	8/7/01	KMC	EPA 8	270
Fluorene	<0.49	ug/L	0.49	16	1	8/2/01	8/7/01	KMC	EPA 8	270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Project #: 2082394.01160101

Contract #: 1510 Folder #: 18561

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CTI LAB#: 79867	Sample Des	scription:	MW03					Sampl	ed: 7/	26/01 1315
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Method
Hexachlorobenzene	<0.47	ug/L	0.47	1.6	1		8/2/01	8/7/01	КМС	EPA 8270
Hexachlorobutadiene	<0.21	ug/L	0.21	3.3	1		8/2/01	8/7/01	KMC	EPA 8270
Hexachlorocyclopentadiene	<0.16	ug/L	0.16	0.52	1		8/2/01	8/7/01	КМС	EPA 8270
Hexachloroethane	<0.22	ug/L.	0.22	0.73	1		8/2/01	8/7/01	KMC	EPA 8270
Hexachloropropene	<0.18	ug/L	0.18	0.60	1		8/2/01	8/7/01	KMC	EPA 8270
Indeno(1,2,3-cd)pyrene	<0.85	ug/L	0.85	2.8	1		8/2/01	8/7/01	КМС	EPA 8270
Isophorone	<0.51	ug/L	0.51	1.7	1		8/2/01	8/7/01	КМС	EPA 8270
N-Nitroso-di-n-propylamine	<0.48	ug/L	0.48	1.6	1		8/2/01	8/7/01	KMC	EPA 8270
N-Nitrosodimethylamine	<0.27	ug/L	0.27	0.90	1		8/2/01	8/7/01	KMC	EPA 8270
N-Nitrosodiphenylamine &	<0.34	ug/L	0.34	1.1	1		8/2/01	8/7/01	KMC	EPA 8270
N-Nitrosopyrrolidine	<0.28	ug/L	0.28	0.90	1		8/2/01	8/7/01	KMC	EPA 8270
Naphthalene	<0.48	ug/L	0.48	1.6	1		8/2/01	8/7/01	KMC	EPA 8270
Nitrobenzene	<0.47	ug/L	0.47	1.6	1		8/2/01	8/7/01	KMC	EPA 8270
Pentachlorophenol	<0.21	ug/L	0.21	0.68	1		8/2/01	8/7/01	KMC	EPA 8270
Phenanthrene	<0.50	ug/L	0.50	1.7	1		8/2/01	8/7/01	KMC	EPA 8270
Phenol	<0.23	ug/L	. 0.23	0.76	1		8/2/01	8/7/01	KMC	EPA 8270
Pyrene	<0.46	ug/L	0.46	1.5	1		8/2/01	8/7/01	KMC	EPA 8270
Pyridine	<0.66	ug/L	0.66	2.2	1		8/2/01	8/7/01	KMC	EPA 8270
I,1,1,2-Tetrachloroethane	<0.20	ug/L	0.20	0.40	1 .			8/9/01	RLD	EPA 8260
1,1,1-Trichloroethane	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.20	0.50	1			8/9/01	RLD	EPA 8260
1,1,2-Trichloroethane	<0.10	ug/L	0.10	0.40	1			8/9/01	RLD	EPA 8260
1,1-Dichloroethane	2.0	ug/L	0.10	0.40	1			8/9/01	RLD	EPA 8260
1,1-Dichloroethene	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260
,1-Dichloropropene	<0.20	ug/L	0.20	0.50	1			8/9/01	RLD	EPA 8260
,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.80	1			8/9/01	RLD	EPA 8260
,2,3-Trichloropropane	<0.10	ug/L	0.10	0.40	1			8/9/01	RLD	EPA 8260
,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.70	1			8/9/01	RLD	EPA 8260
,2,4-Trimethylbenzene	0.33	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260
,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	1.2	1			8/9/01	RLD	EPA 8260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Project #: 2082394.01160101

Project Name: ST FRANCIS AUTO

Contract #: 1510 Folder #: 18561

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CTI LAB#: 79867	Sample Des	scription:	MW03					Sampled	: 7/	26/01 1	315
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Method	
1,2-Dibromoethane	<0.10	ug/L	0.10	0.20	1			8/9/01	RLD	EPA 8260)
1,2-Dichlorobenzene	0.93	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260)
1,2-Dichloroethane	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260)
cis-1,2-Dichloroethene	0.42	ug/L	0.20 *	0.50	1			8/9/01	RLD	EPA 8260)
trans-1,2-Dichloroethene	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
1,2-Dichloropropane	<0.20	ug/L	0.20	0.60	1			8/9/01	RLD	EPA 8260	
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
1,3-Dichlorobenzene	<0.10	ug/L	0.10	0.20	1			8/9/01	RLD	EPA 8260)
cis-1,3-Dichloropropene	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
1,3-Dichloropropane	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
trans-1,3-Dichloropropene	<0.10	ug/L	0.10	0.20	1			8/9/01	RLD	EPA 8260)
1,4-Dichlorobenzene	0.32	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
2,2-Dichloropropane	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260)
2-Chlorotoluene	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
4-Chlorotoluene	<0.20	ug/L	0.20	0.50	1			8/9/01	RLD	EPA 8260)
Benzene	4.7	ug/L	0.10	0.20	1			8/9/01	RLD	EPA 8260)
Bromobenzene	<0.10	ug/L	0.10	0.20	1			8/9/01	RLD	EPA 8260)
Bromochloromethane	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
Bromodichloromethane	<0.10	ug/L	0.10	0.40	1			8/9/01	RLD	EPA 8260)
Bromoform	<0.20	ug/L	0.20	0.50	1			8/9/01	RLD	EPA 8260)
Bromomethane	<0.40	ug/L	0.40	1.3	1			8/9/01	RLD	EPA 8260)
n-Butylbenzene	4.7	ug/L	0.10	0.40	1			8/9/01	RLD	EPA 8260)
sec-Butylbenzene	8.7	ug/L	0.20	0.60	1			8/9/01	RLD	EPA 8260)
tert-Butylbenzene	3.0	ug/L	0.10	0.20	1			8/9/01	RLD	EPA 8260)
Carbon tetrachloride	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
Chlorovenzene	6.5	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
Chloroethane	1.2	ug/L	0.40	1.2	1			8/9/01	RLD	EPA 8260)
Chloroform	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260)
Chloromethane	0.67	ug/L	0.20	0.50	1			8/9/01	RLD	EPA 8260)
Dibromochloromethane	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260)
Dibromomethane	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260)

