

**LIMITED DUE DILIGENCE  
AND  
PHASE II ENVIRONMENTAL SITE ASSESSMENT  
FOR  
YANKTON SIOUX TRIBE ADMINISTRATION BUILDING  
303<sup>rd</sup> STREET AND 388<sup>th</sup> AVENUE  
MARTY, CHARLES MIX COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 WYNKOOP ST.  
DENVER, COLORADO 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Ste. 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

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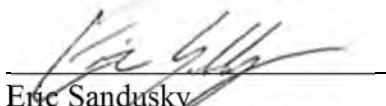
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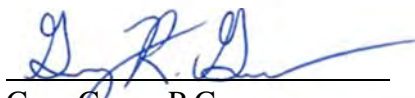
**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Ste. 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Prepared by:

  
Eric Sandusky  
START Project Scientist

Date: 8/25/2016

Reviewed and Approved by:

  
Greg Geras, P.G.  
START Project Manager

Date: 8/25/2016

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## LIST OF ACRONYMS

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ACM	asbestos-containing material
AHERA	Asbestos Hazard Emergency Response Act
ASTM	ASTM, International
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	contaminant of concern
DRO	Diesel Range Organics
ECHO	Enforcement and Compliance History Online
EDR	Environmental Data Resources Inc.
EPA	United States Environmental Protection Agency
ESA	Environnemental Site Assessment
ESC	ESC Lab Sciences
FINDS	Facility Index System
ft	feet
GRO	Gasoline Range Organics
GW	groundwater
HEPA	high-efficiency particulate air
in.	inches
LBP	lead-based paint
LUST	Leaking Underground Storage Tank
mg/cm <sup>2</sup>	milligrams per square centimeter
mg/kg	milligrams per kilogram
MTBE	methyl tertiary butyl ether
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not applicable
P.G.	Professional Geologist
PCB	polychlorinated biphenyl
PID	photoionization detector
PLM	Polarized Light Microscopy

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## LIST OF ACRONYMS (CONTINUED)

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PPE	personal protective equipment
QA	Quality Assurance
QC	Quality Control
RACM	regulated asbestos-containing material
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Concern
SAP	Sampling and Analysis Plan
SD	South Dakota
sq. ft.	square feet
START	Superfund Technical Assessment and Response Team
SQG	Small Quantity Generator
SOO	Statement of Objectives
TBA	Targeted Brownfields Assessment
TD	total depth
TDD	Technical Direction Document
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
ug/L	micrograms per liter
VOC	volatile organic compound
WESTON	Weston Solutions, Inc.
XRF	X-ray fluorescence
YST	Yankton Sioux Tribe

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Yankton Sioux Tribe (YST) Administration Building located at the intersection of 303<sup>rd</sup> Street and 388<sup>th</sup> Avenue in Marty, Charles Mix County, SD (Site).

## SCOPE OF WORK

This Phase II ESA was conducted in accordance with Technical Direction Document (TDD) 0003/1605-17 and *ASTM, International (ASTM) E1903-11 – Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*. The purpose of a Phase II ESA is to achieve the objectives set forth in the *Statement of Objectives* (SOO) developed by the user(s) and the Phase II Assessor. Goals for this Phase II ESA were to acquire and evaluate sufficient information to determine the location and concentration of potential environmental contamination at the Site, if present. The specific SOO for this Phase II ESA were as follows:

- Assess and evaluate suspected contaminants that may be present at the Site. Develop sufficient information to reasonably render a professional opinion that, with respect to the potential concerns assessed, hazardous substances either are or are not are present at the property, including the concentrations of the substances if present;
- To investigate and assess the current presence of contaminants in soil and/or groundwater on the Site associated with the underground storage tank (UST) that was identified during the due diligence process;
- Gather and provide sufficient data to assist the Targeted Brownfield Assessment (TBA) recipient to make informed decisions with regard to the future use of the property; and
- Gather sufficient data to provide cost estimates for properly disposing of hazardous materials, remediation, and or demolition, if necessary.

## SITE BACKGROUND

The Site is currently comprised of an abandoned two-story building and surrounding lot, located in a residential area in Marty, SD. The building was constructed in 1957 and originally called Saint Sylvester's Convent. Between 1958 and 1982, the property was used as the Mother House for the Oblate Sisters of the Blessed Sacrament of St. Paul's Parish and a chapel. From 1982 onward, the property was rented, then owned by the Yankton Sioux Tribe (YST) when the building was converted to accommodate administration offices for the tribe. In recent years the building has been left vacant and in 2010, rapid snowmelt flooded the lower level with five feet of water. Additionally, the property contains one estimated 5,000 to 8,000-gallon UST that previously contained diesel fuel, which had previously been drained by the YST. The TBA recipient (YST)

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would like to rehabilitate the existing building on the property to provide a shelter for homeless members of the community.

## **SUMMARY OF RESULTS AND CONCLUSIONS**

Phase II assessment fieldwork was conducted between July 6 and 7, 2016 (ACM and LBP surveys) and on July 12, 2016 (UST investigation). Results of the Phase II ESA has confirmed the presence of contaminants of concern (COCs) at the Site. The following list is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos Containing Material (ACM)**

Of the 34 samples submitted for laboratory analysis, a total of ten samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the estimated extent of ACM and location of the ACM identified at the Site. See Sections 5.1 and 6.1 of this report for a more detailed breakdown.

<b>ACM Material</b>	<b>Estimated Volume / Extent (Approximate)</b>	<b>Location</b>
Pipe fittings	100 fittings	Lower level
Window caulk	70 sq. ft.	All windows
Floor tile	15,000 sq. ft.	Both stories
Glue pucks	17,500 sq. ft.	Ceilings of both stories

Notes:  
sq. ft. = square feet

Based on the results of the ACM survey, asbestos is present in building. ACM is considered to be a COC in relation to the Site.

### **Lead-Based Paint (LBP)**

Based on the results from the lead based paint inspection, elevated X-ray fluorescence (XRF) results were reported for lead in the trough of windows on the second level at concentrations above 1 mg/cm<sup>2</sup>. The only accessible building components which have lead based paint are the wooden windows located throughout the building. The top layer of paint (yellow) is not lead-based paint (LBP), but the original white paint found on several window troughs and other window components is above the action level. Based on the results of the LBP survey, LBP is present in building. LBP is considered to be a COC in relation to the Site.

### **Polychlorinated biphenyls (PCBs), Mercury, and Mold**

A summary of the observations regarding the visual inspections conducted are presented below:

- Of the light ballasts observed, one polychlorinated biphenyl (PCB) ballast was observed. None of the light fixtures observed in the building appeared to be leaking fluids. PCBs are considered COCs in relation to the Site.
- Two mercury-containing thermostat switches were observed in the building, one on each level. Mercury is considered a COC in relation to the Site.
- Mold was encountered at the Site on both levels. Additionally, the lower level of the hexagonal structure was flooded during the inspection. Mold is considered a COC in relation to the Site.

### **Sub-surface Soils**

Based on the results of the sub-surface soil investigation of the UST, no contamination of soils were found at the Site.

### **Groundwater**

Based on the results of the sub-surface groundwater investigation of the UST, no contamination of groundwater was found at the Site.

## **RECOMMENDATIONS**

Based on the work performed, START recommends the following:

- Based on the ACM identified at the site, START recommends conducting ACM remediation. Prior to any renovations, work penetrating the ceilings, or demolition a proper plan for mitigation and/or disposal of ACM should be developed, and any work conducted should be performed by a company certified to handle ACM materials.
- Based on the LBP identified at the Site, START recommends encapsulation of LBP since the building is to be renovated for future use.
- If PCB-containing equipment (e.g., light ballasts) is encountered during renovation or repair activities, it should be properly removed and disposed.
- The mercury-containing thermostat switches should be removed and properly disposed.
- Mold should be removed and remediated by a certified restoration company and clearance air samples should be performed after the work is completed.

## SUMMARY OF CONCEPTUAL COST ESTIMATE TO CLEANUP

Conceptual costs were determined based upon information obtained from RS Means Building Construction Cost Data 2016 (RS Means, 2016). Actual bids from companies to perform the work may vary from this estimate depending on local conditions and other factors outside of the assessor's knowledge. Final design specifications, features, and cost of the actual remedy will need to be developed by a certified contractor prior to beginning cleanup and may differ from the conceptual design presented.

The following table contains a total cost estimate to remove and dispose of all ACM, encapsulate LBP, and remediate mold visually observed at the Site.

Contaminant Remediation Tasks	Remediation Cost
ACM Abatement and Disposal	\$223,997.82
LBP Encapsulation	\$7,830.24
Mold Remediation	\$14,874.72
<b>Total</b>	<b>\$246,702.78</b>

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified as a result of the Phase II ESA of the Site; however, this section is not intended to be a "stand alone" document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

## **1.0 INTRODUCTION**

### **1.1 SCOPE OF WORK AND PURPOSE**

The Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) conducted a Phase II Environmental Site Assessment (ESA) at Yankton Sioux Tribe (YST) Administration Building located at the intersection of 303<sup>rd</sup> Street and 388<sup>th</sup> Avenue in Marty, Charles Mix County, SD (Site) (Figure 1). The ESA was conducted in accordance with Technical Direction Document (TDD) 0003/1605-17 and *ASTM, International (ASTM) E1903-11 – Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*. The purpose of a Phase II ESA is to acquire and evaluate information sufficient to achieve the objectives set forth in the *Statement of Objectives* (SOO) developed by the user(s) and the Phase II Assessor. The scope of a Phase II ESA is related to the activities agreed upon to meet the objectives of the investigation as defined in the SOO which are subject to ongoing evaluation and refinement as the assessment progresses. The SOO developed for this Site is presented in Section 1.2.

This Phase II ESA report contains the results of the data collection activities and associated quality assurance/quality control (QA/QC) measures conducted specific to the Site. Information used to conduct this Phase II ESA was based upon reasonably ascertainable, visually and physically observable conditions, and included testing or sampling of materials. The structure of this report is based on the ASTM standard, hereafter referred to as ASTM E1903-11.

### **1.2 STATEMENT OF OBJECTIVES**

The objectives were developed by the Targeted Brownfields Assessment (TBA) applicant (user), START (Phase II Assessor) and the United States Environmental Protection Agency (EPA) to obtain sound, scientifically valid data concerning actual property conditions at the Site with respect to the presence or the likely presence of target analytes/substances including, but not limited to, those within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The SOO for the Site were determined during the project scoping meeting held on May 27<sup>th</sup>, 2016 and based upon the results of limited due diligence conducted by START as part of TDD 0003/1605-17. The Phase II ESA objectives determined for the Site were as follows:

- Assess and evaluate suspected contaminants that may be present at the Site. Develop sufficient information to reasonably render a professional opinion that, with respect to the potential concerns assessed, hazardous substances either are or are not are present at the property, including the concentrations of the substances if present;



- To investigate and assess the current presence of contaminants in soil and/or groundwater on the Site associated with the underground storage tank (UST) that was identified during the due diligence process;
- Gather and provide sufficient data to assist the Targeted Brownfield Assessment (TBA) recipient to make informed decisions with regard to the future use of the property; and
- Gather sufficient data to provide cost estimates for properly disposing of hazardous materials, remediation, and or demolition, if necessary.

## 2.0 SUMMARY OF BACKGROUND INFORMATION AND LIMITED DUE DILIGENCE

The Site is located at the intersection of 303<sup>rd</sup> Street and 388<sup>th</sup> Avenue in Marty, Charles Mix County, SD (Figure 1). An abandoned two-story building and UST are present at the Site. The TBA recipient (YST) would like to rehabilitate the existing building on the property to provide a shelter for homeless members of the community.

### 2.1 PROPERTY DESCRIPTION, LOCATION, AND HISTORY

The 0.27-acre Site is currently abandoned and has been flooded in the past (Figure 2). Built in 1957, the site was utilized as a convent under the name Saint Sylvester's. Up until 1982, the property was used for religious purposes, such as a chapel. Post-1982, the property was rented and owned by the YST. The building was converted to accommodate administration offices for the tribe until it became vacant and was flooded in 2010. Additionally, an approximate 5,000 to 8,000-gallon UST that previously contained diesel fuel until drained by the tribe is located on the Site.

### 2.2 LIMITED DUE DILIGENCE

#### 2.2.1 Previously Prepared Environmental Reports and Records

Previous environmental reports and/or records were obtained by START and reviewed for information relating to the Site. The following table summarizes highlights from specific reports/records reviewed that provide information used in consideration when forming conclusions reached in this Phase II ESA. Information used from these reports as it relates to findings and conclusions from this investigation is presented for applicable media in Section 6.

Document Reviewed	Description
<b>Document:</b> Targeted Brownfields Assessment Application <b>Prepared for:</b> EPA <b>Prepared by:</b> Yankton Sioux Tribe <b>Date:</b> 2016 <b>Report Source:</b> EPA	<b>Report Summary:</b> The application gives brief summaries of site background information and environmental conditions at the site (including potential contaminants). The application also provides contact names(s) and phone numbers for the applicant, and potential redevelopment plans for the site. <b>Information Relating to the Site:</b> This application indicated the building was built in 1957 and thus the potential for asbestos, lead-based paint, polychlorinated biphenyls, and mold to be present is high. In 2010, a flood submerged the entire lower level of the administration building. The Yankton Sioux Tribe plans on removing hazardous materials and developing a homeless shelter for the YST community.

## 2.2.2 Standard Environmental Record Sources

For the Site, START relied on the following reports provided by Environmental Data Resources, Inc. (EDR) for information:

- *The EDR Radius Map™ Report with GeoCheck® (The Radius Report)* (EDR, 2016a) - An electronic search of the standard and most current environmental record sources. This report contains certain information obtained from a variety of public and other sources reasonably available to EDR. A copy of the report is provided as Appendix A.
- *The EDR Aerial Photo Decade Package* (EDR, 2016b) - Aerial photographs are provided for the Site and are included in Appendix B.
- *The EDR Certified Sanborn® Map Report* (EDR, 2016c) – Sanborn maps were provided for the Site. A copy of the Sanborn map report is provided as Appendix E.

### 2.2.2.1 Records Review

#### Site Database Listing Summary

*The EDR Radius Map™ Report* did not identified the Site on any databases.

#### Adjacent and/or Surrounding Property Database Listing Summary

*The EDR Radius Map™ Report* identified the following sites located within the appropriate search distances near the Site:

- Two – Indian UST sites within a within a 1/4-mile radius.
- Five – Leaking underground storage tank (LUST) sites within 1/4-mile radius.
- Three – US Brownfields site is identified within 1/4-mile radius.
- One – Resource Conservation and Recovery Act (RCRA) Small Quantity Generator (SQG) site is identified within 1/4-mile radius.
- One – Enforcement and Compliance History Online (ECHO) site is identified within 1/4-mile radius.
- One – Facility Index System (FINDS) site is identified within 1/4- mile radius.

The following pages provide details for the Site EDR database listings and/or nearby site listings of interest identified by START.

Property	EDR Radius Report Map ID	Address	Approx. Distance (Miles)	Relative Ground Surface Elevation	Database(s)	Summary of Information from EDR Radius Report (Appendix B)
Site Listings						
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surrounding Properties						
Former Guest House	1	9000 388 <sup>th</sup> Ave	0.000	Higher	US Brownfields, FINDS, ECHO	The building has been vacant since a flood in 2010. The tribe would like to redevelop the property. However, based upon the contaminants associated with this site, this facility is not considered a recognized environmental condition (REC) in relation to the Site.
St. Katherines Build	2	9000 388 <sup>th</sup> Ave	0.098	Higher	US Brownfields	The building was built in the 1920s by St. Pauls Mission. The tribe took over ownership in 1975. The building was used as an administration building and had class rooms. Asbestos, Lead contamination, and PCBs found on site. However, based upon the contaminants associated with this site, this facility is not considered a REC in relation to the Site.
Petroleum Contaminat	3	303 Street & 388 Ave	0.143	Lower	LUST	A release occurred. No Further Action. This facility is not considered a REC in relation to the Site.
St. Joseph's Dormatory	4	9000 388 <sup>th</sup> AVE	0.146	Higher	US Brownfields	The building was built in the 1920s by St. Pauls Mission. The tribe took over ownership in 1975. Asbestos, mold, Lead contamination, and PCBs found on site and in the soil. However, based upon the contaminants associated with this site, this facility is not considered a REC in relation to the Site.
Mary Indian School	A5	6 Miles south of Wag	0.184	Lower	RCRA-SQG, Indian LUST, Indian UST	The site is not located on Indian land. Based on the distance and lower elevation (i.e., down-gradient), this facility is not considered a REC in relation to the Site.
Marty Tribal Store	6	P.O. BOX 248	0.188	Lower	Indian LUST, Indian UST	Confirmed release, RBCA Tier 2 assessment in 1998. Permanently closed. This facility is not considered a REC in relation to the Site.

Property	EDR Radius Report Map ID	Address	Approx. Distance (Miles)	Relative Ground Surface Elevation	Database(s)	Summary of Information from EDR Radius Report (Appendix B)
Flooded Tank	A7	Tribal Bldg. Located	0.193	Lower	LUST	Release on 6/12/2010, NFA on 6/14/2010. This facility is not considered a REC in relation to the Site.
Marty Tribal Store	8	Marty Indian School	0.222	Lower	LUST	Gasoline spill. Open. Based on the distance and lower elevation (i.e., down-gradient), this facility is not considered a REC in relation to the Site.

### 2.2.2.1.1 Orphan Sites Summary

The Orphan Sites summary included in *The Radius Report* is a listing of site(s) that could not be mapped by EDR due to insufficient addresses. No orphan sites exist.