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

87-48888

Project #: 2082394.01160101

Contract #: 1510 Folder #: 18561

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CTI LAB#: 79867	Sample Desc	ription:	MW03					Sampl	ed: 7	26/01 1315
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Method
Dichlorodifluoromethane	<0.10	ug/L	0.10	0.40	1			8/9/01	RLD	EPA 8260
Diisopropyl ether	<0.10	ug/L	0.10	0.40	1			8/9/01	RLD	EPA 8260
Ethylbenzene	0.26	ug/L	0.10 *	0.30	1			8/9/01	RLD	EPA 8260
Hexachlorobutadiene	<0.20	ug/L	0.20	0.60	1			8/9/01	RLD	EPA 8260
Isopropylbenzene	10	ug/L	0.10	0.20	1			8/9/01	RLD	EPA 8260
p-Isopropyltoluene	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.0	1			8/9/01	RLD	EPA 8260
Methylene chloride	<0.40	ug/L	0.40	1.2	1			8/9/01	RLD	EPA 8260
Naphthalene	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260
n-Propylbenzene	14	ug/L.	0.10	0.20	1			8/9/01	RLD	EPA 8260
Styrene	<0.10	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260
Tetrachloroethene	0.15	ug/L	0.10 *	0.30	1			8/9/01	RLD	EPA 8260
Toluene	0.64	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260
Trichloroethene	<0.20	ug/L	0.20	0.40	1			8/9/01	RLD	EPA 8260
Trichlorofluoromethane	<0.20	ug/L	0.20	0.50	1			8/9/01	RLD	EPA 8260
Vinyl chloride	4.8	ug/L	0.10	0.30	1			8/9/01	RLD	EPA 8260
m & p-Xylene	0.40	ug/L	0.20 *	0.70	1			8/9/01	RLD	EPA 8260
o-Xylene	0.22	ug/L.	0.10 *	0.30	1			8/9/01	RLD	EPA 8260

CTI LAB#:	79868	Sample Des	scription:	MW05					Sample	:d: 7/2	26/01	14
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Metho	od
Metals Results												
Dissolved Arsenic		4.4	ug/L	1.3	3	4 1		7/31/01	8/2/01	NAH	EPA 70	60
Dissolved Antimonv		<3.4	ua/L	3.4	1 1	11 1			7/30/01	NAH	EPA 60)101

Dissolved Antimony	<3.4	ug/L	3.4	11	1	7/30/01	NAH	EPA 6010B
Dissolved Beryllium	0.79	ug/L	0.37 *	1.2	1	7/30/01	NAH	EPA 6010B
Dissolved Cadmium	<0.42	ug/L	0.42	1.4	1	7/30/01	NAH	EPA 6010B
Dissolved Chromium	0.69	ug/L	0.61 *	2.1	1	7/30/01	NAH	EPA 6010B
Dissolved Copper	<2.9	ug/L	2.9	9.5	1	7/30/01	NAH	EPA 6010B
Dissolved Lead	2.0	ug/L	1.4 *	4.7	1	7/30/01	NAH	EPA 6010B
Dissolved Nickel	10.3	ug/L	5.0 *	17	1	7/30/01	NAH	EPA 6010B
Dissolved Selenium	<5.2	ug/L	5.2	17	1	7/30/01	NAH	EPA 6010B

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

24

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MONTGOMERY WATSON

Project #: 2082394.01160101

Project Name: ST FRANCIS AUTO

Contract #: 1510 Folder #: 18561

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CTI LAB#: 79868	3 Sample Des	scription:	MW05				Sample	ed: 7/	26/01 1400
Analyte	Result	Units	LOD	LOQ	Dilution	Prep Qualifier Date	Analysis Date	Analys	Method
Dissolved Silver	<0.62	ug/L	0.62	2.1	1		7/30/01	NAH	EPA 6010B
Dissolved Thallium	<5.4	ug/L	5.4	18	1		7/30/01	NAH	EPA 6010B
Dissolved Zinc	7.2	ug/L	1.8	5.8	1		7/30/01	NAH	EPA 6010B
Dissolved Mercury	<0.14	ug/L	0.14	0.47	1	7/28/01	7/30/01	NAH	EPA 7470
Drganic Results Aroclor-1016	<0.15	ug/L	0.15	0.40	50	7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1221	<0.10	ug/L	0.10	0.25	50	7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1232	<0.15	ug/L	0.15	0.45	50	7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1242	<0.15	ug/L	0.15	0.40	50	7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1248	<0.0030	ug/L	0.0030	0.0090	1	7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1254	<0.0020	ug/L	0.0020	0.0050	1	7/30/01	8/5/01	JRC	EPA 8082
Aroclor-1260	<0.0030	ug/L	0.0030	0.0090	1	7/30/01	8/5/01	JRC	EPA 8082
1,2,4,5-Tetrachlorobenzene	<4.8 <24	ug/L ug/l	4.8 24	16 80	25 25	8/2/01	8/7/01 8/7/01	KMC	EPA 8270
1,2,4,5-Tetrachlorobenzene	<4.8	ug/L	4.8	16	25	8/2/01	8/7/01	КМС	EPA 8270
1,2,4-Trichlorobenzene	<24	ug/L.	24	80	25	8/2/01	8/7/01	KMC	EPA 8270
1,2-Dichlorobenzene	<4.8	ug/L	4.8	16	25	8/2/01	8/7/01	KMC	EPA 8270
,3-Dichlorobenzene	<5.0	ug/L	5.0	17	25	8/2/01	8/7/01	KMC	EPA 8270
1,4-Dichlorobenzene	<5.3	ug/L	5.3	18	25	8/2/01	8/7/01	KMC	EPA 8270
	<4.0	ug/L	4.5	15	25	8/2/01	8/7/01	KMC	EPA 8270
	<1.0	ug/L	7.0	24	25	8/2/01	8/7/01	KMC	EPA 02/U
	<7.0	ug/L	70	40	20	0/2/U1 8/2/01	8/7/01	KMC	EPA 8270
2 4-Dinitrophenol	<23	ug/L	1.0 2 2	24	20	8/2/01	8/7/01	KMC	EPA 8270
2 4-Dinitrotoluene	<5.3	ug/L	5.3	1.5	25	8/2/01	8/7/01	KMC	EPA 8270
2.6-Dichlorophenol	<5.0	ua/L	5.0	17	25	8/2/01	8/7/01	KMC	EPA 8270
2.6-Dinitrotoluene	<12	9 ua/l	12	،، ۵۸	25	8/2/01	8/7/01	KMC	EPA 8270
2-Chloronaphthalene	<13	ua/l	13	43	25	8/2/01	8/7/01	KMC	EPA 8270
2-Chlorophenol	<4.5	ua/L	4.5	15	25	8/2/01	8/7/01	KMC	EPA 8270
2-Methylnaphthalene	<12	-g- uo/L	12	40	25	8/2/01	8/7/01	KMC	EPA 8270
	<11	-3	11	20		9/2/01	9/7/01	KMC	

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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Sample Description:

79868

CTI LAB#:

8888

Benzo(a)pyrene

Benzo(b)fluoranthene

Benzo(g,h,i)perylene

Benzo(k)fluoranthene

Bis(2-chloroethoxy)methane

Bis(2-chloroethyl)ether

Benzoic acid

Benzyl alcohol

MONTGOMERY WATSON

MW05

Contract #: 1510 Folder #: 18561

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Sampled:

7/26/01

1400

Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

Prep Analysis Units LOD Date Date Result LOQ **Dilution Qualifier** Method Analyte Analyst Qualifiers applying to all Analytes of Method EPA 8270: V ug/L. 2-Naphthylamine <30 30 100 25 8/2/01 8/7/01 KMC EPA 8270 <13 ug/L 2-Nitroaniline 13 43 25 8/2/01 8/7/01 KMC EPA 8270 2-Nitrophenol <11 ug/L 11 38 25 8/2/01 8/7/01 KMC EPA 8270 3 & 4-Methylphenol <9.5 ug/L 9.5 33 25 8/2/01 8/7/01 KMC EPA 8270 <10 8/7/01 3,3'-Dichlorobenzidine ug/L 10 33 25 8/2/01 KMC EPA 8270 3-Nitroaniline <3.5 ug/L 3.5 12 25 8/2/01 8/7/01 KMC EPA 8270 4,6-Dinitro-2-methylphenol <3.3 ug/L 8/2/01 8/7/01 3.3 11 25 KMC EPA 8270 ug/L 4-Bromophenyl-phenyl ether <13 8/2/01 8/7/01 KMC 13 45 25 EPA 8270 4-Bromophenyl-phenyl ether <13 ug/L 8/2/01 13 45 25 8/7/01 KMC EPA 8270 4-Chloro-3-methylphenol <12 ug/L 12 25 8/2/01 8/7/01 KMC 40 EPA 8270 4-Chloroaniline <15 ug/L 15 50 25 8/2/01 8/7/01 KMC EPA 8270 ug/L 4-Chlorophenyl-phenyl ether <13 8/7/01 KMC 13 43 25 8/2/01 EPA 8270 4-Nitroaniline <11 ug/L 11 38 25 8/2/01 8/7/01 KMC EPA 8270 4-Nitrophenol <7.0 ug/L 7.0 23 25 8/2/01 8/7/01 KMC EPA 8270 Acenaphthene <12 ug/L 12 40 25 8/2/01 8/7/01 KMC EPA 8270 ug/L Acenaphthylene <13 13 8/2/01 8/7/01 43 25 KMC EPA 8270 <13 Acetophenone ug/L 13 43 25 8/2/01 8/7/01 KMC EPA 8270 Aniline <15 ug/L 15 48 25 8/2/01 8/7/01 KMC EPA 8270 Anthracene <12 ug/L 12 40 25 8/2/01 8/7/01 KMC EPA 8270 Azobenzene & <8.8 8/2/01 ug/L 8.8 30 25 8/7/01 KMC EPA 8270 1,2-Diphenylhydra Benzidine <12 ug/L 12 40 25 8/2/01 8/7/01 KMC EPA 8270 Benzo(a)anthracene <12 ug/L 12 25 8/2/01 8/7/01 KMC 40 EPA 8270