### 2.2.2.2 Aerial Photograph Review

Aerial photographs were provided by EDR (EDR, 2016b). Due to the scale and poor quality of the 1962, 1984, 1988, 1991, 1994, 1998, 2005, 2006, 2008, 2010, and 2012 aerial photographs, observable site specific details are limited for those years. Copies of the aerial photographs are included in Appendix C. The review is summarized in the following table:

Year	Source	Description Based on Aerial Photographs
1962	EDR	<u>Site</u> : Poor quality aerial photograph: the Site does appear to be developed as it currently stands. <u>Surrounding Properties</u> : The surrounding properties are observed to be developed; however, due to the poor quality exact details are not discernible.
1984	EDR	<u>Site</u> : Poor quality aerial photograph: unable to distinguish the Site from surrounding properties. <u>Surrounding Properties</u> : The surrounding properties are observed to be developed; however, due to the poor quality exact details are not discernible.
1988	EDR	<u>Site</u> : Poor quality aerial photograph: unable to distinguish the Site from surrounding properties. <u>Surrounding Properties</u> : The surrounding properties are observed to be developed; however, due to the poor quality exact details are not discernible.
1991	EDR	<u>Site</u> : Poor quality aerial photograph: no obvious changes were observed from the previous photograph. <u>Surrounding Properties</u> : The surrounding properties are observed to be developed; however, due to the poor quality exact details are not discernible.
1994	EDR	<u>Site</u> : Poor quality aerial photograph: no obvious changes were observed from the previous photograph. <u>Surrounding Properties</u> : The surrounding properties are observed to be developed; however, due to the poor quality exact details are not discernible.
1998	EDR	<u>Site</u> : Poor quality aerial photograph: unable to determine if any changes occurred. <u>Surrounding Properties</u> : Poor quality, however a construction project is underway to the east of the property.
2005	EDR	<u>Site</u> : Good quality aerial photograph: no obvious changes were observed. <u>Surrounding Properties</u> : Good quality, surrounding areas have developed into residential properties.
2006	EDR	<u>Site</u> : No obvious changes were observed from the previous aerial photograph. <u>Surrounding Properties</u> : No obvious changes were observed from the previous aerial photograph.
2008	EDR	<u>Site</u> : No obvious changes were observed from the previous aerial photograph. <u>Surrounding Properties</u> : No obvious changes were observed from the previous aerial photograph.

Year	Source	Description Based on Aerial Photographs
2010	EDR	<u>Site</u> : No obvious changes were observed from the previous aerial photograph. <u>Surrounding Properties</u> : No obvious changes were observed from the previous aerial photograph.
2012	EDR	<u>Site</u> : No obvious changes were observed from the previous aerial photograph. <u>Surrounding Properties</u> : No obvious changes were observed from the previous aerial photograph.

### 2.2.2.3 Sanborn Map Review

START reviewed *The EDR Certified Sanborn® Map Report* (EDR, 2016c) provided for the Site. No Sanborn Maps associated with the Site were noted. A copy of *The EDR Certified Sanborn® Map Report* is provided in Appendix D.

### 2.2.3 Local Government and/or Private Inquiries

Requests for information regarding the Site and/or surrounding properties were submitted to the following agencies:

- Yankton Sioux Tribe – START submitted requests for files/records from YST Brownfields coordinator, Mrs. Danielle Zephier, on June 10, 2016. The YST divisions contacted included:
  - Environmental Protection Department – Danielle Zephier
  - Utilities program – Bryan Heth
  - Roads Department – Louis Golus Jr.
  - Tribal Historic Preservation Office – Perry Little

A summary of the information obtained from relevant file/records reviewed, if any, are presented in Appendix E.

### 2.2.4 Interviews Records

<b>Name</b>	Sister Miriam
<b>Employer</b>	Religious Community – Oblate Sisters
<b>Position</b>	Environmental Science Specialist
<b>Time with Company</b>	32 years
<b>Time at this Facility</b>	24 years
<b>Date &amp; Method of Interview</b>	June 07, 2016 – Phone interview
<b>Information Obtained</b>	Electric heat in building, no known issues outside of mold from flooding. Prior to this use (1958) the land was vacant. Sisters owned the building until 1982, then leased it to YST then sold under trust.

<b>Name</b>	Bryan Heth/YST Utilities Program and Louis Golus Jr./YST Roads Department
<b>Employer</b>	YST
<b>Position</b>	Department personnel
<b>Time with Company</b>	Unknown
<b>Time at this Facility</b>	Unknown
<b>Date &amp; Method of Interview</b>	June 13, 2016 – Phone interview
<b>Information Obtained</b>	They both assisted in draining the UST. Information obtained from Bryan and Louie says that it was an approximate 5,000 to 8,000 gallon tank. Tank is located about 10-15 feet from the building on the west side and there is a grove of trees growing just west of the UST. The presence of the UST is considered a REC in relation to the Site.



### **3.0 DESCRIPTION OF WORK PERFORMED AND RATIONALE**

This section summarizes the work performed and rationale for the work conducted to meet the SOO developed for the investigation as documented in the approved Sampling and Analysis Plan (SAP) for the Site (WESTON, 2016). Deviations from the approved SAP for this Phase II ESA are presented in Section 3.7.

Based upon the SOO developed for the Site, a building inspection was conducted as part of this Phase II ESA. The investigation included visual inspection, field screening, and/or sample collection for laboratory analysis. Details of the individual media investigations along with rationale are presented below. Photographs of field activities are included in the Photograph Log presented in Appendix A. The ACM and LBP Phase II fieldwork was conducted on July 6, 2016 and July 7, 2016.

In addition, based upon the due diligence conducted, potential contamination in subsurface soils and groundwater associated with the UST were investigated as part of this Phase II ESA. The investigation of these media included visual inspection, field screening, and/or sample collection for laboratory analysis. Details of the individual media investigations along with rationale are presented below. The UST investigation field work was conducted on July 12, 2016. Photographs of field activities are included in the Photograph Log presented in Appendix A.

#### **3.1 ACM**

Due to the age of the structure, this Phase II ESA involved an ACM survey, including the collection of bulk asbestos samples. Surveys were conducted by State of South Dakota Licensed Asbestos Building Inspector: Mr. Gary Snow. Visual inspections were conducted on areas of the structures where an individual performing demolition or renovation operations may encounter regulated asbestos-containing material (RACM). Sample locations and the total number of samples were based on Asbestos Hazard Emergency Response Act (AHERA) standards (EPA, 1985) and/or the best professional judgment of the inspector. Each potential RACM location was touched to determine if it was friable. Bulk samples were collected of all suspect friable and non-friable RACM and submitted to an asbestos-certified laboratory for analysis.

#### **3.2 LBP**

Due to the age of the building at the Site, this Phase II ESA involved a LBP survey by LBP Inspector, Mr. Gary Snow. In order to conduct the LBP survey, X-Ray Fluorescence (XRF) instrument was used on painted surface locations to determine if materials were positive for lead ( $\geq 1 \text{ mg/cm}^2$ ). Visual inspections were conducted on areas of the buildings and XRF readings were collected based upon the best professional judgment of the risk assessor.

### **3.3 VISUAL INSPECTIONS**

Due to the age of the building, visual inspections were conducted for polychlorinated biphenyl (PCB) ballasts, mercury thermostats, and mold. The visual inspection included presence/non-presence determination of the hazards, and quantity and location information was documented where possible, but no samples were collected.

### **3.4 SUB-SURFACE SOIL**

Due to the UST identified at the Site, this Phase II ESA involved a sub-surface soil investigation to determine if impacts associated with the UST are present at the Site. In order to conduct the assessment, three boreholes (YSTAB-BH01 through YSTAB-BH03) were installed at designated locations in order to characterize and/or attempt to delineate impacts, if any, at the Site (Figure 5). The rationale for each borehole location is described in Section 5.2.

### **3.5 GROUNDWATER**

Due to the UST identified at the Site, this Phase II ESA involved a groundwater investigation to determine if impacts associated with the UST are present at the Site. In order to conduct the assessment, groundwater samples were collected from two boreholes (YSTAB-BH02 and YSTAB-BH03) to characterize and/or attempt to delineate impacts, if any, at the Site (Figure 5).

### **3.6 DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN**

Due to the ongoing evaluation and refinement of the SOO, changes can occur to the approved SAP based upon site conditions encountered. Deviations from the approved SAP for this Phase II ESA are presented below:

- Only three borings were installed instead of four due to an underground utility corridor located in between the building and east side of the UST.
- Only two groundwater samples collected due to one proposed boring not being installed and insufficient water available to sample in boring YSTAB-BH01.
- Samples were inadvertently analyzed for full volatile organic compounds (VOCs) instead of the limited list of VOC analytes associated with petroleum contaminants.
- Six soil samples were collected instead of eight due to one proposed boring location not being installed.

None of the deviations from the SAP are thought to have a material impact on the findings and conclusions regarding identification and characterization of contaminants of this Phase II ESA.

## 4.0 DESCRIPTION OF METHODS USED

The following sections describe methods utilized during the Site investigation.

### 4.1 ACM

#### Asbestos Bulk Sampling

Personnel performing the sampling wore personal protective equipment (PPE) appropriate to the hazard(s) presented and included gloves, Tyvek, booties, hard hats, and/or high-efficiency particulate air (HEPA) respiratory protection. Asbestos bulk samples were randomly collected using the grid system described in the EPA publication “*Asbestos in Buildings – Simplified Sampling Scheme for Friable Surfacing Materials*” (EPA, 1985). The following general sampling guidelines were followed during the inspection, as applicable:

- In areas where homogeneous suspected RACM (surfacing) was less than 1,000 square feet (sq. ft.), three randomly collected bulk samples were collected from each area;
- In areas where homogeneous suspected RACM (surfacing) was at least 1,000 sq. ft. but less than 5,000 sq. ft., five randomly collected bulk samples were collected from each area;
- In areas where homogeneous suspect RACM (surfacing) was at least 5,000 sq. ft., seven randomly selected bulk samples were collected from each area;
- For miscellaneous potential ACMs, a minimum of one bulk sample was collected for each type.

#### Quality Assurance (QA)/Quality Control (QC)

No QA/QC activities or sample types were required based upon the assessment techniques and sample collection methods.

#### Laboratory Analytical Methods

Samples collected were sent to Reservoirs Environmental Inc. in Denver, CO for polarized light microscopy (PLM) analysis by Method EPA 600/R-93/116 to determine a visual estimation of asbestos content and, if applicable, Method EPA 600/R-93/116 (400 Point Count).

### 4.2 LBP

#### XRF Readings

XRF in-situ readings were collected using an Niton™ XLp 300 Series handheld XRF instrument to analyze painted and coated surfaces (interior and exterior) for lead during this Phase II ESA. XRF readings of walls, windows, and other painted surfaces in each room equivalent were collected. Room equivalents include painted or coated surfaces that are not considered to be

separate rooms such as hallways and closets. A representative number of sample readings were collected from a subset of rooms considered by the certified LBP inspector to be of like coated surfaces.

In general, locations where the paint appeared to be thickest were selected for XRF analysis. Locations where paint was worn away or scraped off were avoided. Areas over pipes, electrical surfaces, nails, and other possible interferences were also avoided. The XRF probe faceplate was allowed to lie flat against the surface of the test location to obtain a quality reading.

### **QA/QC**

The following QA/QC activities were conducted as part of this investigation:

- XRF Standardization Readings – XRF standardization readings were collected prior to use, every four hours during use (as applicable), and following use to verify accuracy.

No other QA/QC activities or sample types were required based upon the assessment techniques and sample collection methods. Based on the results of the standardization readings, all results reported are considered acceptable. Results of the QA/QC activities are presented in Table 3.

### **Laboratory Analytical Methods**

Due to no inconclusive readings reported by the XRF instrument, no paint chip samples were collected for laboratory analysis.

## **4.3 PCBS, MERCURY, AND MOLD**

### **Visual Inspections**

Visual inspections were conducted for presence/non-presence of mercury thermostats, PCB ballasts, and mold. Suspect hazards encountered, if any, were documented in field notes and/or photographed.

## **4.4 SUB-SURFACE SOIL**

### **Soil Boring Installation**

Boreholes were installed using direct push method to depths where field screening procedures indicated contamination was no longer present, groundwater was encountered, or boring refusal was encountered. Soil cores were continuously collected from each borehole and logged by the field geologist until total depth (TD) was reached or refusal encountered.

### **Field Screening**

Soils from the direct push cores were logged by the field geologist; field screened using visual and olfactory methods; then collected in approximate two-foot intervals and placed in plastic re-

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sealable freezer bags. Each freezer bag was screened for semi-quantitative VOC headspace vapor screening analysis with a photoionization detector (PID) and documented by the field geologist.

### **Sample Collection for Laboratory Analysis**

Discrete soil samples were selected for laboratory analysis based upon the field screening procedures including PID readings, visual and olfactory observations, and/or the best professional judgment of the field geologist. Soil samples selected were transferred into laboratory-supplied containers. Disposable gloves were used during sample collection procedures. The soil samples were labeled, placed in a cooler with ice (cooled to 4°C), and stored until shipment for laboratory analysis accompanied by chain-of-custody documentation.

### **QA/QC Samples**

The following QA/QC activities and sampling were conducted as part of the sub-surface soil investigation:

- Sample Duplicates – One field duplicate sub-surface soil sample (YSTAB-BH02(0809)) was collected and submitted for laboratory analysis.
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) – One MS/MSD sample (YSTAB-BH03(0607)) was collected and submitted for laboratory analysis.

No other QA/QC activities or sample types were collected based upon the assessment techniques and sample collection methods. Based on the results of the QA/QC samples analyzed, all results reported are considered acceptable. Results of the duplicate sample collected are presented in Table 4.

### **Laboratory Analytical Methods**

Sub-surface soil samples collected were shipped to ESC in Mount Juliet, Tennessee for analysis of volatile organic compounds (VOCs) by EPA Method 8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO) and TPH diesel range organics (DRO) by EPA Method 8015, and lead by EPA Method 6010.

## **4.5 GROUNDWATER**

### **Sample Collection for Laboratory Analysis**

Groundwater samples for laboratory analysis were collected using a peristaltic pump and disposable tubing from which the groundwater was then transferred into laboratory-supplied containers with the preservative appropriate to the analysis requested, if applicable. Disposable gloves were used during sample collection procedures. The groundwater samples were labeled, placed in a cooler with ice (cooled to 4°C), and stored until shipment for laboratory analysis accompanied by chain-of-custody documentation.

### **QA/QC Samples**

The following QA/QC activities and sampling were conducted as part of the groundwater investigation:

- Sample Duplicates – One duplicate groundwater sample (YSTAB-GW-DUP from boring YSTAB-BH03) was collected and submitted for laboratory analysis.
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) – One MS/MSD sample (YSTAB-GW-BH02) was collected and submitted for laboratory analysis.
- Trip Blank – One trip blank sample was submitted to assess cross-contamination introduced during shipping and field handling procedures.

No other QA/QC activities or sample types were collected based upon the assessment techniques and sample collection methods. Based on the results of the QA/QC samples analyzed, all results reported are considered acceptable. Results of the trip blanks samples indicated no cross contamination of samples. Results of the duplicate sample collected are presented in Table 5. Results of the trip blank samples are presented in Table 5.

### **Laboratory Analytical Methods**

Groundwater samples collected were shipped to ESC in Mount Juliet, Tennessee for analysis of VOCs by EPA Method 8260 and TPH-GRO and TPH-DRO by EPA Method 8015. The trip blank sample was analyzed for VOCs by EPA Method 8260.

## 5.0 PRESENTATION OF INFORMATION AND DATA ACQUIRED

### 5.1 ACM

A total of 34 bulk samples were collected from the Site and submitted for PLM analysis. ACM sample results are shown in Tables 1 and 2. Locations with positive results (> 1% asbestos) are displayed on Figures 3 and 4. Of the samples collected, the following number of samples was collected of each bulk material.

Bulk Material	Number of Samples Collected
Drywall (Sheetrock, compounds, and/or textures)	7
Wall board	2
Ceiling tile	6
Floor tile and mastic	11
Pipe insulation	1
Cove base	1
Window caulk or glazing	3
Glue pucks	3

In addition, the following assumptions and items of note were observed during the ACM survey:

- When appropriate, samples were collected from areas of the building material already damaged or disturbed.
- No carpeted areas were encountered at the Site. A wooden subfloor was observed below tiled areas on the second story and a concrete subfloor on the lower level.
- Drywall samples included sheetrock, tape, compound, and/or texture components. A few areas had drywall present; however, most of the interior walls were either framed with wallboard attached or concrete block.
- Preexisting holes in the concrete block were examined and no vermiculite insulation was observed to be present.
- Suspect window glazing and caulking were observed on windows at the property.
- Ceiling tiles were present throughout most of the building. Tiles with glue dots were adhered to drywall in all cases. Certain areas also had a suspended ceiling over these two layers of materials.

- Cementitious pipe fittings were observed in the lower level, but only fiberglass insulation was used on heating and cooling systems, and the remainder of pipes. Additionally, no sink coatings were encountered.
- The lowest portion of the building was still flooded, with about six inches of standing water at the time of inspection. This section was thereby deemed inaccessible.
- Significant water damage was noted on the second story ceilings in various rooms.
- An access panel under the staircase in the lower level was examined, but no suspect materials were observed.

## 5.2 LBP

A total of 80 XRF readings were taken from the building. The following number of readings were collected from each area:

Location	Readings Count
First Level	31
Second Level	47
Exterior	2

In addition, the following assumptions and items of note were observed during the LBP survey:

- Due to the exterior of the building being brick, only two exterior XRF readings (soffit and gutter) were collected.

## 5.3 PCBS, MERCURY, AND MOLD

The following observations were made during the visual inspections:

- Light fixtures in the building primarily used fluorescent bulbs. A total of 165 ballasts were counted during the inspection. None of the light fixtures observed in the building appeared to be leaking fluids. One PCB ballast was encountered; however, all other ballasts observed were non-PCB. Since it is not practical to check every ballast, potential for other PCB ballasts at the Site exists.
- Two mercury-containing thermostats were observed, one on each floor of the building.
- Mold was encountered at the Site. Flooding and significant water damage also lead to algal growth in certain rooms on floor tile and drywall ceilings.



## **5.4 SUB-SURFACE SOILS**

A total of six sub-surface soil samples were collected from three soil borings installed as part of the sub-surface soil investigation. The locations where the boreholes were installed are presented in Figure 5. The following table presents the information acquired from the three borings.

Boring	Location/Purpose	Samples Collected	Sample Depth (ft bgs)	Boring Total Depth (ft bgs)
YSTAB-BH01	Up-gradient of the UST to delineate soil impacts of the release.	Soil: YSTAB-BH01-(0809), YSTAB-BH01-(1920)	8-9 19-20	20
YSTAB-BH02	Cross-gradient of the UST to delineate soil impacts of the release.	Soil: YSTAB-BH02-(0809), YSTAB-BH02-(1213)	8-9 12-13	13
		QA/QC: YSTAB-BH02-DUP(0809) (Duplicate)	8-9	
YSTAB-BH03	Down-gradient of the UST to delineate soil impacts of the release.	Soil: YSTAB-BH03-(0607), YSTAB-BH03-(1011)	6-7 10-11	14
		QA/QC: YSTAB-BH03-0607 (MS/MSD)	6-7	

## 5.5 GROUNDWATER

A total of three groundwater samples (including one duplicate) were collected from two borings (YSTAB-BH02 and YST-BH03) installed as part of the groundwater investigation. The following table presents the information acquired.

Boring	Purpose	Depth to Groundwater	Samples Collected
YSTAB-GW-BH02	Cross-gradient of the UST to delineate groundwater impacts of the release.	8.4 ft bgs	Groundwater (GW): YSTAB-GW-BH02
YATAB-GW-BH03	Down-gradient of the UST to delineate groundwater impacts of the release.	7.8 ft bgs	GW: YSTAB-GW-BH03
			QA/QC: YSTAB-GW-DUP (duplicate)

## **6.0 EVALUATION AND INTERPRETATION OF INFORMATION, DATA, AND RESULTS**

The evaluation and interpretation of the information, data, and results for the Phase II ESA are presented below. This section summarizes the field screening data and laboratory results obtained to identify the location and extent of contamination. Standards and screening levels used for comparison were:

### **ACM**

- Asbestos-Containing Materials in Schools Rule (40 Code of Federal Regulations [CFR] Part 763, Subpart E)

### **LBP**

- U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012 Edition)

### **Sub-surface Soils**

- South Dakota Department of Environment and Natural Resources (DENR); and
- EPA Regional Screening Levels (RSLs) - Industrial and Residential

### **Groundwater**

- EPA RSLs - Maximum Contaminant Levels (MCLs)

Figures 3 and 4 shows the sample locations and extent of ACM contamination identified. Figure 5 shows boring locations installed. Field assessment results and laboratory results for the samples are summarized in Tables 1 through 5. A copy of laboratory reports are presented in Appendix F.

## **6.1 ACM**

Of the 34 samples submitted for laboratory analysis, ten samples were reported as “positive” (>1% asbestos) for asbestos. Asbestos results ranged from 3% to 25% total asbestos. Of the ten samples, three samples were reanalyzed by point count analysis; however, no samples were point counted below one and, therefore, are considered to be ACM. In all, ten confirmed ACM samples were collected at the Site. The following table indicates the type, condition, and number of samples identified as ACM.

Identified ACM	Condition	Number of ACM Samples
Pipe fittings	Friable	1
Window caulk	Non-friable	1
Floor tile	Non-friable	5
Glue pucks	Non-friable	3

ACM sample collection locations and approximate extents are presented in Figures 3 and 4. The confirmed ACM sample(s), the asbestos containing layer(s), and the estimated volume of ACM material is presented in Table 1. A list of the samples collected that were reported as non-detect for asbestos is presented in Table 2.

### **Interpretation of Results**

Pipe fittings found in the lower level of the YST building have been confirmed as ACM. As no visible access was available to all pipes, the fitting quantity was estimated by the inspector. Window caulking was identified as ACM; therefore, all windows are assumed to contain ACM caulk. Floor tile present throughout most of the building was identified as ACM. Lastly, glue pucks found on ceiling tiles were confirmed to be ACM. Because these are attached to drywall, the substrate is also considered to be contaminated. These ceiling tiles were encountered on most of the ceilings of each floor of the building.

Based on the laboratory results reported for the ten confirmed ACM samples, asbestos is present at the Site is considered to be a contaminant of concern (COC). The following table indicates the location and estimated extent of ACM identified at the Site.

ACM Material	Estimated Volume / Extent (Approximate)	Location
Pipe fittings	100 fittings	Lower level
Window caulk	70 sq. ft.	All windows
Floor tile	15,000 sq. ft.	Both stories
Glue pucks	17,500 sq. ft.	Ceilings of both stories

## **6.2 LBP**

Of the 80 XRF readings taken from the building, four readings were elevated for lead ( $\geq 1$  mg/cm<sup>2</sup>), indicating lead-based paint. A complete list of LBP readings is presented in Table 3.

### **Interpretation of Results**

Based on the results from the lead based paint inspection, elevated X-ray fluorescence (XRF) results were reported for lead in the trough of windows on the second level at concentrations above

1 mg/cm<sup>2</sup>. The only accessible building components which have lead based paint are the wooden windows located throughout the building. The top layer of paint (yellow) is not lead-based paint (LBP), but the original white paint found on several window troughs and other window components is above the action level. Based on the results of the LBP survey, LBP is present in building. LBP is considered to be a COC in relation to the Site.

### **6.3 PCBS, MERCURY, AND MOLD**

The following additional items were noted:

- Of the light ballasts observed, only one PCB ballast was observed. None of the light fixtures observed in the building appeared to be leaking fluids.
- Two mercury thermostat switches were observed in the building, one on each floor. The location of the two mercury thermostats are presented in Figures 3 and 4.
- Mold was encountered at the Site.

#### **Interpretation of Results**

- Based on the visual inspection, PCBs are considered a COC at the Site.
- Based on the visual inspection, mercury is considered a COC at the Site.
- Based on the visual inspection, mold is considered a COC at the Site.

### **6.4 SUB-SURFACE SOIL**

#### **Evaluation of Laboratory Sample Results**

Of the seven sub-surface soil samples, including one duplicate, submitted for laboratory analysis, no detections were reported above screening values. The locations of the borings are presented in Figure 5. A summary of laboratory results for the sub-surface soils samples are presented in Table 4. Laboratory reports for the sub-surface soil samples collected are presented in Appendix F.

#### **Interpretation of Results**

No contamination of soils were found at the site.

### **6.5 GROUNDWATER**

#### **Evaluation of Laboratory Sample Results**

Of the three groundwater samples, including one duplicate, submitted for laboratory analysis, no analytes were detected. Sample reporting limits exceeded the EPA MCL for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane; however, all results reported were non-detect. As these analytes are not typically associated with petroleum contamination, this is not considered to

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significantly impact the overall findings. A summary of laboratory results for the groundwater samples are presented in Table 5. Laboratory reports for the groundwater samples collected are presented in Appendix B.

### **Interpretation of Results**

No contamination of groundwater was found at the site.

## **6.6 CONCEPTUAL SITE MODEL**

Per ASTM E1903-11 (Section 6.4.6), validation of the conceptual site model is conducted by evaluating testing results and other investigation findings to determine whether available information is sufficient to support sound conclusions regarding the presence of the target analytes. The presence of the target analytes investigated as part of this Phase II ESA along with the current exposure pathways, as applicable, for the Site is presented in the following table.

Target Analytes	Media	Contaminants Present Above Screening Benchmarks	Exposure Pathway	Exposure Route	Human Receptors	
					Residential	Workers
Petroleum Hydrocarbons	Sub-surface Soil	No	Incomplete	Dermal	--	--
				Ingestion	--	--
				Inhalation	--	--
Petroleum Hydrocarbons	Groundwater	No	Incomplete	Dermal	--	--
				Ingestion	--	--
				Inhalation	--	--
ACM	Building Materials	Yes	Potentially Complete	Dermal	--	X
				Ingestion	--	X
				Inhalation	--	X
LBP	Building Materials	Yes	Complete	Dermal	--	X
				Ingestion	--	X
				Inhalation	--	X
Mercury, PCBs, and Mold	Building Materials	Yes	Potentially Complete	Dermal	--	X
				Ingestion	--	X
				Inhalation	--	X

**Comments:** Evaluation of exposure pathway completeness is based upon the current site use as vacant and assumes that no people are currently accessing the Site or will be accessing the Site other than workers during future redevelopment. Once future site-specific activities are determined or if a change in current use occurs, exposure pathways should be re-assessed as they may alter the pathway completeness presented in this report and require further evaluation prior to conducting any activities or change in use at the Site.

Note:

-- = Receptor not at risk (Currently)

X = Receptor at risk to exposure (Currently or Potentially)



## **6.7 DISCLOSURE OF AVAILABLE DATA INSUFFICIENT TO MEET OBJECTIVES**

Per ASTM E1903-11 (Section 1.3.2), all Phase II ESA reports must disclose any respect in which available data are insufficient to meet the objectives of the assessment. Listed below are the disclosures in which the available data set for this investigation were insufficient to meet the objectives of this Phase II ESA, if any.

- Based upon the objectives for this Phase II ESA, objectives of this assessment were met based upon the available data.

## 7.0 CONCLUSIONS OF THE PHASE II ESA

START performed a Phase II ESA in conformance with the scope and limitations of ASTM E1903-11 at the Yankton Sioux Tribe (YST) Administration Building located at the intersection of 303<sup>rd</sup> Street and 388<sup>th</sup> Avenue in Marty, Charles Mix County, SD. Results of this Phase II ESA has confirmed the presence of COCs at the Site. The following list is a summary of the conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos Containing Material (ACM)**

Of the 34 samples submitted for laboratory analysis, a total of ten samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the estimated extent of ACM and location of the ACM identified at the Site. See Sections 5.1 and 6.1 of this report for a more detailed breakdown.

ACM Material	Estimated Volume / Extent (Approximate)	Location
Pipe fittings	100 fittings	Lower level
Window caulk	70 sq. ft.	All windows
Floor tile	15,000 sq. ft.	Both stories
Glue pucks	17,500 sq. ft.	Ceilings of both stories

Notes:  
sq. ft. = square feet

Based on the results of the ACM survey, asbestos is present in building. ACM is considered to be a COC in relation to the Site.

### **Lead-Based Paint (LBP)**

Based on the results from the lead based paint inspection, elevated X-ray fluorescence (XRF) results were reported for lead in the trough of windows on the second level at concentrations above 1 mg/cm<sup>2</sup>. The only accessible building components which have lead based paint are the wooden windows located throughout the building. The top layer of paint (yellow) is not lead-based paint (LBP), but the original white paint found on several window troughs and other window components is above the action level. Based on the results of the LBP survey, LBP is present in building. LBP is considered to be a COC in relation to the Site.

### **Polychlorinated biphenyls (PCBs), Mercury, and Mold**

The following is a summary of the observations regarding the visual inspections conducted:

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- Of the light ballasts observed, one polychlorinated biphenyl (PCB) ballast was observed. None of the light fixtures observed in the building appeared to be leaking fluids. PCBs are considered COCs in relation to the Site.
- Two mercury-containing thermostat switches were observed in the building, one on each level. Mercury is considered a COC in relation to the Site.
- Mold was encountered at the Site on both levels. Additionally, the lower level of the hexagonal structure was flooded during the inspection. Mold is considered a COC in relation to the Site.

### **Sub-surface Soils**

Based on the results of the sub-surface soil investigation of the UST, no contamination of soils were found at the Site.

### **Groundwater**

Based on the results of the sub-surface groundwater investigation of the UST, no contamination of groundwater was found at the Site.

## **RECOMMENDATIONS**

Based on the work performed, START recommends the following:

- Based on the ACM identified at the site, START recommends conducting ACM remediation. Prior to any renovations, work penetrating the ceilings, or demolition a proper plan for mitigation and/or disposal of ACM should be developed, and any work conducted should be performed by a company certified to handle ACM materials.
- Based on the LBP identified at the Site, START recommends encapsulation of LBP since the building is to be renovated for future use.
- If PCB-containing equipment (e.g., light ballasts) is encountered during renovation or repair activities, it should be properly removed and disposed.
- The mercury-containing thermostat switches should be removed and properly disposed.
- Mold should be removed and remediated by a certified restoration company and clearance air samples should be performed after the work is completed.

## 8.0 SIGNATURE OF PHASE II ASSESSOR AND SEAL

This Phase II ESA was completed by the following START personnel and subcontractor(s), if applicable. Qualifications are provided at the end of the report:

- Mr. Eric Sandusky, Associate Geoscientist and Environmental Professional;
- Mr. Greg Geras, P.G., Project Manager;
- Mr. Joe. Rudi, Project Scientist;
- Mr. Michael Cherny, Assistant Scientist; and
- Mr. Gary Snow, ACM/LBP Inspector.

Mr. Eric Sandusky has undertaken the role of Phase II Assessor for this assessment. The following is the certification statement as defined in ASTM Practice E1903-11 (Section 9.2.1):

*We have performed a Phase II environmental site assessment at the property at the Yankton Sioux Tribe (YST) Administration Building located at the intersection of 303rd Street and 388th Avenue in Marty, Charles Mix County, SD in conformance with the scope and limitations of ASTM Practice E1903-11 and for the following objectives:*

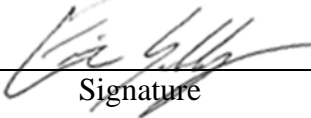
- *Assess and evaluate suspected contaminants that may be present at the Site. Develop sufficient information to reasonably render a professional opinion that, with respect to the potential concerns assessed, hazardous substances either are or are not are present at the property, including the concentrations of the substances if present;*
- *To investigate and assess the current presence of contaminants in soil and/or groundwater on the Site associated with the underground storage tank (UST) that was identified during the due diligence process;*
- *Gather and provide sufficient data to assist the Targeted Brownfield Assessment (TBA) recipient to make informed decisions with regard to the future use of the property; and*
- *Gather sufficient data to provide cost estimates for properly disposing of hazardous materials, remediation, and or demolition, if necessary.*

Eric Sandusky

\_\_\_\_\_  
Certifying Environmental Professional (Print)

START Project Scientist

\_\_\_\_\_  
Title

  
\_\_\_\_\_  
Signature

8/25/2016

\_\_\_\_\_  
Date

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## 9.0 COST ESTIMATE FOR CLEANUP

Presented below are the conceptual costs (not intended for budgetary estimates) to remediate the COCs at the Site. Conceptual costs were determined based upon information obtained from *RS Means Building Construction Cost Data 2016* (RS Means, 2016). Actual bids from companies to perform the work may vary from this estimate depending on local conditions and other factors outside of the assessor's knowledge. Final design specifications, features, and cost of the actual remedy will need to be developed by a certified contractor prior to beginning cleanup and may differ from the conceptual design presented.

Based on the Phase II ESA conducted, the specific concerns addressed in this cost estimate for the Site include removal and proper disposal of all ACM, encapsulation of all LBP, and remediation of all mold.

### 9.1 ACM REMEDIATION

The following table contains a quantity estimate of ACM at the Site.

Contaminant	Estimated Quantity for Removal
Pipe fittings	100 fittings
Window caulk	70 sq. ft.
Floor tile	15,000 sq. ft.
Glue pucks and drywall	17,500 sq. ft.

The following table contains a cost estimate to remove and dispose of all ACM at the Site.

Contaminant Remediation Tasks	Remediation Cost
ACM Abatement and Disposal	\$186,664.85
20% Contingency	\$37,332.97
<b>Total</b>	<b>\$223,997.82</b>

### 9.2 LBP REMEDIATION

An estimated 450 sq. ft. of window troughs would need to be encapsulated in order to remediate all LBP at the Site. The following table contains a cost estimate to encapsulate the LBP at Site.

Contaminant Remediation Tasks	Remediation Cost
LBP Encapsulation	\$6525.20
20% Contingency	\$1,305.04
<b>Total</b>	<b>\$7,830.24</b>

### 9.3 MOLD REMEDIATION

Mold present on floor tile and drywall will be removed in conjunction with the ACM remediation; therefore, this cost estimate only evaluated decontamination of the remaining masonry surfaces on the lower level where mold was visually observed. The following table contains a cost estimate to remediate mold at Site.

Contaminant Remediation Tasks	Remediation Cost
Mold Remediation	\$12,395.60
20% Contingency	\$2,479.12
<b>Total</b>	<b>\$14,874.72</b>

### 9.4 TOTAL COST FOR ACM, LBP, AND MOLD REMEDIATION

The following table contains a total cost estimate to remove and dispose of all ACM, encapsulate LBP, and remediate mold at the Site. A detailed cost estimate breakdown for the preferred alternative is presented on Table 6.

Contaminant Remediation Tasks	Remediation Cost
ACM Abatement and Disposal	\$223,997.82
LBP Encapsulation	\$7,830.24
Mold Remediation	\$14,874.72
<b>Total</b>	<b>\$246,702.78</b>

## **10.0 SPECIFICATIONS FOR ASTM E1903-11 REPORT USE AND RELIANCE**

### **10.1 SPECIAL TERMS AND CONDITIONS**

This document has been prepared by the WESTON START IV team as tasked by the EPA solely for the use and benefit of the EPA and TBA. Any use of this document or information herein by persons or entities other than the EPA or TBA, without the express written consent of START, will be at the sole risk and liability of said person or entity. START will not be liable to the EPA, TBA, or such persons or entities, for any damages resulting therefrom. It is understood that this document may not include all information pertaining to the described site.

### **10.2 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT**

ASTM E1903-11 (Section 4.2.1) acknowledges that “No Phase II ESA can eliminate all uncertainty. Furthermore, any sample, either surface or subsurface, taken for chemical testing may or may not be representative of a larger population. Professional judgment and interpretation are inherent in the process, and even when exercised in accordance with objective scientific principles, uncertainty is inevitable. Additional assessment beyond that which was reasonably undertaken may reduce the uncertainty”. ASTM E1903-11 (Section 4.2.1.2) acknowledges that “The effectiveness of a Phase II ESA may be compromised by limitations or defects in the information used to define the objectives and scope of the investigation, including inability to obtain information concerning historic site uses or prior site assessment activities despite the efforts of the user and Phase II Assessor to obtain such information in accordance with 5.1.3”. Furthermore, the ASTM E1903-11 (Section 4.2.2) states “Phase II ESAs do not generally require an exhaustive assessment of environmental conditions on a property. There is a point at which the cost of information obtained and the time required to obtain it outweigh the benefit of the information and, in the context of private transactions and contractual responsibilities, may become a material detriment to the orderly conduct of business. If the presence of target analytes is confirmed on a property, the extent of further assessment is a function of the degree of confidence required and the degree of uncertainty acceptable in relation to the objectives of the assessment”.

### **10.3 DISCLAIMERS**

START has performed this Phase II ESA in general conformance with the scope and limitations of ASTM E1903-11 standards and TDD 0003/1605-17. The Phase II ESA findings and conclusions presented herein are professional opinions based solely on data collected during the assessment and/or interpretation of information and past data provided for review. The information and data collected from the Site by START is based on the conditions existing on the date(s) of

0003/1605-17

START's assessment activities at the property. START does not warrant or guarantee information obtained from third parties used for this assessment are correct, complete, and/or current.

Though START did collect samples and/or perform testing during this assessment, it is possible that past contamination remains undiscovered or that property conditions will change in the future. START does not warrant or guarantee the property suitable for any particular purpose or certify the property as "clean."