25

25

25

25

25

25

25

25

35

35

28

35

5.8

28

43

20

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

8/2/01

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KMC

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KMC

EPA 8270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

11

10

11

10

1.8

8.5

13

6.0

Solid sample results reported on a Dry Weight Basis

<11

<10

<11

<10

<1.8

<8.5

<13

<6.0

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

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or 388888

MONTGOMERY WATSON

Project #: 2082394.01160101

Project Name: ST FRANCIS AUTO

Contract #: 1510

Folder #: 18561

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CTI LAB#: 79868	Sample Desc	ription: M\	W05					Sampled:	7/2	26/01 1400
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Qualifiers applying to all Analyte Bis(2-chloroisopropyl)ether	<pre>s of Method E <13</pre>	PA 8270: V ua/L	13	43	25		8/2/01	8/7/01	КМС	EPA 8270
Bis(2-ethylhexyl)phthalate	<35	ua/L	35	120	25		8/2/01	8/7/01	KMC	EPA 8270
Butylbenzylphthalate	<10	ug/L	10	35	25		8/2/01	8/7/01	KMC	EPA 8270
Carbazole	<14	ug/L	14	45	25		8/2/01	8/7/01	KMC	EPA 8270
Chrysene	<12	ug/L	12	40	25		8/2/01	8/7/01	KMC	EPA 8270
Di-n-butylphthalate	<17	ug/L.	17	58	25		8/2/01	8/7/01	KMC	EPA 8270
Di-n-octylphthalate	<8.0	ug/L	8.0	28	25		8/2/01	8/7/01	КМС	EPA 8270
Dibenzo(a,h)anthracene	<21	ug/L	21	70	25		8/2/01	8/7/01	KMC	EPA 8270
Dibenzofuran	<13	ug/L	13	43	25		8/2/01	8/7/01	KMC	EPA 8270
Diethylphthalate	<13	ug/L	13	43	25		8/2/01	8/7/01	KMC	EPA 8270
Dimethylphthalate	<12	ug/L	12	43	25		8/2/01	8/7/01	KMC	EPA 8270
Fluoranthene	<13	ug/L	13	43	25		8/2/01	8/7/01	KMC	EPA 8270
Fluorene	<12	ug/L	12	40	25		8/2/01	8/7/01	KMC	EPA 8270
Hexachlorobenzene	<12	ug/L	12	40	25		8/2/01	8/7/01	КМС	EPA 8270
Hexachlorobutadiene	<5.3	ug/L	5.3	83	25		8/2/01	8/7/01	KMC	EPA 8270
Hexachlorocyclopentadiene	<4.0	ug/L	4.0	13	25		8/2/01	8/7/01	KMC	EPA 8270
Hexachloroethane	<5.5	ug/L	5.5	18	25		8/2/01	8/7/01	KMC	EPA 8270
Hexachloropropene	<4.5	ug/L	4.5	15	25		8/2/01	8/7/01	KMC	EPA 8270
indeno(1,2,3-cd)pyrene	<21	ug/L	21	70	25		8/2/01	8/7/01	KMC	EPA 8270
isophorone	<13	ug/L	13	43	25		8/2/01	8/7/01	KMC	EPA 8270
N-Nitroso-di-n-propylamine	<12	ug/L	12	40	25		8/2/01	8/7/01	KMC	EPA 8270
N-Nitrosodimethylamine	<6.8	ug/L	6.8	23	25		8/2/01	8/7/01	KMC	EPA 8270
N-Nitrosodiphenylamine &	<8.5	ug/L	8.5	28	25		8/2/01	8/7/01	KMC	EPA 8270
N-Nitrosopyrrolidine	<7.^	ug/L	7.0	23	25		8/2/01	8/7/01	KMC	EPA 8270
Naphthalene	25	ug/L	12 *	40	25		8/2/01	8/7/01	КМС	EPA 8270
Nitrobenzene	<12	ug/L	12	40	25		8/2/01	8/7/01	KMC	EPA 8270
Pentachlorophenol	<5.3	ug/L	5.3	17	25		8/2/01	8/7/01	КМС	EPA 8270
Phenanthrene	<13	ug/L	13	43	25		8/2/01	8/7/01	KMC	EPA 8270
Phenol	<5.8	ug/L	5.8	19	25		8/2/01	8/7/01	KMC	EPA 8270

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

MONTGOMERY WATSON

Project Name: ST FRANCIS AUTO

Project #: 2082394.01160101



Contract #: 1510 Folder #: 18561

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AnalyseReadtUnitsLODLODNumberPeak<	CTI LAB#: 79868	Sample Des	cription:	MW05					Sample	ed: 7/2	26/01 1400
Qualifiers applying to all Antibuc EPA 8270: Vyridine 417 ugL 17 55 25 8201 87/01 KMC EPA 8270 1,1.1-Tichachloroethane <1.6 ugL 2.8 3.3 10 88/01 RLD EPA 8260 1,2.2-Tichloroethane <1.9 ugL 1.8 5.2 10 88/01 RLD EPA 8260 1,2.2-Tichloroethane <1.6 0.2 10 8/801 RLD EPA 8260 1,2.2-Tichloroethane <1.6 ugL 1.6 5.0 10 8/801 RLD EPA 8260 1,1.5-Ichloroethane <1.5 ugL 1.6 5.0 10 8/801 RLD EPA 8260 1,1.5-Ichloroptopane <2.3 ugL 1.6 5.0 10 8/801 RLD EPA 8260 2,3-Tichloroptopane <2.4 ugL 2.6 6.6 10 8/801 RLD EPA 8260 2,4-Tichloroptopane <4.0 ugL 1.1 3.6 10 8/801	Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Jack Hier's applying to a Arbityles of Metrics EPA 6270. V 17 55 25 82/01 87/01 KMC EPA 6270 1,1,2-Tertachloroethane <1.6											
1,1,2-Tetrachloroethane <1.6	Qualifiers applying to all Analyt Pvridine	es of Method I	EPA 8270: V ua/L	17	55	25	8	8/2/01	8/7/01	КМС	EPA 8270
1.1.2-Tetrachloroethane<1.6ugl1.65.21084%01RLDEPA 828011.1.1-Trichloroethane<2.8			0								
1.1 - Trichloroethane <2.8	1,1,1.2-Tetrachloroethane	<1.6	ug/L	1.6	5.2	10			8/8/01	RLD	EPA 8260
1.1.2.2.Tetrachloroethane <1.9	1,1,1-Trichloroethane	<2.8	ug/L	2.8	9.3	10			8/8/01	RLD	EPA 8260
1.2 Trichloroethane <1.6	1,1,2,2-Tetrachloroethane	<1.9	ug/L	1.9	6.2	10			8/8/01	RLD	EPA 8260
1-Dichloroethane<1.5ug/L1.54.9108/801RLDEPA 82601-Dichloroethane<2.3	1,1,2-Trichloroethane	<1.6	ug/L	1.6	5.5	10			8/8/01	RLD	EPA 8260
1.1.Dichloroethene <2.3 ugl 2.3 7.5 10 8/801 RLD EPA 8280 1.1.Dichloropropene <3.8	1,1-Dichloroethane	<1.5	ug/L	1.5	4.9	10			8/8/01	RLD	EPA 8260
1.1.Dichloropropene <3.8 ugl 3.8 13 10 8/b/01 RLD EPA 8260 2.3.3.Trichlorobenzene <1.5	1,1-Dichloroethene	<2.3	ug/L	2.3	7.5	10			8/8/01	RLD	EPA 8260
2,3-Trichlorobenzene <1.5	1,1-Dichloropropene	<3.8	ug/L	3.8	13	10			8/8/01	RLD	EPA 8260
2,3-Trichloropropane<2.3ug/L2.37.6108/8/01RLDEPA 8260,2,4-Trichlorobenzene<2.6	1,2,3-Trichlorobenzene	<1.5	ug/L	1.5	5.0	10			8/8/01	RLD	EPA 8260
2,2,4 Trichlorobenzene<2.6ug/L2.68.6108/8/01RLDEPA 8260,2,4 Trimethylbenzene350ug/L1.13.6108/8/01RLDEPA 8260,2-Dibromo-3-chloropropane<4.0	1,2,3-Trichloropropane	<2.3	ug/L	2.3	7.6	10			8/8/01	RLD	EPA 8260
2.4-Trimethylbenzene350ug/L1.13.6108/8/01RLDEPA 8260.2-Dibromo-3-chloropropane<4.0	,2,4-Trichlorobenzene	<2.6	ug/L	2.6	8.6	10			8/8/01	RLD	EPA 8260
2-Dibromo-3-chloropropane<4.0ug/L4.014108/8/01RLDEPA 8260,2-Dibromoethane<1.4	1,2,4-Trimethylbenzene	350	ug/L	1.1	3.6	10			8/8/01	RLD	EPA 8260
2-Dibromoethane<1.4ug/L1.44.5108/8/01RLDEPA 82602-Dibrlorobenzene<2.9	1,2-Dibromo-3-chloropropane	<4.0	ug/L	4.0	14	10			8/8/01	RLD	EPA 8260
2.2 Dichlorobenzene <2.9	1,2-Dibromoethane	<1.4	ug/L	1.4	4.5	10			8/8/01	RLD	EPA 8260
2.2 ind 2.2 7.3 10 8/8/01 RLD EPA 8260 isis-1,2-Dichloroethene <2.8	1,2-Dichlorobenzene	<2.9	ug/L	2.9	9.6	10			8/8/01	RLD	EPA 8260
is 1,2-Dichloroethene <2.8	1,2-Dichloroethane	<2.2	ug/L	2.2	7.3	10			8/8/01	RLD	EPA 8260
rans-1,2-Dichloroethene<4.0ug/L4.014108/8/01RLDEPA 8260,2-Dichloropropane<2.4	cis-1,2-Dichloroethene	<2.8	ug/L	2.8	9.2	10			8/8/01	RLD	EPA 8260
A2-Dichloropropane<2.4ug/L2.48.1108/8/01RLDEPA 8260A3-Dichlorobenzene15ug/L1.24.1108/8/01RLDEPA 8260A3-Dichlorobenzene<1.3	rans-1,2-Dichloroethene	<4.0	ug/L	4.0	14	10			8/8/01	RLD	EPA 8260
A,3,5-Trimethylbenzene15ug/L1.24.1108/8/01RLDEPA 8260,3-Dichlorobenzene<1.3	1,2-Dichloropropane	<2.4	ug/L	2.4	8.1	10			8/8/01	RLD	EPA 8260
A-Dichlorobenzene<1.3ug/L1.34.4108/8/01RLDEPA 8260is-1,3-Dichloropropene<1.2	I,3,5-Trimethylbenzene	15	ug/L	1.2	4.1	10			8/8/01	RLD	EPA 8260
is-1,3-Dichloropropene<1.2ug/L1.23.9108/8/01RLDEPA 8260,3-Dichloropropane<1.4	,3-Dichlorobenzene	<1.3	ug/L	1.3	4.4	10			8/8/01	RLD	EPA 8260
A-Dichloropropane<1.4ug/L1.44.6108/8/01RLDEPA 8260rans-1,3-Dichloropropene<1.1	cis-1,3-Dichloropropene	<1.2	ug/L	1.2	3.9	10			8/8/01	RLD	EPA 8260
rans-1,3-Dichloropropene<1.1ug/L1.13.6108/8/01RLDEPA 8260,4-Dichlorobenzene<2.1	,3-Dichloropropane	<1.4	ug/L	1.4	4.6	10			8/8/01	RLD	EPA 8260
A-Dichlorobenzene<2.1ug/L2.17.0108/8/01RLDEPA 8260x2-Dichloropropane<2.6	rans-1,3-Dichloropropene	<1.1	ug/L.	1.1	3.6	10			8/8/01	RLD	EPA 8260
2-Dichloropropane <2.6 ug/L 2.6 8.6 10 8/8/01 RLD EPA 8260 Chlorotoluene <1.3	,4-Dichlorobenzene	<2.1	ug/L	2.1	7.0	10			8/8/01	RLD	EPA 8260
Chlorotoluene <1.3 ug/L 1.3 4.4 10 8/8/01 RLD EPA 8260 -Chlorotoluene <1.3	2,2-Dichloropropane	<2.6	ug/L	2.6	8.6	10			8/8/01	RLD	EPA 8260
-Chlorotoluene <1.3 ug/L 1.3 4.4 10 8/8/01 RLD EPA 8260 Menzene 10 ug/L 1.2 4.1 10 8/8/01 RLD EPA 8260	2-Chlorotoluene	<1.3	ug/L	1.3	4.4	10			8/8/01	RLD	EPA 8260
lenzene 10 ug/L 1.2 4.1 10 8/8/01 RLD EPA 8260	I-Chlorotoluene	<1.3	ug/L	1.3	4.4	10			8/8/01	RLD	EPA 8260
	Benzene	10	ug/L	1.2	4.1	10			8/8/01	RLD	EPA 8260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Project Name: ST FRANCIS AUTO