ASTM E1903-11 (Section 1.5) states "This practice is not intended to supersede applicable requirements imposed by regulatory authorities. This practice does not attempt to define a legal standard of care either for the performance of professional services with respect to matters within its scope, or for the performance of any individual *Phase II Environmental Site Assessment*".

Information, limitations, and disclaimers provided in this general section apply to all of the sections included in this report.



## 11.0 REFERENCES

American Society for Testing and Materials (ASTM), 2011. E1903-11, *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*. West Conshohocken, Pennsylvania.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
ASTM, 2011	Guidance	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

EDR, 2016a. *The EDR Radius Map™ Report with GeoCheck®*. YST – Old Tribal Hall, Marty, SD, Lake Andes, SD 57356. Inquiry number 4636056.2s. June 2, 2016.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
EDR, 2016a	Database	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

EDR, 2016b. *The EDR Aerial Photo Decade Package*. YST – Old Tribal Hall, Marty, SD, Lake Andes, SD 57356. Inquiry number 4636056.5. June 2, 2016.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
EDR, 2016b	Photographs	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

EDR, 2016c. *Certified Sanborn® Map Report*. YST – Old Tribal Hall, Marty, SD, Lake Andes, SD 57356. Inquiry number 4636056.3. June 2, 2016.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
EDR, 2016c	Historical Record	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

EPA, 2016. *Technical Direction Document (TDD) 0003/1605-17*.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
EPA, 2016	Guidance	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

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RS Means, 2016. *Building Construction Cost Data 74<sup>th</sup> Annual Edition*. Norwell, Massachusetts.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
RS Means, 2016	Reference	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

WESTON, 2016. *Sampling and Analysis Plan for Yankton Sioux Tribe, Targeted Brownfields Assessment, 388<sup>th</sup> Avenue and 100 Main Street Marty, South Dakota 57361*. July, 2016.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
WESTON, 2016a	Document	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

## 12.0 QUALIFICATIONS

START utilized qualified, professional staff, trained in performing the scope of work required for this Phase II ESA. The START team personnel included a project manager and technical specialist(s). Their roles are described in more detail as follows:

- Project Manager and Environmental Professional – Mr. Greg Geras, P.G. is a professional geologist with over 12 years of experience in the field of environmental sciences. Mr. Geras specializes in the development and implementation of site investigation plans, collection & analysis of soil, sediment, groundwater, and surface water data, evaluation of remediation options, conducting Phase I and Phase II ESA investigations, technical report writing and review. He is experienced in projects involving initial and secondary site assessments, remedial action/corrective action, risk assessment, closure plan development, and agency negotiation.
- Associate Geoscientist and Project Team Lead - Mr. Eric Sandusky is an environmental professional with 7+ years of experience as a geologist conducting and managing projects including site assessments, and remedial design activities at RCRA/CERCLA sites. He is experienced in conducting condition assessments, research and writing technical documents including Phase I/II ESAs.
- Assistant Scientist – Mr. Michael Cherny has one year of project experience collecting soil, groundwater, surface water, and air samples, and conducting air monitoring. His experience includes conducting site assessments, removals, technical report documentation, and field instrument proficiency. Mr. Cherny is an AHERA certified asbestos inspector and a certified LBP inspector in CO and MT.
- Project Scientist – Mr. Joe. Rudi, Has a B.A. in Outdoor Studies with 7+ years of experience in the field of environmental sciences including environmental lab work, Phase I/II ESAs, MMRP investigations, Phase I site investigations, removal actions and environmental remediation; Mr. Rudi has managed/conducted quality control on projects from \$10,000 to 800,000 dollars for the United States Air Force, United States Army Corp of Engineers, and the EPA.
- Environmental Professional – Mr. Gary Snow is an environmental professional with over 35 years of experience in various aspects of building construction, as a general contractor specializing in commercial and public buildings, asbestos consulting for a wide range of federal, state, school and private entities. His background in building systems and expertise in federal regulations offers a comprehensive range of expertise which enhances his ability to develop technical and complex project designs for asbestos abatement. He has hands-on experience in all aspects of asbestos management and control including inspections, abatement, and project design. He is an EPA approved trainer and training provider through the Center for Environmental Training (CET), a division of GS&A, Inc. Mr. Snow has completed EPA certification, for LBP inspector/risk assessor and contractor/supervisor and is certified by the EPA for Montana, Wyoming and South Dakota and all Indian Lands within Region VIII and by the State of North Dakota. He has conducted LBP abatement projects for several clients including the federal government and extensive risk assessments for both the private and public sector.

0003/1605-17

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## FIGURES

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Contract No.:  
EP-S8-13-01  
TDD: 1605-17  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

**FORMER YANKTON SIOUX TRIBE  
ADMINISTRATION BUILDING  
SOUTH DAKOTA  
SITE LOCATION MAP**

DATE:  
06/10/16  
SCALE:  
1"=N.T.S.

Figure  
1



Contract No.:  
EP-S8-13-01  
TDD: 1605-17  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

**FORMER YANKTON SIOUX TRIBE  
ADMINISTRATION BUILDING  
SOUTH DAKOTA  
SITE VICINITY MAP**

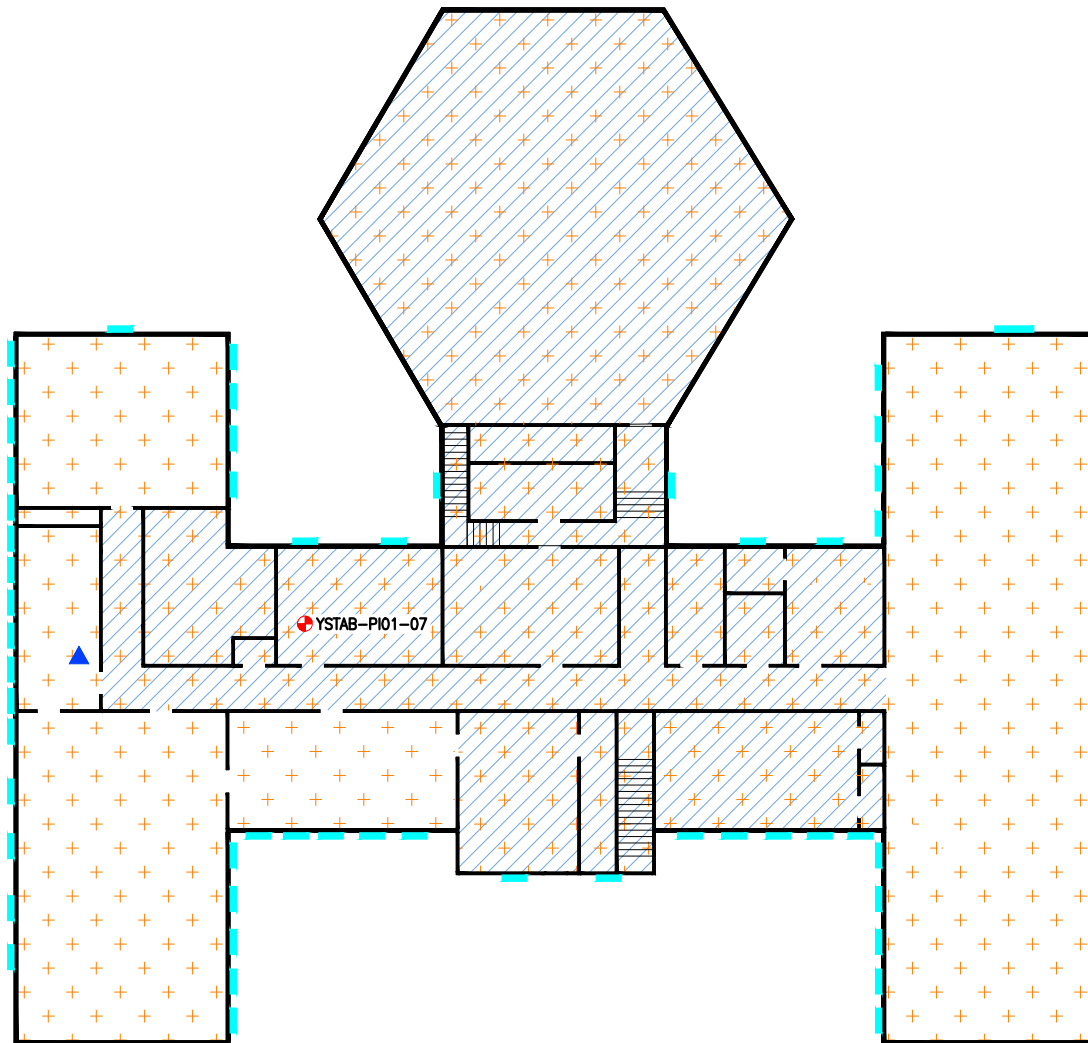
DATE:  
06/10/16  
SCALE:  
1"=100'±

Figure  
2



## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- LBP LEAD BASED PAINT
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM FLOOR TILE EXTENT
- ACM GLUE PUCKS
- ACM WINDOW CAULK/LBP WINDOW TROUGH
- Hg THERMOSTAT



Contract No.:  
EP-S8-13-01  
TDD: 1605-17  
TO: 0003



Prepared By:  
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START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

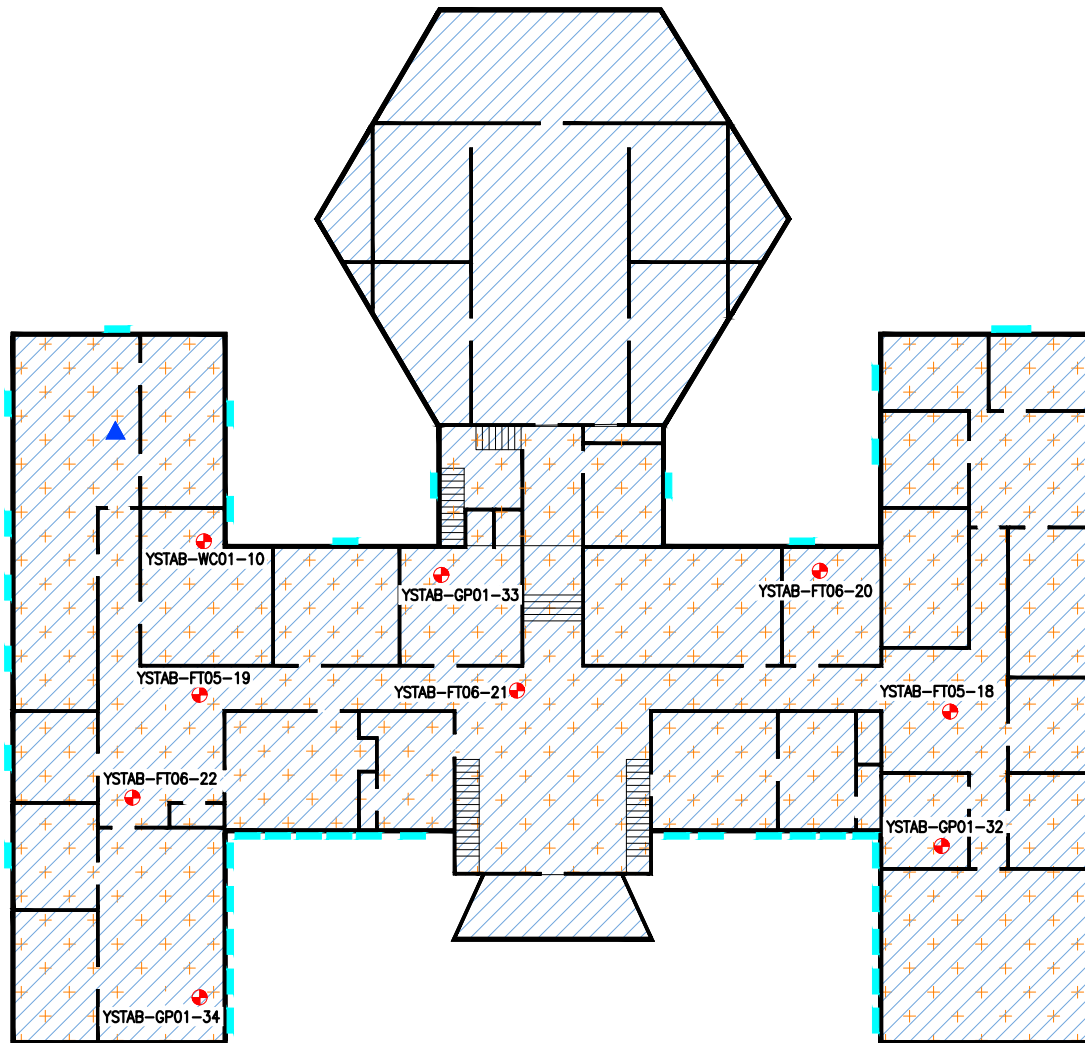
### ACM AND LBP SAMPLE LOCATION AND EXTENT FORMER YANKTON SIOUX TRIBE ADMINISTRATION BUILDING - FIRST LEVEL ASBESTOS AND LEAD BASED PAINT SURVEY

DATE:  
08/12/16  
SCALE:  
N.T.S.

Figure  
3

## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- LBP LEAD BASED PAINT
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM FLOOR TILE EXTENT
- ACM GLUE PUCKS
- ACM WINDOW CAULK/LBP WINDOW TROUGH
- Hg THERMOSTAT



Contract No.:  
EP-S8-13-01  
TDD: 1605-17  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM AND LBP SAMPLE LOCATION AND EXTENT FORMER YANKTON SIOUX TRIBE ADMINISTRATION BUILDING - SECOND LEVEL ASBESTOS AND LEAD BASED PAINT SURVEY




DATE:  
08/12/16  
SCALE:  
N.T.S.

Figure  
4





# Legend

-  Investigative Boring Location
-  Building Footprint
-  Underground Storage Tank

0 15 30 60 Feet



Prepared for:  
U.S. EPA Region 8



Contract No.:  
EP-S8-13-01

TDD:  
1605-17

TO:  
0003

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START IV

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Lakewood, CO 80215

**FIGURE 5**  
**SOIL BORING LOCATION MAP**  
**YANKTON SIOUX TRIBE**  
**ADMINISTRATION BUILDING**  
**YANKTON, SOUTH DAKOTA**

Date: 8/11/2016

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## TABLES

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# ACM Sample Results and Estimated Volumes

Table 1

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
<b>YST Administration Building</b>					
YSTAB-PI01-07	Pipe fitting	A - Gray fibrous plaster	Chrysotile 25%	--	100 fittings
YSTAB-WC01-10	Window caulk	A - Off white caulk w/ white paint	Chrysotile 10%	--	70 sq. ft.
YSTAB-FT05-18	Floor tile	B - Tan/brown floor tile	Chrysotile 18%	--	15,000 sq. ft.
YSTAB-FT05-19	Floor tile	B - Tan/brown floor tile	Chrysotile 18%	--	
YSTAB-FT06-20	Floor tile	B - Tan/multi-colored floor tile	Chrysotile 15%	--	
YSTAB-FT06-21	Floor tile	B - Tan/multi-colored floor tile	Chrysotile 15%	--	
YSTAB-FT06-22	Floor tile	B - Tan/multi-colored floor tile	Chrysotile 15%	--	
YSTAB-GP01-32	Glue puck	A - Brown adhesive	Chrysotile 3%	2.25	17,500 sq. ft.
YSTAB-GP01-33	Glue puck	A - Brown adhesive	Chrysotile 3%	1.75	
YSTAB-GP01-34	Glue puck	A - Brown adhesive	Chrysotile 3%	2.75	

## Non-detect for Asbestos Samples

Table 2

Sample ID	Physical Description	Sample Layer(s)
<b>YST Administration Building</b>		
YSTAB-DW01-01	Drywall	A - White texture w/ white paint
		B - White joint compound
		C - White tape
YSTAB-WT01-02	Wall texture	A - White texture w/ white paint
YSTAB-WT01-03	Wall texture	A - White texture w/ white paint
YSTAB-WT01-04	Wall texture	A - White compound
YSTAB-FT01-05	Floor tile	A - Tan floor tile
YSTAB-FT01-06	Floor tile	A - Green floor tile
YSTAB-CB01-08	Cove base	A - Peach cove base
YSTAB-FT03-09	Floor tile	A - Green floor tile
YSTAB-WG01-11	Window glazing	A - White glazing w/ yellow paint
YSTAB-WB01-12	Wall board	A - Tan/black wall board
YSTAB-WC01-13	Window caulk	A - Off white caulk w/ off white paint
YSTAB-WB01-14	Wall board	A - Tan/black wall board
YSTAB-FT04-15	Floor tile	A - Light gray floor tile
YSTAB-FT04-16	Floor tile	A - Gray floor tile
YSTAB-FT04-17	Floor tile	A - Light gray floor tile
YSTAB-CT01-23	Ceiling tile	A - Tan/white perlite ceiling tile
YSTAB-CT01-24	Ceiling tile	A - Tan/white perlite ceiling tile
YSTAB-CT01-25	Ceiling tile	A - Tan/white perlite ceiling tile
YSTAB-CT02-26	Ceiling tile	A - Brown/white ceiling tile
YSTAB-CT02-27	Ceiling tile	A - Brown/white ceiling tile
YSTAB-CT02-28	Ceiling tile	A - Brown/white ceiling tile
YSTAB-DW02-29	Drywall	A - White/tan drywall
YSTAB-DW02-30	Drywall	A - White/tan drywall
YSTAB-DW02-31	Drywall	A - White/tan drywall