Project #: 2082394.01160101

CTLaboratories

Contract #: 1510 Folder #: 18561

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CTI LAB#: 7986	68 Sample Des	scription:	MW05					Sampl	ed: 7/	26/01 1	400
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Method	
Bromobenzene	<1.5	ug/L	1.5	4.8	10	_		8/8/01	RLD	EPA 8260	
Bromochloromethane	<1.6	ug/L	1.6	5.4	10			8/8/01	RLD	EPA 8260	•
Bromodichloromethane	<1.9	ug/L	1.9	6.3	10			8/8/01	RLD	EPA 8260	1
Bromoform	<1.6	ug/L	1.6	5.2	10			8/8/01	RLD	EPA 8260	I
Bromomethane	<4.0	ug/L	4.0	15	10			8/8/01	RLD	EPA 8260	I
n-Butylbenzene	95	ug/L	1.0	3.2	10			8/8/01	RLD	EPA 8260	ł
sec-Butylbenzene	140	ug/L	1.0	3.3	10			8/8/01	RLD	EPA 8260	ł
tert-Butylbenzene	25	ug/L	2.8	9.2	10			8/8/01	RLD	EPA 8260	I
Carbon tetrachloride	<2.1	ug/L	2.1	6.9	10			8/8/01	RLD	EPA 8260	I
Chlorobenzene	<1.2	ug/L	1.2	4.1	10			8/8/01	RLD	EPA 8260	ł
Chloroethane	<3.0	ug/L	3.0	11	10			8/8/01	RLD	EPA 8260	ł
Chloroform	1.9	ug/L	1.6 *	5.4	10			8/8/01	RLD	EPA 8260	I
Chloromethane	<4.0	ug/L	4.0	14	10			8/8/01	RLD	EPA 8260	ł
Dibromochloromethane	<2.7	ug/L	2.7	8.9	10			8/8/01	RLD	EPA 8260)
Dibromomethane	<2.6	ug/L	2.6	8.7	10			8/8/01	RLD	EPA 8260	ł
Dichlorodifluoromethane	<5.0	ug/L	5.0	17	10			8/8/01	RLD	EPA 8260	•
Diisopropyl ether	<1.3	ug/L	1.3	4.4	10			8/8/01	RLD	EPA 8260	1
Ethylbenzene	5.9	ug/L	1.4	4.7	10			8/8/01	RLD	EPA 8260	1
lexachlorobutadiene	<2.7	ug/L	2.7	9.0	10			8/8/01	RLD	EPA 8260	ł
sopropylbenzene	120	ug/L	2.2	7.4	10			8/8/01	RLD	EPA 8260	•
-Isopropyltoluene	28	ug/L	1.0	3.2	10			8/8/01	RLD	EPA 8260)
Aethyl tert-butyl ether	<1.6	ug/L	1.6	5.2	10			8/8/01	RLD	EPA 8260)
lethylene chloride	<8.0	ug/L	8.0	26	10			8/8/01	RLD	EPA 8260	ł
laphthalene	51	ug/L	2.0	6.7	10			8/8/01	RLD	EPA 8260	1
Propylbenzene	250	ug/L	2.3	7.5	10			8/8/01	RLD	EPA 8260	1
styrene	<1.2	ug/L	1.2	4.0	10			8/8/01	RLD	EPA 8260)
etrachloroethene	<1.5	ug/L	1.5	4.9	10			8/8/01	RLD	EPA 8260	•
oluene	<1.4	ug/L	1.4	4.6	10			8/8/01	RLD	EPA 8260)
richloroethene	<2.7	ug/L	2.7	9.1	10			8/8/01	RLD	EPA 8260)
richlorofluoromethane	<1.7	ug/L	1.7	5.6	10			8/8/01	RLD	EPA 8260)
/invl chloride	<1.8	ua/l	1.8	61	10			8/8/01	BLD	EPA 8260	1

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Contract #: 1510 Folder #: 18561

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Project Name: ST FRANCIS AUTO Project #: 2082394.01160101

CTI LAB#:	79868	Sample Des	scription:	MW05					Sample	ed: 7/2	26/01 1400
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
m & p-Xylene		37	ug/L	2.3	7.5	10			8/8/01	RLD	EPA 8260
o-Xylene		3.4	ug/L	1.3	• 4.2	10			8/8/01	RLD	EPA 8260

CTI LAB#: 79869	Sample Desc	ription:	BAILER BLANK					Sample	d: 7/	26/01	1425
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Metho	d
Organic Results											
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 826	50
1,1,1-Trichloroethane	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 826	50
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.20	0.50	1			8/7/01	RLD	EPA 826	50
1,1,2-Trichloroethane	<0.10	ug/L	0.10	0.40	1			8/7/01	RLD	EPA 826	60
1,1-Dichloroethane	<0.10	ug/L	0.10	0.40	1			8/7/01	RLD	EPA 826	50
1,1-Dichloroethene	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 826	50
1,1-Dichloropropene	<0.20	ug/L	0.20	0.50	1			8/7/01	RLD	EPA 826	50
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.80	1			8/7/01	RLD	EPA 826	50
1,2,3-Trichloropropane	<0.10	ug/L	0.10	0.40	1			8/7/01	RLD	EPA 826	60
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.70	1			8/7/01	RLD	EPA 826	50
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 826	50
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	1.2	1			8/7/01	RLD	EPA 826	50
1,2-Dibromoethane	<0.10	ug/L	0.10	0.20	1			8/7/01	RLD	EPA 826	50
1,2-Dichlorobenzene	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 826	50
1,2-Dichloroethane	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 826	50
cis-1,2-Dichloroethene	<0.20	ug/L	0.20	0.50	1			8/7/01	RLD	EPA 826	30
trans-1,2-Dichloroethene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 826	50
1,2-Dichloropropane	<0.20	ug/L	0.20	0.60	1			8/7/01	RLD	EPA 826	30
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 826	50
1,3-Dichlorobenzene	<0.10	ug/L	0.10	0.20	1			8/7/01	RLD	EPA 826	50
cis-1,3-Dichloropropene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 82	50
1,3-Dichloropropane	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 820	60
trans-1,3-Dichloropropene	<0.10	ug/L.	0.10	0.20	1			8/7/01	RLD	EPA 820	60
1,4-Dichlorobenzene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 820	60
2,2-Dichloropropane	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 820	60