### Lead-Based Paint Screening Results

### Table 3

Reading	Date/Time	Floor	Room	Side	Component	Feature	Substrate	Color	Condition	Results	DI
1	7/6/2016 15:48				Shutter Calibration						
2	7/6/2016 15:50				Validation (SRM2573)						
3	7/6/2016 15:53	2	Front Stairs	B	Wall		Masonry	White	Intact	Negative	1
4	7/6/2016 15:53	2	Front Stairs	C	Wall		Masonry	White	Intact	Negative	1
5	7/6/2016 15:53	2	Office 1	A	Wall		Masonry	White	Intact	Negative	1
6	7/6/2016 15:54	2	Office 1	B	Wall		Masonry	White	Intact	Negative	2.83
7	7/6/2016 15:54	2	Office 1	C	Wall		Masonry	White	Intact	Negative	1
8	7/6/2016 15:54	2	Office 1	D	Wall		Masonry	White	Intact	Negative	1
9	7/6/2016 15:55	2	Office 1	A	Window	Ext. Trim	Wood	Yellow	Intact	Negative	1.77
10	7/6/2016 15:55	2	Office 1	A	Window	Trough	Wood	White	Intact	Positive	2.04
11	7/6/2016 15:55	2	Office 1	A	Window	Sill	Wood	Brown	Intact	Negative	1.04
12	7/6/2016 15:57	2	Office 2	A	Wall		Masonry	Brown	Intact	Negative	1
13	7/6/2016 15:58	2	Office 2	B	Wall		Masonry	White	Intact	Negative	1
14	7/6/2016 15:58	2	Office 2	C	Wall		Masonry	Brown	Intact	Negative	1
15	7/6/2016 15:58	2	Office 2	D	Wall		Masonry	White	Intact	Negative	1.08
16	7/6/2016 16:02	2	Office 3 (Corner)	A	Wall		Masonry	White	Intact	Null	1
17	7/6/2016 16:02	2	Office 3 (Corner)	D	Wall		Masonry	White	Intact	Negative	1
18	7/6/2016 16:02	2	Office 3 (Corner)	D	Window	Sash	Wood	White	Intact	Negative	1
19	7/6/2016 16:03	2	Office 3 (Corner)	D	Window	Trough	Wood	White	Intact	Positive	1.59
20	7/6/2016 16:03	2	Office 3 (Corner)	D	Window	Sill	Wood	white	Intact	Negative	1
21	7/6/2016 16:04	2	Office 4 (SW Corner)	B	Wall		Masonry	White	Intact	Negative	1.98
22	7/6/2016 16:06	2	Office 5 (NW Corner)	A	Wall		Masonry	Green	Intact	Negative	2.11
23	7/6/2016 16:07	2	Office 5 (NW Corner)	B	Wall		Masonry	Green	Intact	Negative	1
24	7/6/2016 16:08	2	Office 6	D	Wall		Masonry	Green	Intact	Negative	1.54
25	7/6/2016 16:09									Null	1.39
26	7/6/2016 16:10	2	Office 6	D	Window	Ext Sash	Wood	Yellow	Damaged	Positive	1.58
27	7/6/2016 16:11	2	Office 6	D	Window	Sill	Wood	Stain	Intact	Negative	1.17
28	7/6/2016 16:13	2	Office 7	A	Wall		Masonry	white	Intact	Negative	1
29	7/6/2016 16:13	2	Office 7	B	Wall		Masonry	Orange	Intact	Negative	1
30	7/6/2016 16:14	2	Office 7	C	Wall		Masonry	White	Intact	Negative	1.78
31	7/6/2016 16:14	2	Office 7	D	Wall		Masonry	Orange	Intact	Negative	1.15
32	7/6/2016 16:15	2	Office 7	C	Window	Trough	Wood	White	Intact	Negative	1.43
33	7/6/2016 16:16									Null	1.47
34	7/6/2016 16:16	2	Office 7	C	Window	Ext Trim	Wood	Yellow	Damaged	Positive	1.98
35	7/6/2016 16:18	2	Office 8	A	Wall		Masonry	Tan	Intact	Negative	1
36	7/6/2016 16:19	2	Office 8	B	Wall		Masonry	Lavender	Intact	Negative	1
37	7/6/2016 16:19	2	Office 8	C	Wall		Masonry	Tan	Intact	Negative	1
38	7/6/2016 16:19	2	Office 8	D	Wall		Masonry	Lavender	Intact	Negative	1
39	7/6/2016 16:21	2	office 9	A	Wall		Masonry	Yellow	Intact	Negative	1
40	7/6/2016 16:21	2	office 9	B	Wall		Masonry	Yellow	Intact	Negative	1
41	7/6/2016 16:22	2	office 9	C	Wall		Masonry	Yellow	Intact	Negative	1
42	7/6/2016 16:22	2	office 9	D	Wall		Masonry	Yellow	Intact	Negative	1
43	7/6/2016 16:23	2	East Wing	A	Wall		Masonry	White	Intact	Negative	4.4
44	7/6/2016 16:23	2	East Wing	B	Wall		Masonry	White	Intact	Negative	2.36
45	7/6/2016 16:24	2	East Wing	C	Wall		Masonry	White	Intact	Negative	1
46	7/6/2016 16:24	2	East Wing	D	Wall		Masonry	White	Intact	Negative	1.21
47	7/6/2016 16:25	2	Central Office, east w	D	Window	Sash	Wood	Brown	Intact	Negative	1.39
48	7/6/2016 16:25	2	Central Office, east w	D	Window	Trough	Wood	White	Intact	Negative	1.56
49	7/6/2016 16:25	2	Central Office, east w	D	Window	Sill	Wood	Stain	Intact	Negative	2.02
50	7/6/2016 16:25	2	Central Office, east w	D	Window	Trim	Wood	Stain	Intact	Negative	1.41
51	7/6/2016 16:26	2	Central Office, east w	A	Door	Door	Wood	Stain	Intact	Negative	1.49
52	7/6/2016 16:38				Shutter Calibration						
53	7/6/2016 16:39				Validation (SRM2573)						
54	7/6/2016 16:43				Shutter Calibration						
55	7/6/2016 16:58		Void		Validation (SRM2573)						
56	7/7/2016 7:55				Shutter Calibration						
57	7/7/2016 7:58				Validation (SRM2573)						
58	7/7/2016 7:59	1	N. Stairway	B	Wall		Masonry	Green	Intact	Negative	1
59	7/7/2016 8:00									Null	1
60	7/7/2016 8:00									Null	1
61	7/7/2016 8:00	1	N. Stairway	B	Wall		Masonry	Green	Intact	Negative	1
62	7/7/2016 8:01	1	SW Room	A	Wall		Masonry	Green	Intact	Negative	1
63	7/7/2016 8:01	1	SW Room	B	Wall		Masonry	Green	Intact	Negative	1
64	7/7/2016 8:01	1	SW Room	C	Wall		Masonry	Green	Intact	Negative	1
65	7/7/2016 8:02	1	SW Room	D	Wall		Masonry	Green	Intact	Negative	1
66	7/7/2016 8:02	1	SW Room	D	Window	Interior Sash	Wood	Stain	Intact	Negative	1
67	7/7/2016 8:02	1	SW Room	D	Window	Sill	Wood	Stain	Intact	Negative	1
68	7/7/2016 8:02	1	SW Room	D	Window	Trim	Wood	Stain	Intact	Negative	1.11
69	7/7/2016 8:05	1	Mechanical	A	Wall		Masonry	Blue	Intact	Negative	1.47
70	7/7/2016 8:06	1	Mechanical	B	Wall		Masonry	Blue	Intact	Negative	2.26
71	7/7/2016 8:07	1	Mechanical	C	Wall		Masonry	Blue	Intact	Negative	1.52
72	7/7/2016 8:07	1	Mechanical	D	Wall		Masonry	Blue	Intact	Negative	1.77
73	7/7/2016 8:08									Null	

## Table 3

Reading	Date/Time	Floor	Room	Side	Component	Feature	Substrate	Color	Condition	Results	DI
74	7/7/2016 8:09	1	Office	A	Wall		Masonry	Yellow	Intact	Negative	1
75	7/7/2016 8:09	1	Office	B	Wall		Masonry	Yellow	Intact	Negative	1.06
76	7/7/2016 8:09	1	Office	C	Wall		Masonry	Yellow	Intact	Negative	1
77	7/7/2016 8:09	1	Office	D	Wall		Masonry	Yellow	Intact	Negative	1
78	7/7/2016 8:10	1	Office 2a	A	Wall		Masonry	Yellow	Intact	Negative	1.51
79	7/7/2016 8:10	1	Office 2a	B	Wall		Masonry	Yellow	Intact	Negative	1.42
80	7/7/2016 8:10	1	Office 2a	C	Wall		Masonry	Yellow	Intact	Negative	2.58
81	7/7/2016 8:11	1	Office 2a	D	Wall		Masonry	Yellow	Intact	Negative	1.7
82	7/7/2016 8:12	1	East Wing	A	Wall		Masonry	White	Intact	Negative	1.55
83	7/7/2016 8:12	1	East Wing	B	Wall		Masonry	White	Intact	Negative	1.29
84	7/7/2016 8:12	1	East Wing	C	Wall		Masonry	White	Intact	Negative	1
85	7/7/2016 8:13	1	East Wing	D	Wall		Masonry	White	Intact	Negative	1
86	7/7/2016 8:14									Null	1.77
87	7/7/2016 8:15	1	Kitchen Prep	A	Wall		Masonry	Green	Intact	Negative	1
88	7/7/2016 8:15									Null	1
89	7/7/2016 8:16	1	Kitchen Prep	A	Window	Sash	Wood	Purple	Intact	Negative	1.02
90	7/7/2016 8:16	1	Kitchen Prep	A	Window	Sill	Wood	Purple	Intact	Negative	1.58
91	7/7/2016 8:16	1	Kitchen Prep	A	Window	Trim	Wood	Purple	Intact	Negative	1
92	7/7/2016 8:16	1								Null	2.37
93	7/7/2016 8:16	1	Kitchen	B	Wall		Glazed Tile	Green	intact	Negative	3.93
94	7/7/2016 8:17	1	Kitchen	C	Wall		Glazed Tile	Green	intact	Negative	2.04
95	7/7/2016 8:19	Ext	Exterior	A	Soffit		Wood	Brown	Intact	Negative	1
96	7/7/2016 8:20	1	Exterior	A	Gutter		Metal	Brown	Intact	Negative	1.08
97	7/7/2016 8:22									Null	1.05
98	7/7/2016 8:22									Null	1
99	7/7/2016 8:22					Validation (SRM2573)				Positive	1.16

Sub-Surface Soil Samples - Analytical Results  
YST Administration Building

Table 4

Analyte	Units	EPA RSLs		SD DENR Tier 1 Action Levels	Sample ID Date Type	YSTAB-BH01(8-9)	YSTAB-BH01(19-20)	YSTAB-BH02(8-9)	YSTAB-BH02(12-13)	YSTAB-BH03(10-11)	YSTAB-BH03(6-7)	YSTAB-DUP(8-9)
		Industrial	Residential			07/12/2016 Grab	07/12/2016 Grab	07/12/2016 Grab	07/12/2016 Grab	07/12/2016 Grab	07/12/2016 Grab	07/12/2016 Grab
LEAD	mg/kg	800	400	--	--	10.2	7.42	6.08	6.52	10.9	9.61	6.97
Diesel Range Organics (DRO)												
TPH (GC/FID) HIGH FRACTION	mg/kg	--	--	500	--	<4	<4	<4	<4	<4	<4	<4
Gasoline Range Organics (GRO)												
TPH (GC/FID) LOW FRACTION	mg/kg	--	--	500	--	<0.1	<0.1	<0.1	<0.1	0.446	<0.1	<0.1
Volatile Organic Compounds (VOCs)												
ACETONE	mg/kg	--	--	--	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.24 U	0.05 U
ACRYLONITRILE	mg/kg	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.248 U	0.01 U
BENZENE	mg/kg	--	1.2	0.2	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
BROMOBENZENE	mg/kg	--	290	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
BROMODICHLOROMETHANE	mg/kg	--	0.29	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
BROMOFORM	mg/kg	--	19	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
BROMOMETHANE	mg/kg	--	6.8	--	--	0.005 U J4	0.005 U J4	0.005 U J4	0.005 U J4	0.005 U	0.124 U	0.005 U
N-BUTYLBENZENE	mg/kg	--	3,900	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
SEC-BUTYLBENZENE	mg/kg	--	7,800	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
TERT-BUTYLBENZENE	mg/kg	--	7,800	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
CARBON TETRACHLORIDE	mg/kg	--	0.65	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
CHLOROBENZENE	mg/kg	--	280	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
CHLORODIBROMOMETHANE	mg/kg	--	8.3	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
CHLOROETHANE	mg/kg	--	14,000	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.124 U	0.005 U
2-CHLOROETHYL VINYL ETHER	mg/kg	--	--	--	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U J4	1.24 U J4	0.05 U J4
CHLOROFORM	mg/kg	--	0.32	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.124 U	0.005 U
CHLOROMETHANE	mg/kg	--	110	--	--	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0619 U	0.0025 U
2-CHLOROTOLUENE	mg/kg	--	1,600	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
4-CHLOROTOLUENE	mg/kg	--	1,600	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,2-DIBROMO-3-CHLOROPROPANE	mg/kg	--	0.0053	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.124 U	0.005 U
1,2-DIBROMOETHANE	mg/kg	--	0.036	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
DIBROMOMETHANE	mg/kg	--	24	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,2-DICHLOROBENZENE	mg/kg	--	1,800	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,3-DICHLOROBENZENE	mg/kg	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,4-DICHLOROBENZENE	mg/kg	--	2.6	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
DICHLORODIFLUOROMETHANE	mg/kg	--	87	--	--	0.005 U J4	0.005 U J4	0.005 U J4	0.005 U J4	0.005 U	0.124 U	0.005 U
1,1-DICHLOROETHANE	mg/kg	--	3.6	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,2-DICHLOROETHANE	mg/kg	--	0.46	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,1-DICHLOROETHENE	mg/kg	--	230	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
CIS-1,2-DICHLOROETHENE	mg/kg	--	160	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
TRANS-1,2-DICHLOROETHENE	mg/kg	--	1,600	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,2-DICHLOROPROPANE	mg/kg	--	1	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,1-DICHLOROPROPENE	mg/kg	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,3-DICHLOROPROPANE	mg/kg	--	1,600	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
CIS-1,3-DICHLOROPROPENE	mg/kg	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
TRANS-1,3-DICHLOROPROPENE	mg/kg	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
2,2-DICHLOROPROPANE	mg/kg	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
DI-ISOPROPYL ETHER	mg/kg	--	2,200	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
ETHYLBENZENE	mg/kg	--	5.8	10	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
HEXACHLORO-1,3-BUTADIENE	mg/kg	--	1.2	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
ISOPROPYLBENZENE	mg/kg	--	1,900	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
P-ISOPROPYLTOLUENE	mg/kg	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
2-BUTANONE (MEK)	mg/kg	--	27,000	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.248 U	0.01 U
METHYLENE CHLORIDE	mg/kg	--	57	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.124 U	0.005 U
4-METHYL-2-PENTANONE (MIBK)	mg/kg	--	33,000	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.248 U	0.01 U
METHYL TERT-BUTYL ETHER	mg/kg	--	47	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
NAPHTHALENE	mg/kg	--	3.8	25	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.124 U	0.005 U
N-PROPYLBENZENE	mg/kg	--	3,800	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
STYRENE	mg/kg	--	6,000	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,1,1,2-TETRACHLOROETHANE	mg/kg	--	2	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,1,2,2-TETRACHLOROETHANE	mg/kg	--	0.6	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,1,2-TRICHLOROTRIFLUOROETHANE	mg/kg	--	40,000	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
TETRACHLOROETHENE	mg/kg	--	24	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
TOLUENE	mg/kg	--	4,900	15	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.124 U	0.005 U
1,2,3-TRICHLOROBENZENE	mg/kg	--	63	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,2,4-TRICHLOROBENZENE	mg/kg	--	24	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,1,1-TRICHLOROETHANE	mg/kg	--	8,100	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,1,2-TRICHLOROETHANE	mg/kg	--	1.1	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
TRICHLOROETHENE	mg/kg	--	0.94	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
TRICHLOROFLUOROMETHANE	mg/kg	--	23,000	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.124 U	0.005 U
1,2,3-TRICHLOROPROPANE	mg/kg	--	0.0051	--	--	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0619 U	0.0025 U
1,2,4-TRIMETHYLBENZENE	mg/kg	--	58	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,2,3-TRIMETHYLBENZENE	mg/kg	--	49	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
VINYL CHLORIDE	mg/kg	--	0.059	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
1,3,5-TRIMETHYLBENZENE	mg/kg	--	780	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0248 U	0.001 U
XYLENES, TOTAL	mg/kg	--	580	300	--	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.0742 U	0.003 U

Notes:

- Bold**  
U  
J4
- = Analyte detected above the reporting limit  
= Analyte not detected above the reporting limit  
= The associated batch QC was outside the established quality control range for accuracy.