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

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MONTGOMERY WATSON

Project #: 2082394.01160101

Project Name: ST FRANCIS AUTO

Contract #: 1510 Folder #: 18561

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CTI LAB#: 79869	Sample Des	cription:	BAILER BLANK					Sampl	ed: 7/	26/01	1425
Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Meth	od
2-Chlorotoluene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
4-Chlorotoluene	<0.20	ug/L	0.20	0.50	1			8/7/01	RLD	EPA 8	260
Benzene	<0.10	ug/L	0.10	0.20	1			8/7/01	RLD	EPA 8	260
Bromobenzene	<0.10	ug/L	0.10	0.20	1			8/7/01	RLD	EPA 8	260
Bromochloromethane	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
Bromodichloromethane	<0.10	ug/L	0.10	0.40	1			8/7/01	RLD	EPA 8	260
Bromoform	<0.20	ug/L	0.20	0.50	1			8/7/01	RLD	EPA 8	260
Bromomethane	<0.40	ug/L	0.40	1.3	1			8/7/01	RLD	EPA 8	260
n-Butylbenzene	<0.10	ug/L	0.10	0.40	1			8/7/01	RLD	EPA 8	260
sec-Butylbenzene	<0.20	ug/L	0.20	0.60	1			8/7/01	RLD	EPA 8	260
tert-Butylbenzene	<0.10	ug/L	0.10	0.20	1			8/7/01	RLD	EPA 8	260
Carbon tetrachloride	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
Chlorobenzene	0.12	ug/L	0.10 *	0.30	1			8/7/01	RLD	EPA 8	260
Chloroethane	<0.40	ug/L	0.40	1.2	1			8/7/01	RLD	EPA 8	260
Chloroform	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
Chloromethane	<0.20	ug/L	0.20	0.50	1			8/7/01	RLD	EPA 8	260
Dibromochloromethane	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 8	260
Dibromomethane	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 8	260
Dichlorodifluoromethane	<0.10	ug/L	0.10	0.40	1			8/7/01	RLD	EPA 8	260
Diisopropyl ether	<0.10	ug/L	0.10	0.40	1			8/7/01	RLD	EPA 8	260
Ethylbenzene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
Hexachlorobutadiene	<0.20	ug/L	0.20	0.60	1			8/7/01	RLD	EPA 8	260
Isopropylbenzene	<0.10	ug/L	0.10	0.20	1			8/7/01	RLD	EPA 8	260
p-Isopropyltoluene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.0	1			8/7/01	RLD	EPA 8	260
Methylene chloride	<0.40	ug/L	0.40	1.2	1			8/7/01	RLD	EPA 8	260
Naphthalene	<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 8	260
n-Propylbenzene	<0.10	ug/L	0.10	0.20	1			8/7/01	RLD	EPA 8	260
Styrene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
Tetrachloroethene	<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8	260
Toluene	0.51	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 8	260

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

MONTGOMERY WATSON

Project Name: ST FRANCIS AUTO Project #: 2082394.01160101 Contract #: 1510 Folder #: 18561

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CTI LAB#: 79		Sample Des	cription:	BAILER BLANK					Sampl	ed: 7/	/26/01 1425
Analyte		Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analys	t Method
Trichloroethene		<0.20	ug/L	0.20	0.40	1			8/7/01	RLD	EPA 8260
Trichlorofluoromethane		<0.20	ug/L	0.20	0.50	1			8/7/01	RLD	EPA 8260
Vinyl chloride		<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8260
n & p-Xylene		<0.20	ug/L	0.20	0.70	1			8/7/01	RLD	EPA 8260
o-Xylene		<0.10	ug/L	0.10	0.30	1			8/7/01	RLD	EPA 8260

Notes: * Indicates Value in between LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

m Submitted by: _

Record Reviewer

QC Qualifiers

80.331933

Code Description

- A Analyte averaged calibration criteria within acceptable limits.
- B Analyte detected in associated Method Blank.
- C Toxicity present in BOD sample.
- D Diluted Out.
- E Safe, No Total Coliform detected.
- F Unsafe, Total Coliform detected, no E. Coli detected.
- G Unsafe, Total Coliform detected and E. Coli detected.
- H Holding time exceeded.
- J Estimated value. The result is less than the reporting limit, but greater than the MDL.
- L Significant peaks were detected outside the chromatographic window.
- M Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
- N Insufficient BOD oxygen depletion.
- O Complete BOD oxygen depletion.
- P Concentration of analyte differs more than 40% between primary and confirmation analysis.
- Q Laboratory Control Sample outside acceptance limits.
- R See Narrative at end of report.
- S Surrogate and/or internal standard recovery outside acceptance limits due to apparent matrix effects.
- T Sample received with improper preservation or temperature.
- V Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
- W Sample amount received was below program minimum.
- X Analyte exceeded calibration range.
- Y Replicate/Duplicate precision outside acceptance limits.
- Z Calibration criteria exceeded.

WI DNR Lab Certification Number: 15-7066030 DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

MONTGOMERY WATSON		Company: MONTGOMERY WATS Project ST FRANCIS AUTO Logged By: TAJ PM: PMI						с жжжж , а мж жж ,	SPECIAL INSTRUCTIONS: PECFA WI LUST ACT 307 REPORT DRY WT		TURNAROUNE MEFE land MEEK DAYS DAY
PROJECT NAME: ST FRANCIS AUTO CITY: ST FRANCIS SAMPLER(S): COLLECTION COLLECTION GRAB/ DATE TIME COMP 7/21/01 0 700 TRIP BLA 1 1005 G MW02 11/15 1 MW01 1230 MW04 1315 MW03 1400 MW05 - 1428 BAILER B	20JECT #: 2082394.01/60/01 :: WI SAMPLE ID NK	Let D. OF CONTAINERS	X	X	X X X X X X X X X X X X X X X X X X X	X X R. C.				TEMPERATURE INITIALS DATE 7/27/6 REMARKS	

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	SIGNATURE	DATE	TIME	SIGNATURE	DATE	TIME
RELINQUISHED BY:	MP But	7/24/01	1920	RECEIVED BY:		
RELINQUISHED BY	· · · ·			RECEIVED BY:		
RELINQUISHED BY:				RECEIVED BY:	11	
RELINQUISHED BY				RECEIVED FOR LABORATORY BY:	7/27/01	1555
C-O-C No. 02180)3			NAME OF COURIER:	/ /	

AIRBILL NUMBER:

23-128-

SITE UTILITY MAPS

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