**Groundwater Samples - Analytical Results**  
**YST Administration Building**

**Table 5**

Analyte	CAS. No.	Units	EPA MCLs	Sample ID Date Type	YSTAB-GW-BH02 7/12/2016 Grab	YSTAB-GW-BH03 7/12/2016 Grab	YSTAB-GW-DUP 7/12/2016 Grab	YSTAB-TB-01 7/12/2016 Grab
<b>Diesel Range Organics (DRO)</b>								
TPH High Fraction	68334-30-5	ug/L	--	--	100 U	100 U	100 U	100 U
<b>Gasoline Range Organics (GRO)</b>								
TPH Low Fraction	8006-61-9	ug/L	--	--	100 U	100 U	100 U	100 U
<b>Volatile Organic Compounds (VOCs)</b>								
Acetone	67-64-1	ug/L	--	--	50 U	50 U	50 U	50 U
Acrolein	107-02-8	ug/L	--	--	50 U	50 U	50 U	50 U
Acrylonitrile	107-13-1	ug/L	--	--	10 U	10 U	10 U	10 U
Benzene	71-43-2	ug/L	5	--	1 U	1 U	1 U	1 U
Bromobenzene	108-86-1	ug/L	--	--	1 U	1 U	1 U	1 U
Bromodichloromethane	75-27-4	ug/L	80	--	1 U	1 U	1 U	1 U
Bromoform	75-25-2	ug/L	80	--	1 U	1 U	1 U	1 U
Bromomethane	74-83-9	ug/L	--	--	5 U	5 U	5 U	5 U
n-Butylbenzene	104-51-8	ug/L	--	--	1 U	1 U	1 U	1 U
sec-Butylbenzene	135-98-8	ug/L	--	--	1 U	1 U	1 U	1 U
tert-Butylbenzene	98-06-6	ug/L	--	--	1 U	1 U	1 U	1 U
Carbon tetrachloride	56-23-5	ug/L	5	--	1 U	1 U	1 U	1 U
Chlorobenzene	108-90-7	ug/L	100	--	1 U	1 U	1 U	1 U
Chlorodibromomethane	124-48-1	ug/L	80	--	1 U	1 U	1 U	1 U
Chloroethane	75-00-3	ug/L	--	--	5 U	5 U	5 U	5 U
2-Chloroethyl vinyl ether	110-75-8	ug/L	--	--	50 J6U	50 U	50 U	50 U
Chloroform	67-66-3	ug/L	80	--	5 U	5 U	5 U	5 U
Chloromethane	74-87-3	ug/L	--	--	2.5 U	2.5 U	2.5 U	2.5 U
2-Chlorotoluene	95-49-8	ug/L	--	--	1 U	1 U	1 U	1 U
4-Chlorotoluene	106-43-4	ug/L	--	--	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/L	0.2	--	5 U	5 U	5 U	5 U
1,2-Dibromoethane	106-93-4	ug/L	0.05	--	1 U	1 U	1 U	1 U
Dibromomethane	74-95-3	ug/L	--	--	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	95-50-1	ug/L	600	--	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1	ug/L	--	--	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7	ug/L	75	--	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	ug/L	--	--	5 U	5 U	5 U	5 U
1,1-Dichloroethane	75-34-3	ug/L	--	--	1 U	1 U	1 U	1 U
1,2-Dichloroethane	107-06-2	ug/L	5	--	1 U	1 U	1 U	1 U
1,1-Dichloroethene	75-35-4	ug/L	7	--	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	--	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	--	1 U	1 U	1 U	1 U
1,2-Dichloropropane	78-87-5	ug/L	5	--	1 U	1 U	1 U	1 U
1,1-Dichloropropene	563-58-6	ug/L	--	--	1 U	1 U	1 U	1 U
1,3-Dichloropropene	142-28-9	ug/L	--	--	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	10061-01-5	ug/L	--	--	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	10061-02-6	ug/L	--	--	1 U	1 U	1 U	1 U
2,2-Dichloropropane	594-20-7	ug/L	--	--	1 U	1 U	1 U	1 U
Di-isopropyl ether	108-20-3	ug/L	--	--	1 U	1 U	1 U	1 U
Ethylbenzene	100-41-4	ug/L	700	--	1 U	1 U	1 U	1 U
Hexachloro-1,3-butadiene	87-68-3	ug/L	--	--	1 U	1 U	1 U	1 U
Isopropylbenzene	98-82-8	ug/L	--	--	1 U	1 U	1 U	1 U
p-Isopropyltoluene	99-87-6	ug/L	--	--	1 U	1 U	1 U	1 U
2-Butanone (MEK)	78-93-3	ug/L	--	--	10 U	10 U	10 U	10 U
Methylene Chloride	75-09-2	ug/L	5	--	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	--	--	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	1634-04-4	ug/L	--	--	1 U	1 U	1 U	1 U
Naphthalene	91-20-3	ug/L	--	--	5 U	5 U	5 U	5 U
n-Propylbenzene	103-65-1	ug/L	--	--	1 U	1 U	1 U	1 U
Styrene	100-42-5	ug/L	100	--	1 U	1 U	1 U	1 U
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	--	--	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	--	--	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/L	--	--	1 U	1 U	1 U	1 U
Tetrachloroethene	127-18-4	ug/L	5	--	1 U	1 U	1 U	1 U
Toluene	108-88-3	ug/L	1000	--	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	87-61-6	ug/L	--	--	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	--	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	71-55-6	ug/L	200	--	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	79-00-5	ug/L	5	--	1 U	1 U	1 U	1 U
Trichloroethene	79-01-6	ug/L	5	--	1 U	1 U	1 U	1 U
Trichlorofluoromethane	75-69-4	ug/L	--	--	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	96-18-4	ug/L	--	--	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	95-63-6	ug/L	--	--	1 U	1 U	1 U	1 U
1,2,3-Trimethylbenzene	TMB123	ug/L	--	--	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	108-67-8	ug/L	--	--	1 U	1 U	1 U	1 U
Vinyl chloride	75-01-4	ug/L	2	--	1 U	1 U	1 U	1 U
Total Xylenes	1330-20-7	ug/L	10000	--	3 U	3 U	3 U	3 U

Notes:

- U = Detection limit exceeds MCL.
- J6 = Analyte not detected above the reporting limit
- = The sample matrix interfered with the ability to make any accurate determination; spike value is low.



Table 6

Cost Estimate:  
Removal of All ACM, Encapsulation of All LBP, and Remediation of All Mold  
YST Administration Building


Line Item (RS Means)	Item Description	Quantity	Unit	Crew	Daily Output	Hours	Factor	Unit Costs In Dollars			Total	Total with O&P	Item Total
								Mtrls	Labor	Equip			
ACM Removal and Disposal													
02.82.13.39.0200	Asbestos Abatement Remediation Plan	1	EA	--	--	--	1	--	--	--	1350	1475	\$1,475.00
02.82.13.41.2000	Worker PPE for Hazardous Material (Body/Head) (4 in Crew/21 Days)	4	EA/Day	A-9	--	--	21	9	--	--	9	9.9	\$831.60
02.82.13.41.2500	Worker PPE for Hazardous Material (Respirator)(4 in Crew)	4	EA	--	--	--	1	25.5	--	--	25.5	28	\$112.00
02.82.13.41.2550	Worker PPE for Hazardous Material (Respirator Cart.)(4 in Crew/21 Days)	4	EA/Day	--	--	--	21	5.85	--	--	5.85	6.45	\$541.80
02.82.13.41.1750	Vacuum cleaner, HEPA, 16 gal., stainless steel, wet/dry	1	EA	--	--	--	1	440	--	--	440	485	\$485.00
02.82.13.41.0250	Large Volume Air Sampling Pump, minimum (Per Day)	1	EA	--	--	--	21	355	-	--	355	390	\$8,190.00
02.82.13.41.6500	Negative air machine	1	EA	--	--	--	1	865	--	--	865	950	\$950.00
02.82.13.42.0900	Setup Negative Air Machine	1	EA	1 Asbestos	4.3	1.86	1	--	99.5	--	99.5	155	\$155.00
02.82.13.42.0100	Pre-cleaning, HEPA vacuum and wet wipe, flat surfaces	20000	SF	A-9	12000	0.005	1	0.02	0.28	--	0.3	0.46	\$9,200.00
02.82.13.42.0300	Separation Barrier (8 feet high)	200	SF	2 Carp	400	0.04	1	3.4	1.94	--	5.34	6.7	\$1,340.00
02.82.13.42.0561	Cover surfaces with polyethylene sheeting (walls, 4 mil)	50000	SF	A-9	7000	0.009	1	0.03	0.49	--	0.52	0.79	\$39,500.00
02.82.13.43.5100	Bulk Asbestos Removal (VAT and Mastic from Floor by machine) - 1 Layer	15000	SF	A-11	4800	0.013	1	0.04	0.71	\$0.01	0.76	1.16	\$17,400.00
02.82.13.43.3000	Remove cementitious material from flat surface (window glazing)	70	SF	A-9	1800	0.036	1	0.11	1.9	--	2.01	3.08	\$215.60
02.82.13.43.1000	Pipe fitting insulation (up to 4" diameter pipe)	100	EA	A-9	320	0.2	1	0.6	10.7	--	11.3	17.3	\$1,730.00
02.82.13.44.0250	Demolition of Ceiling (gypsum board with glue dots)	17500	SF	A-9	2500	0.026	1	0.08	1.37	--	1.45	2.21	\$38,675.00
Estimation	3rd Party Oversight for Asbestos Cleanup (1 Inspector / 1 Day)	8	Hour	1 Inspector	1	1	1	--	150	--	150	200	\$1,600.00
02.82.13.45.1110	PCM air sample analysis, NIOSH 7400, maximum	1	Each	1 Asbestos	4	2	2	2.2	107	--	109.2	168	\$336.00
02.82.13.47.0100	Collect and Bag Bulk Material, 3 C.F. bags, by Hand	905	EA	A-9	400	0.16	1	0.84	8.55	--	9.39	14.2	\$12,851.00
02.82.13.47.1000	Double Bag and Decontaminant	905	EA	A-9	960	0.067	1	0.84	3.56	--	4.4	6.45	\$5,837.25
02.82.13.47.3000	Cart Bags 50' to Dumpster	905	EA	2 Asbestos	400	0.04	1	--	2.14	--	2.14	3.32	\$3,004.60
02.82.13.47.5020	Disposal ACM, maximum	100	CY	--	--	--	1	--	--	--	355	395	\$39,500.00
02.81.20.10.1270*	Hazardous Waste Hauling Costs (25 CY maximum)	100	CY	--	--	--	1	--	--	--	7.25	7.35	\$735.00
N/A	Miscellaneous (additional plans, equip, preparations, testing, permitting, etc.)												\$2,000.00
01.21.16.50.0020	Contingency (20%)												\$37,332.97
	ACM Removal and Disposal Total												\$223,997.82
LBP Encapsulation													
02.83.19.21.0200	Lead abatement remediation plan	1	EA	--	--	--	1	--	--	--	1225	1350	\$1,350.00
02.82.13.41.2000	Worker PPE for Hazardous Material (Body/Head)(4 in Crew/3 Days)	4	EA/Day	1 Pord	--	--	3	9	--	--	9	9.9	\$118.80
02.82.13.41.2500	Worker PPE for Hazardous Material (Respirator)(4 in Crew)	2	EA	--	--	--	4	25.5	--	--	25.5	28	\$224.00
02.82.13.41.2550	Worker PPE for Hazardous Material (Respirator Cart.)(4 in Crew/3 Days)	4	EA/Day	--	--	--	3	5.85	--	--	5.85	6.45	\$77.40
02.83.19.23.0170	Encapsulation of LBP Windows per 15 SF (1-6 lite)	30	EA	1 Pord	14	0.571	1	20	23	--	43	56.5	\$1,695.00
02.82.13.42.0100	Pre-cleaning, HEPA vacuum and wet wipe, flat surfaces	1000	SF	A-9	12000	0.005	1	0.02	0.28	--	0.3	0.46	\$460.00
02.82.13.42.0300	Separation Barrier (8 feet high)	100	SF	2 Carp	400	0.04	1	3.4	1.94	--	5.34	6.7	\$670.00
02.82.13.42.0560	Cover surfaces with polyethylene sheeting (walls, 6 mil)	1000	SF	A-9	6000	0.011	1	0.04	0.57	--	0.61	0.93	\$930.00
N/A	Miscellaneous (additional plans, equip, preparations, testing, permitting, etc.)												\$1,000.00
01.21.16.50.0020	Contingency (20%)												\$1,305.04
	LBP Encapsulation Total												\$7,830.24
Mold Remediation													
02.85.16.40.0095	Mold abatement plan	1	Total	--	--	--	1	--	--	--	2550	2800	\$2,800.00
02.82.13.41.2000	Worker PPE for Hazardous Material (Body/Head)(4 in Crew/14 Days)	4	EA/Day	1 Pord	--	--	14	9	--	--	9	9.9	\$554.40
02.82.13.41.2500	Worker PPE for Hazardous Material (Respirator)(4 in Crew)	2	EA	--	--	--	4	25.5	--	--	25.5	28	\$224.00
02.82.13.41.2550	Worker PPE for Hazardous Material (Respirator Cart.)(4 in Crew/14 Days)	4	EA/Day	--	--	--	14	5.85	--	--	5.85	6.45	\$361.20
01.54.33.40.4500	Rental submersible electric pump, 1-1/4" diam., 55 GPM	1	Day	--	--	--	1	--	--	--	--	17	\$17.00
04.01.30.20.2000	Cleaning masonry, steam cleaning light soil and biological staining	10000	SF	A-1H	750	0.011	1	--	0.4	0.1	0.5	0.73	\$7,300.00
02.85.16.40.0070	Post remediation air test	1	Total	--	--	--	1	--	--	--	126	139	\$139.00
N/A	Miscellaneous (additional plans, equip, preparations, testing, permitting, etc.)												\$1,000.00
01.21.16.50.0020	Contingency (20%)												\$2,479.12
	Mold Remediation Total												\$14,874.72
ACM Removal, LBP Encapsulation, and Mold Remediation Total													\$246,702.78

Notes:  
Source: RS Means Building Construction Cost Data 2016. 74th Annual Edition. Catalog # 60016  
Disclaimer: This is only an estimate, actual costs may vary  
ACM Asbestos Containing Materials  
CF Cubic feet  
CY Cubic yards  
EA Each  
Equip Equipment  
Mtrls Materials  
N/A, -- Non-Applicable  
O&P Overhead and Profit  
SF Square feet  
<sup>1</sup> Does not include exterior load bearing walls  
\* Converted Cost Per Mile to Cost per CY using factor (Based on 20 mile round trip)

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## **APPENDIX A SITE PHOTOGRAHS**

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<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> 303 <sup>rd</sup> Street and 388 <sup>th</sup> Avenue Marty, South Dakota	<b>Project No.</b> 0003/1605-17
<b>Photo No.</b> <b>1</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b> North			
<b>Description:</b> Front of the Administration Building			

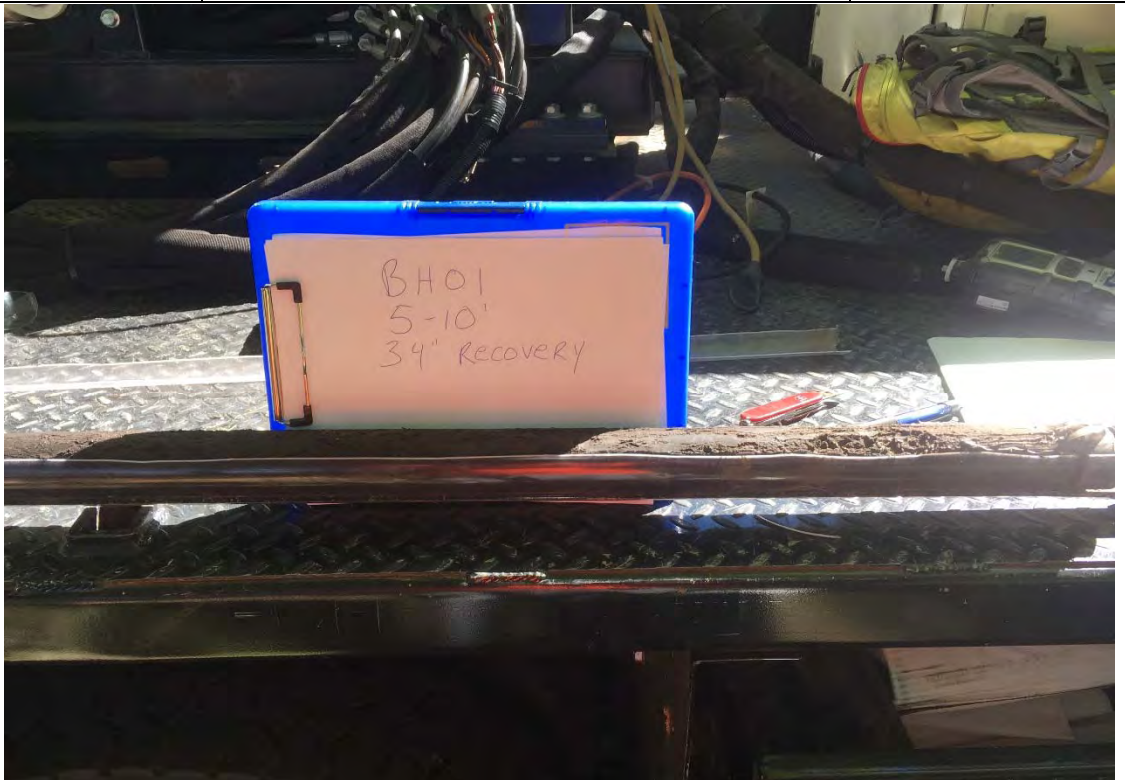
<b>Photo No.</b> <b>2</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Plaque of construction date and original name for the YST administration building.		

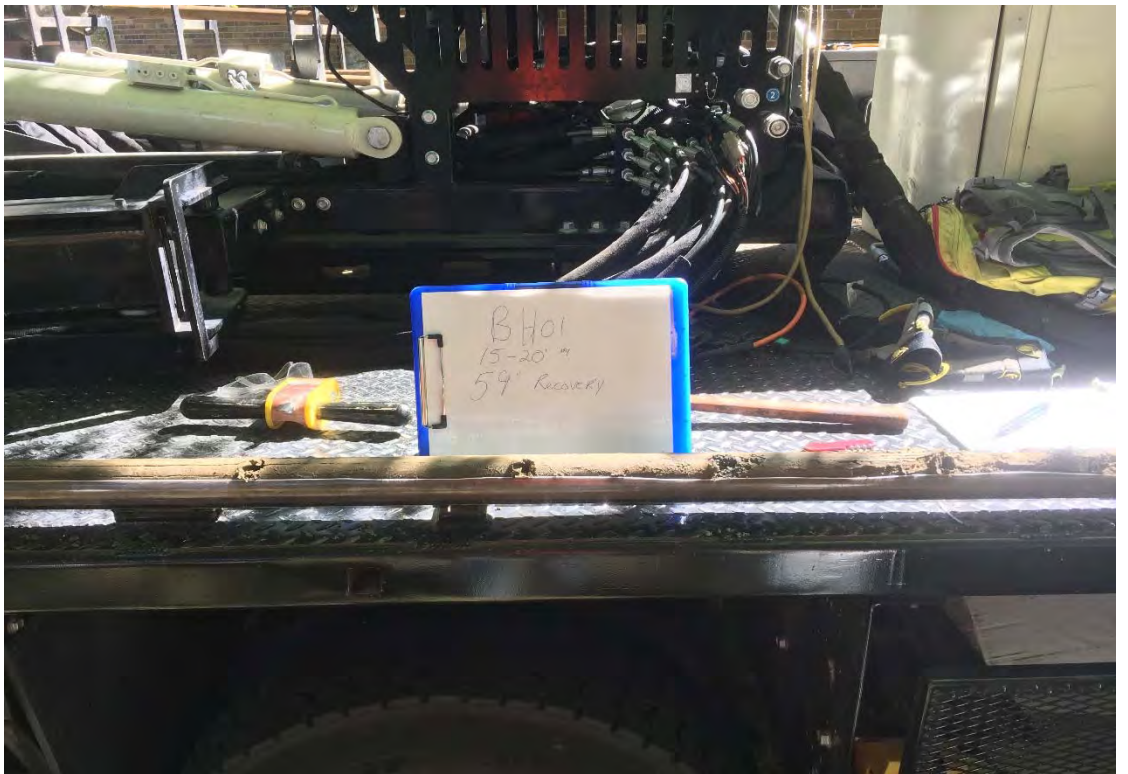


<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>3</b>	<b>Date:</b> 7/12/2016		
<b>Direction Photo Taken:</b> North			
<b>Description:</b> Area where UST is located.			

<b>Photo No.</b> <b>4</b>	<b>Date:</b> 7/12/2016	
<b>Direction Photo Taken:</b> Northeast		
<b>Description:</b> Location of BH-01		



<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>5</b>	<b>Date:</b> 7/12/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Sample YSTAB-BH01-0910.			

<b>Photo No.</b> <b>6</b>	<b>Date:</b> 7/12/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Sample YSTAB-BH01-1920.		



<b>Project Name:</b> YST Administration Building Phase II ESA	<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
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<b>Photo No.</b> <b>7</b>	<b>Date:</b> 7/12/2016
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<b>Direction Photo Taken:</b> East
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<b>Description:</b> Location of BH-02
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<b>Photo No.</b> <b>8</b>	<b>Date:</b> 7/12/2016
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<b>Direction Photo Taken:</b>
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<b>Description:</b> Sample YSTAB-BH02-0910.
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<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>9</b>	<b>Date:</b> 7/12/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Sample YSTAB-BH02-1213.			

<b>Photo No.</b> <b>10</b>	<b>Date:</b> 7/12/2016	
<b>Direction Photo Taken:</b> Southeast		
<b>Description:</b> Location of BH-03.		



<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>11</b>	<b>Date:</b> 7/12/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Sample YSTAB-BH03-0910.			

<b>Photo No.</b> <b>12</b>	<b>Date:</b> 7/12/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Sample YSTAB-BH03-1314.		



<b>Project Name:</b> YST Administration Building Phase II ESA	<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
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<b>Photo No.</b> <b>13</b>	<b>Date:</b> 7/6/2016
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**Direction Photo Taken:**

**Description:**  
View of the interior hallway on the second story. ACM floor tile present and walls are wood paneling.




<b>Photo No.</b> <b>14</b>	<b>Date:</b> 7/6/2016
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**Direction Photo Taken:**


**Description:**  
View of plenum. Suspended ceiling tiles are below ceiling tiles glued to drywall. Fiberglass insulation on HVAC system.







<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>15</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Water damage to the ceiling which shows algae and mold growth present.			

<b>Photo No.</b> <b>16</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> "No PCB's" ballast. Most ballasts were of this style.		

<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>17</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> One older ballast was encountered with potential to be containing PCBs.			

<b>Photo No.</b> <b>18</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Confirmed ACM sample YSTAB-PI01-07. This was a sample of the cementitious pipe fittings present throughout the lower level.		



<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>19</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Standing water with mold growth in the lower hexagonal portion of the building. About 6 inches of water was present during the site visit.			

<b>Photo No.</b> <b>20</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Confirmed ACM sample YSTAB-WC01-10. Window caulking found on most windows at the subject property.		



<b>Project Name:</b> YST Administration Building Phase II ESA	<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361.00
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<b>Photo No.</b> <b>21</b>	<b>Date:</b> 7/6/2016
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**Direction Photo Taken:**

**Description:**  
First of two mercury thermostats encountered at the subject property. This one was located on the lower level.




<b>Photo No.</b> <b>22</b>	<b>Date:</b> 7/6/2016
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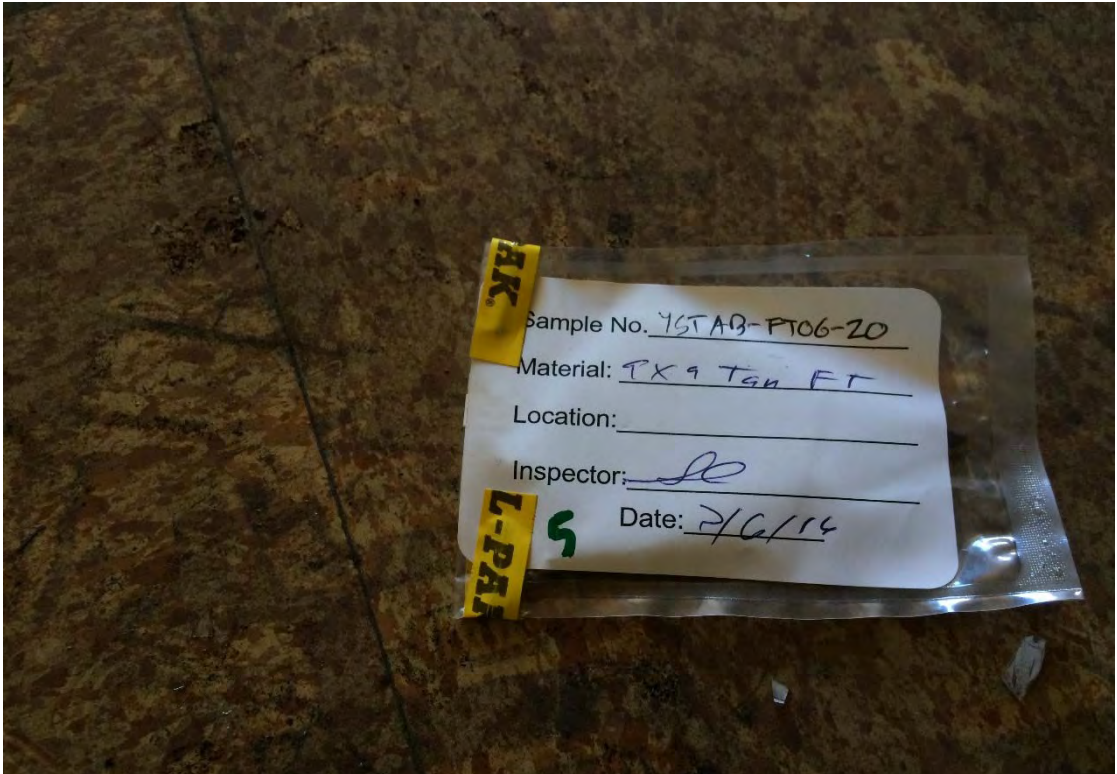
**Direction Photo Taken:**

**Description:**  
Confirmed ACM sample YSTAB-FT05-18. Floor tile present throughout most of the building.

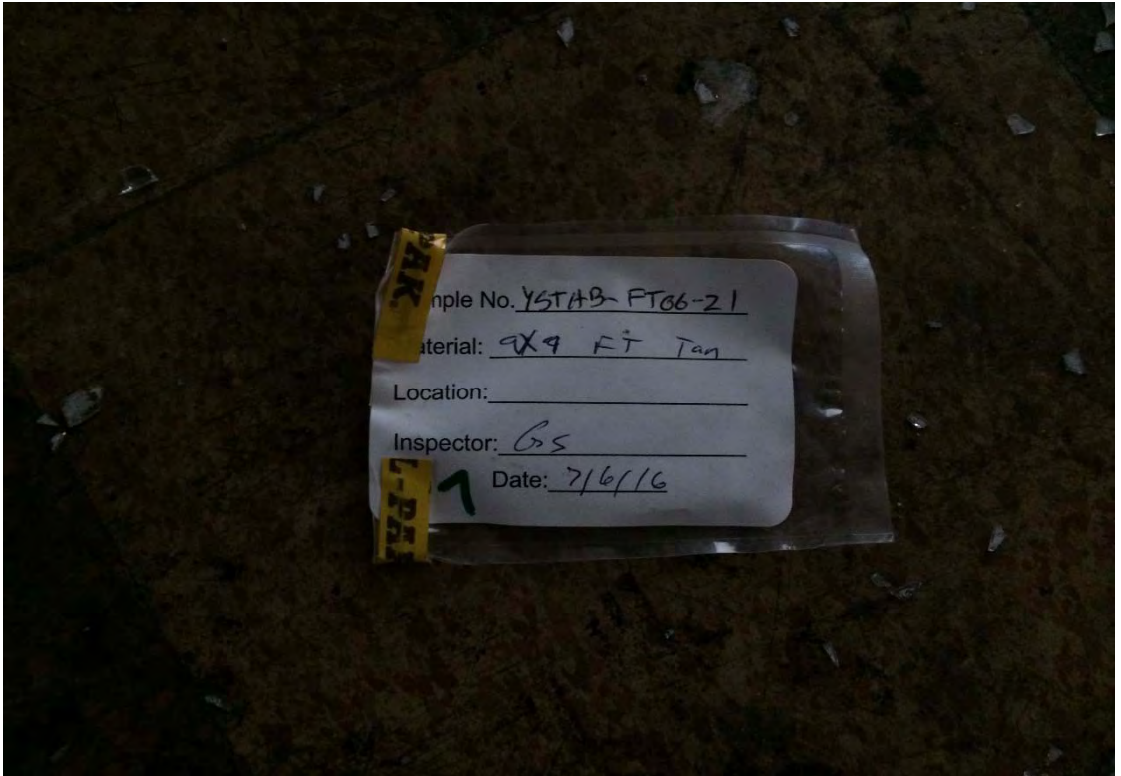


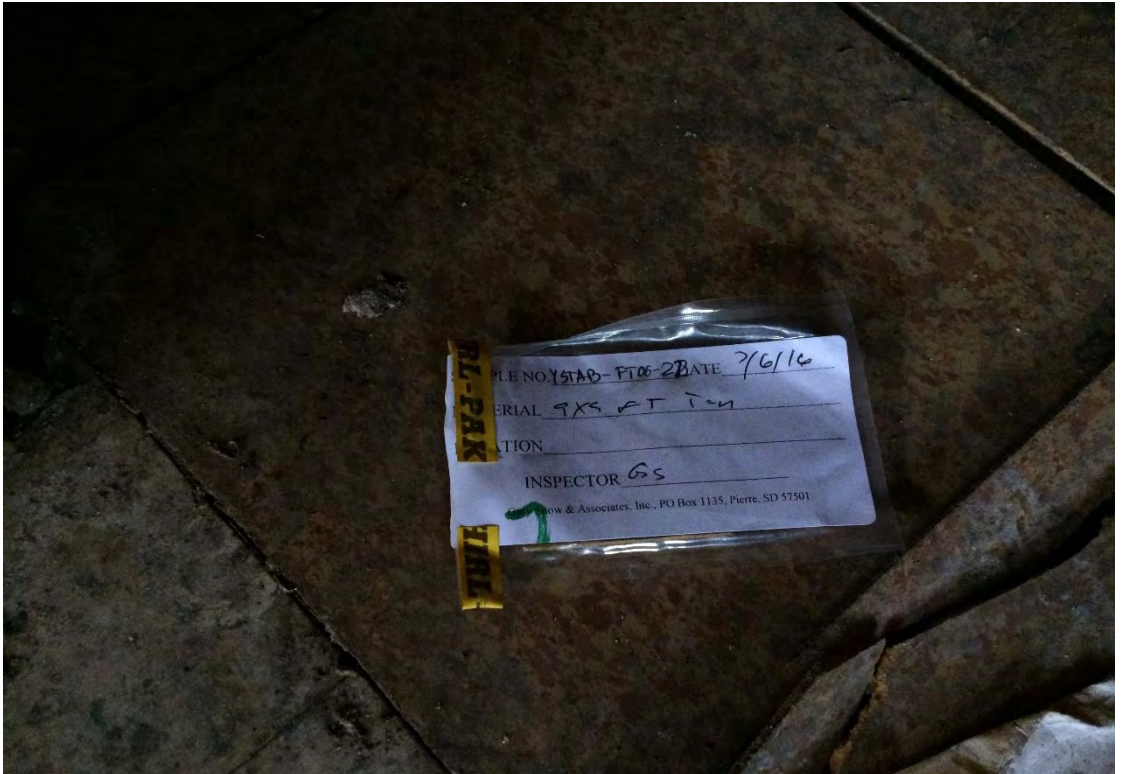


<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>23</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Confirmed ACM sample YSTAB-FT05-19. Floor tile present throughout most of the building.			

<b>Photo No.</b> <b>24</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Confirmed ACM sample YSTAB-FT06-20. Floor tile present throughout most of the building.		



<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>25</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Confirmed ACM sample YSTAB-FT06-21. Floor tile present throughout most of the building.			


<b>Photo No.</b> <b>26</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Confirmed ACM sample YSTAB-FT06-22. Floor tile present throughout most of the building.		

<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>27</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Confirmed ACM sample YSTAB-GP01-32. Glue pucks holding ceiling tiles on drywall throughout most of the ceilings.			

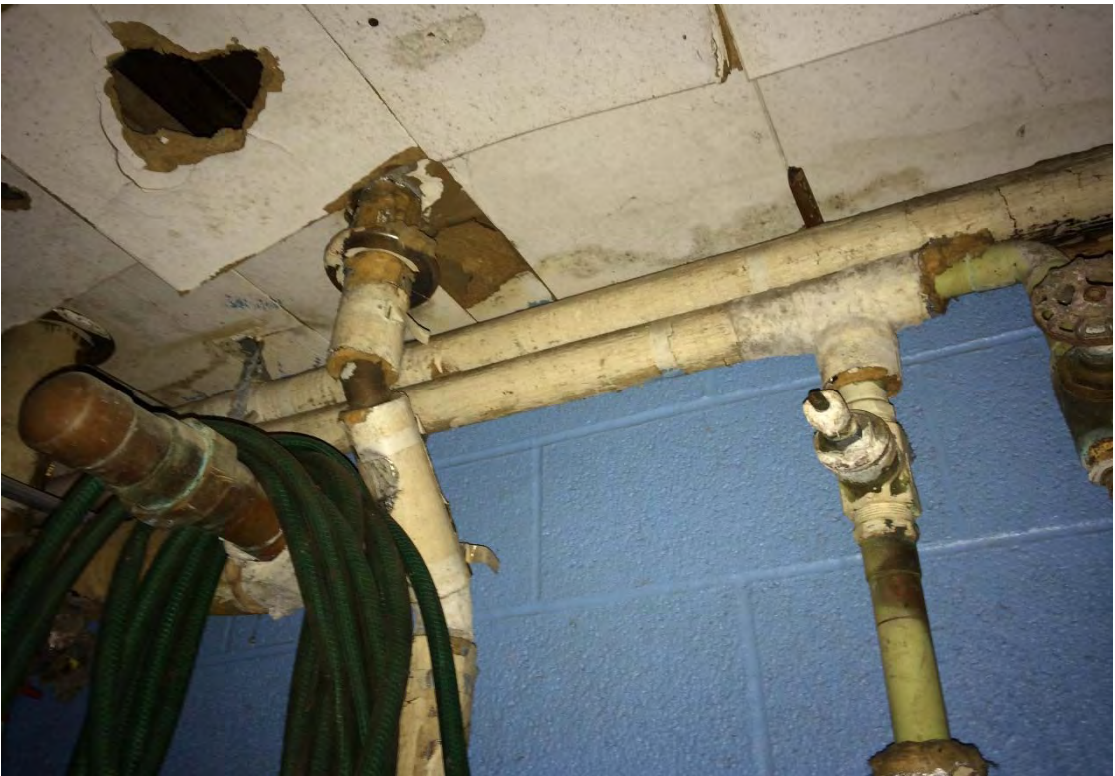
<b>Photo No.</b> <b>28</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Confirmed ACM sample YSTAB-GP01-33. Glue pucks holding ceiling tiles on drywall throughout most of the ceilings.		



<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>29</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> Confirmed ACM sample YSTAB-GP01-34. Glue pucks holding ceiling tiles on drywall throughout most of the ceilings.			

<b>Photo No.</b> <b>30</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> One of the wings on the upper level. Walls are framed and have wall board attached. No insulation was present.		



<b>Project Name:</b> YST Administration Building Phase II ESA		<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
<b>Photo No.</b> <b>31</b>	<b>Date:</b> 7/6/2016		
<b>Direction Photo Taken:</b>			
<b>Description:</b> View of some piping in a maintenance room. Fiberglass insulation was observed on the pipe runs with ACM cementitious fittings.			

<b>Photo No.</b> <b>32</b>	<b>Date:</b> 7/6/2016	
<b>Direction Photo Taken:</b>		
<b>Description:</b> Water damage present on the ceiling on the upper level. Mold growth is seen and also moisture trapped in the masonry.		



<b>Project Name:</b> YST Administration Building Phase II ESA	<b>Site Location:</b> Yankton, South Dakota	<b>Project No.</b> 20408.012.003.0361. 00
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<b>Photo No.</b> <b>33</b>	<b>Date:</b> 7/6/2016
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**Direction Photo Taken:**

**Description:**  
Second of two mercury thermostats encountered at the subject property. This one was located on the upper level.



<b>Photo No.</b> <b>34</b>	<b>Date:</b> 7/6/2016
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**Direction Photo Taken:**

**Description:**  
View of a hallway on the lower level. Severe water damage to the ACM floor tiles and mold is present as well.



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**APPENDIX B**  
**THE EDR RADIUS MAP WITH GEOCHECK**

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**YST - Old Tribal Hall**

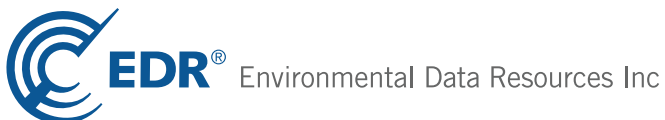
Marty, SD

Lake Andes, SD 57356

Inquiry Number: 4636056.2s

June 02, 2016

## The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

MARTY, SD  
LAKE ANDES, SD 57356

#### COORDINATES

Latitude (North):	42.9941750 - 42° 59' 39.03"
Longitude (West):	98.4266220 - 98° 25' 35.83"
Universal Transverse Mercator:	Zone 14
UTM X (Meters):	546740.9
UTM Y (Meters):	4760112.5
Elevation:	1447 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5645772 MARTY, SD
Version Date:	2012
North Map:	5647519 WAGNER SW, SD
Version Date:	2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120709
Source:	USDA

# MAPPED SITES SUMMARY

Target Property Address:  
MARTY, SD  
LAKE ANDES, SD 57356

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">Reg</a>	YANKTON INDIAN RESER		INDIAN RESERV	Same	1 ft.
<a href="#">1</a>	FORMER GUEST HOUSE	9000 388TH AVENUE	US BROWNFIELDS, FINDS, ECHO	Higher	420, 0.080, ESE
<a href="#">2</a>	ST. KATHERINES BUILD	9000 388TH AVE	US BROWNFIELDS	Higher	520, 0.098, East
<a href="#">3</a>	PETROLEUM CONTAMINAT	303 STREET & 388 AVE	LUST	Lower	755, 0.143, South
<a href="#">4</a>	ST. JOSEPH'S DORMITO	9000 388TH AVE	US BROWNFIELDS	Higher	770, 0.146, SE
<a href="#">A5</a>	MARTY INDIAN SCHOOL	6 MILES SOUTH OF WAG	RCRA-SQG, INDIAN LUST, INDIAN UST	Lower	973, 0.184, SSW
<a href="#">6</a>	MARTY TRIBAL STORE	P.O. BOX 248	INDIAN LUST, INDIAN UST	Lower	992, 0.188, SSE
<a href="#">A7</a>	FLOODED TANK	TRIBAL BLDG LOCATED	LUST	Lower	1020, 0.193, SSW
<a href="#">8</a>	MARTY TRIBAL STORE -	MARTY INDIAN SCHOOL	LUST	Lower	1171, 0.222, SSE



## EXECUTIVE SUMMARY

### TARGET PROPERTY SEARCH RESULTS

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

### DATABASES WITH NO MAPPED SITES

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

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

#### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

#### ***Federal CERCLIS list***

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

#### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

#### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

#### ***Federal RCRA non-CORRACTS TSD facilities list***

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

#### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

#### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

## EXECUTIVE SUMMARY

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent CERCLIS***

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

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

SWF/LF..... Solid Waste Facilities

### ***State and tribal leaking storage tank lists***

LAST..... Leaking Aboveground Storage Tanks

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing

UST..... Underground Storage Tanks

AST..... Aboveground Storage Tanks

### ***State and tribal institutional control / engineering control registries***

INST CONTROL..... List of Brownfields Sites

### ***State and tribal voluntary cleanup sites***

INDIAN VCP..... Voluntary Cleanup Priority Listing

### ***State and tribal Brownfields sites***

BROWNFIELDS..... List of Brownfields Sites

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

SWRCY..... Businesses that Accept Recyclables

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

#### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register

CDL..... Clandestine Drug Labs

US CDL..... National Clandestine Laboratory Register

#### ***Local Land Records***

LIENS 2..... CERCLA Lien Information

## EXECUTIVE SUMMARY

### ***Records of Emergency Release Reports***

HMIRS..... Hazardous Materials Information Reporting System  
SPILLS..... Spills  
SPILLS 90..... SPILLS 90 data from FirstSearch

### ***Other Ascertainable Records***

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated  
FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST  
2020 COR ACTION..... 2020 Corrective Action Program List  
TSCA..... Toxic Substances Control Act  
TRIS..... Toxic Chemical Release Inventory System  
SSTS..... Section 7 Tracking Systems  
ROD..... Records Of Decision  
RMP..... Risk Management Plans  
RAATS..... RCRA Administrative Action Tracking System  
PRP..... Potentially Responsible Parties  
PADS..... PCB Activity Database System  
ICIS..... Integrated Compliance Information System  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
MLTS..... Material Licensing Tracking System  
COAL ASH DOE..... Steam-Electric Plant Operation Data  
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List  
PCB TRANSFORMER..... PCB Transformer Registration Database  
RADINFO..... Radiation Information Database  
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing  
DOT OPS..... Incident and Accident Data  
CONSENT..... Superfund (CERCLA) Consent Decrees  
FUSRAP..... Formerly Utilized Sites Remedial Action Program  
UMTRA..... Uranium Mill Tailings Sites  
LEAD SMELTERS..... Lead Smelter Sites  
US AIRS..... Aerometric Information Retrieval System Facility Subsystem  
US MINES..... Mines Master Index File  
FINDS..... Facility Index System/Facility Registry System  
UXO..... Unexploded Ordnance Sites  
DOCKET HWC..... Hazardous Waste Compliance Docket Listing  
AIRS..... Air Emissions Listing  
COAL ASH..... Coal Ash Disposal Site Listing  
DRYCLEANERS..... Listing of Registered Drycleaners  
Financial Assurance..... Financial Assurance Information Listing  
NPDES..... Wastewater Permit Listing  
UIC..... Underground Injection Wells Listing  
FUELS PROGRAM..... EPA Fuels Program Registered Listing  
ECHO..... Enforcement & Compliance History Information

### **EDR HIGH RISK HISTORICAL RECORDS**

#### ***EDR Exclusive Records***

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

## EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historic Gas Stations  
EDR Hist Cleaner..... EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA LF..... Recovered Government Archive Solid Waste Facilities List  
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

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

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

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2015 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>MARTY INDIAN SCHOOL</i></b>	<b><i>6 MILES SOUTH OF WAG</i></b>	<b><i>SSW 1/8 - 1/4 (0.184 mi.)</i></b>	<b><i>A5</i></b>	<b><i>29</i></b>

#### ***State and tribal leaking storage tank lists***

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental & Natural Resources' UST-Line-Piping Spill/Release List.

A review of the LUST list, as provided by EDR, and dated 01/12/2016 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PETROLEUM CONTAMINAT	303 STREET & 388 AVE	S 1/8 - 1/4 (0.143 mi.)	3	22

## EXECUTIVE SUMMARY

Facility Status: No Further Action  
 Spill Category: Petroleum  
 Facility Id: 2011.122

FLOODED TANK	TRIBAL BLDG LOCATED	SSW 1/8 - 1/4 (0.193 mi.)	A7	34
Facility Status: No Further Action				
Spill Category: Petroleum				
Facility Id: 2010.097				

MARTY TRIBAL STORE -	MARTY INDIAN SCHOOL	SSE 1/8 - 1/4 (0.222 mi.)	8	35
Facility Status: Open				
Spill Category: Petroleum				
Facility Id: 98.345				

INDIAN LUST: A listing of leaking underground storage tank locations on Indian Land.

A review of the INDIAN LUST list, as provided by EDR, and dated 10/27/2015 has revealed that there are 2 INDIAN LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARTY INDIAN SCHOOL	6 MILES SOUTH OF WAG	SSW 1/8 - 1/4 (0.184 mi.)	A5	29
MARTY TRIBAL STORE	P.O. BOX 248	SSE 1/8 - 1/4 (0.188 mi.)	6	32

### State and tribal registered storage tank lists

INDIAN UST: A listing of underground storage tank locations on Indian Land.

A review of the INDIAN UST list, as provided by EDR, and dated 10/20/2015 has revealed that there are 2 INDIAN UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARTY INDIAN SCHOOL	6 MILES SOUTH OF WAG	SSW 1/8 - 1/4 (0.184 mi.)	A5	29
MARTY TRIBAL STORE	P.O. BOX 248	SSE 1/8 - 1/4 (0.188 mi.)	6	32

### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Brownfield lists

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

A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/22/2015 has revealed that there are 3 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORMER GUEST HOUSE	9000 388TH AVENUE	ESE 0 - 1/8 (0.080 mi.)	1	8
ST. KATHERINES BUILD	9000 388TH AVE	E 0 - 1/8 (0.098 mi.)	2	15
ST. JOSEPH'S DORMITO	9000 388TH AVE	SE 1/8 - 1/4 (0.146 mi.)	4	23

## EXECUTIVE SUMMARY

### ***Other Ascertainable Records***

INDIAN RESERV: This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

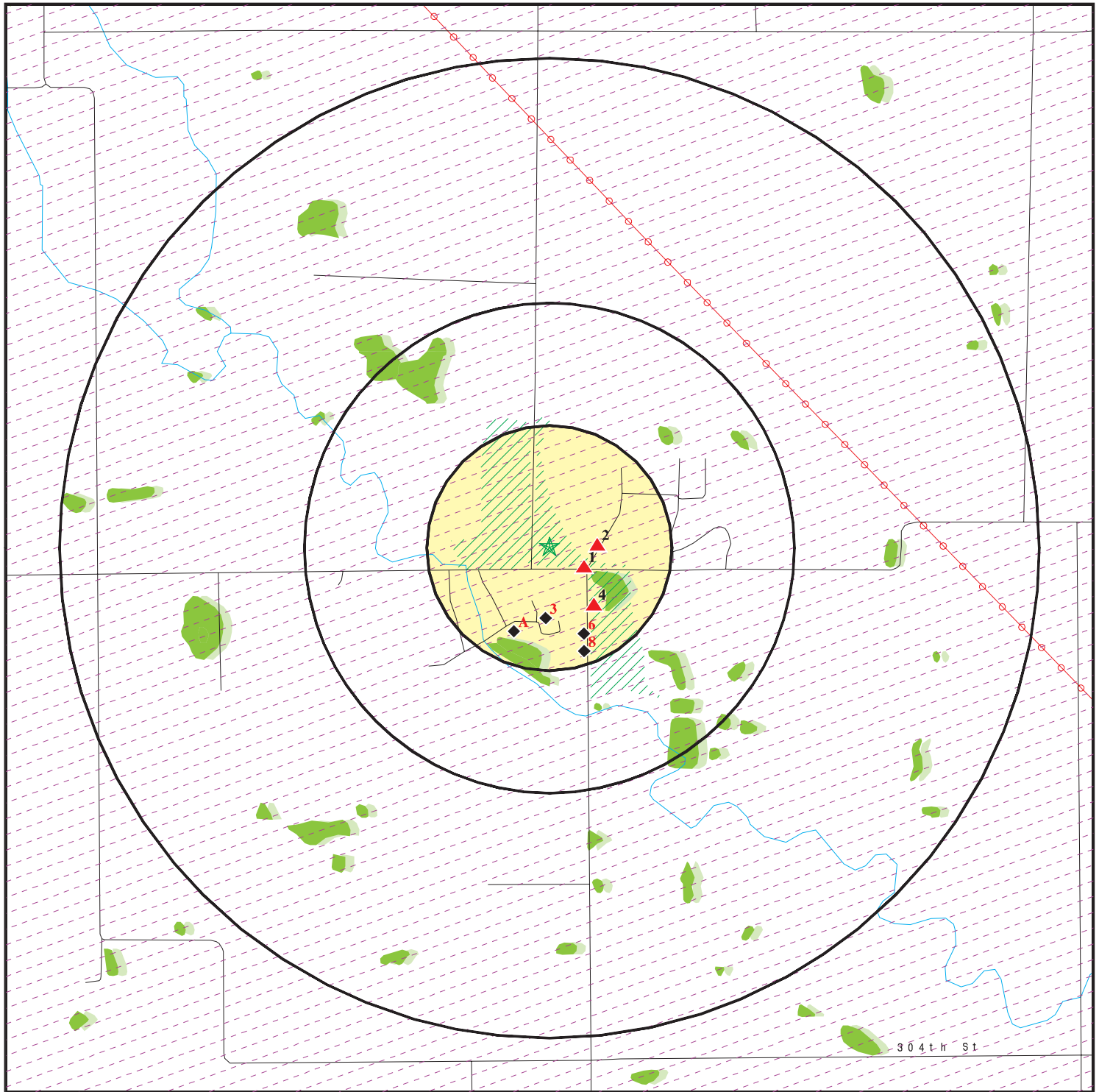
A review of the INDIAN RESERV list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 INDIAN RESERV site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YANKTON INDIAN RESER		0 - 1/8 (0.000 mi.)	0	8

## EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 4636056.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

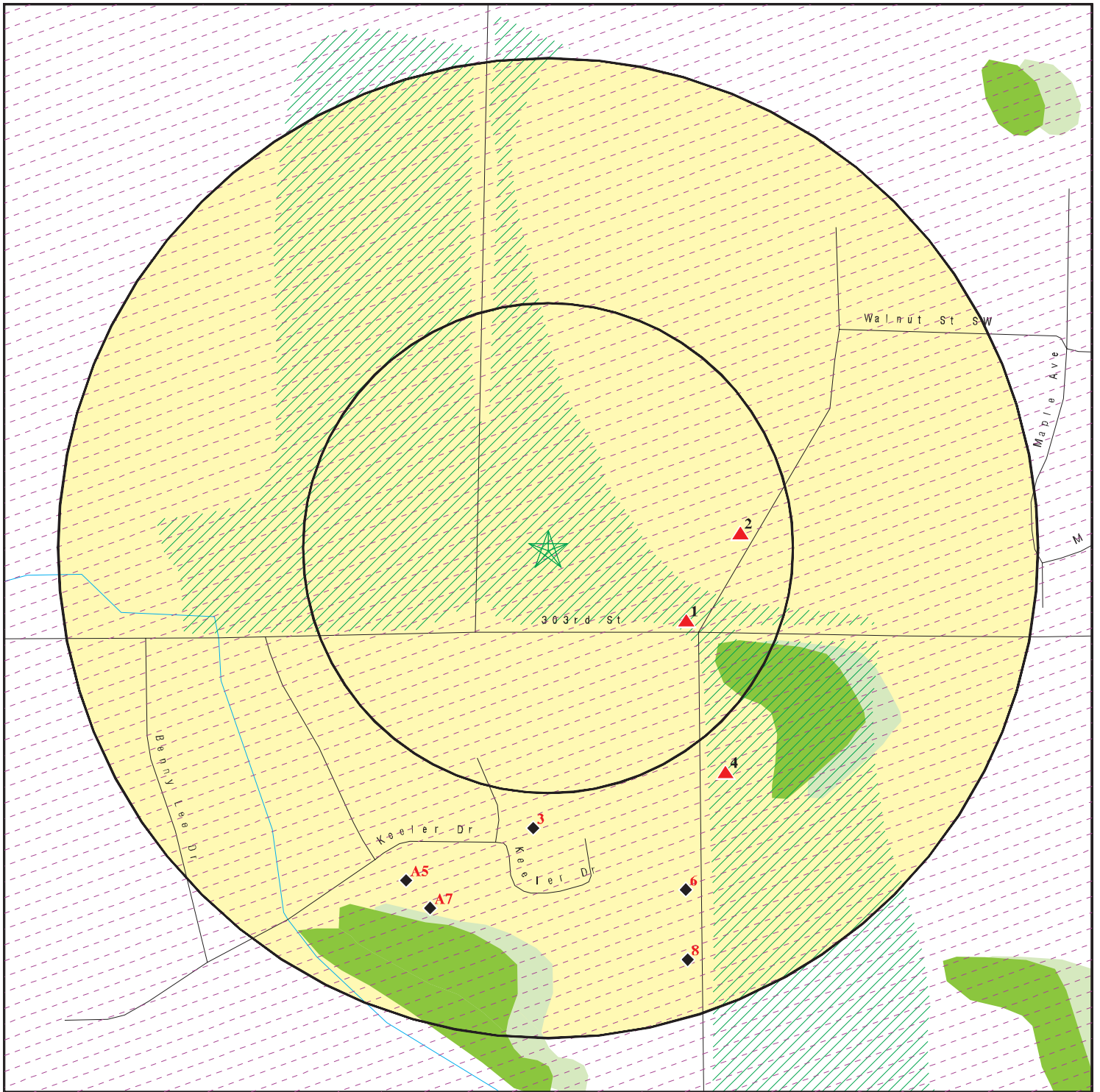
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: YST - Old Tribal Hall  
 ADDRESS: Marty, SD  
 Lake Andes SD 57356  
 LAT/LONG: 42.994175 / 98.426622

CLIENT: Weston Solutions, Inc.  
 CONTACT: Greg Geras  
 INQUIRY #: 4636056.2s  
 DATE: June 02, 2016 5:21 pm



# DETAIL MAP - 4636056.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

0 1/16 1/8 1/4 Miles



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

SITE NAME: YST - Old Tribal Hall  
 ADDRESS: Marty, SD  
 Lake Andes SD 57356  
 LAT/LONG: 42.994175 / 98.426622

CLIENT: Weston Solutions, Inc.  
 CONTACT: Greg Geras  
 INQUIRY #: 4636056.2s  
 DATE: June 02, 2016 5:23 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS	N/A		N/A	N/A	N/A	N/A	N/A	N/A
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LAST	0.500		0	0	0	NR	NR	0
LUST	0.500		0	3	0	NR	NR	3
INDIAN LUST	0.500		0	2	0	NR	NR	2
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	2	NR	NR	NR	2
<b>State and tribal institutional control / engineering control registries</b>								
INST CONTROL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		2	1	0	NR	NR	3
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

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

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

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

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0

- Totals --		0	3	9	0	0	0	12
-------------	--	---	---	---	---	---	---	----

## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
-----------------	--	----------------------------	-----------------	------------------	------------------	----------------	---------------	--------------------------

### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

IND RES  
Region

YANKTON INDIAN RESERVATION

INDIAN RESERV

CIND100209  
N/A

YANKTON INDIAN RESERVATIO (County), SD

< 1/8  
1 ft.

INDIAN RESERV:

Feature: Indian Reservation  
Name: Yankton Indian Reservation  
Agency: BIA  
State: SD

1  
ESE  
< 1/8  
0.080 mi.  
420 ft.

FORMER GUEST HOUSE  
9000 388TH AVENUE  
MARTY, SD 57361

US BROWNFIELDS  
FINDS  
ECHO

1016603716  
N/A

Relative:  
Higher

US BROWNFIELDS:

Recipient name: R8 TBA (STAG Funded)  
Grant type: TBA  
Property name: FORMER GUEST HOUSE  
Property #: Not reported  
Parcel size: .1

Actual:  
1452 ft.

Property Description: The Former Guest House was built around the 1940s by the Bureau of Indian Affairs. The building was used to house former Marty Indian School employees. The Tribe owns the building, which is located on the Marty Indian School Campus. The school still has classes and boards students. The building, however, was damaged in a flood and has been vacant since 2010. The Tribe would like to redevelop the property.

Latitude: 42.9936404  
Longitude: -98.42523130000001  
HCM label: Address Matching-House Number  
Map scale: Not reported  
Point of reference: Entrance Point of a Facility or Station  
Datum: North American Datum of 1983  
ACRES property ID: 170001  
Start date: Not reported  
Completed date: Not reported  
Acres cleaned up: Not reported  
Cleanup funding: Not reported  
Cleanup funding source: Not reported  
Assessment funding: 3000  
Assessment funding source: US EPA - TBA Funding  
Redevelopment funding: Not reported  
Redev. funding source: Not reported  
Redev. funding entity name: Not reported  
Redevelopment start date: Not reported  
Assessment funding entity: EPA  
Cleanup funding entity: Not reported  
Grant type: N/A  
Accomplishment type: Phase I Environmental Assessment  
Accomplishment count: 1  
Cooperative agreement #: n/a  
Ownership entity: Government  
Current owner: Yankton Sioux Tribe  
Did owner change: N  
Cleanup required: Yes  
Video available: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER GUEST HOUSE (Continued)**

**1016603716**

Photo available:	Yes
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Y
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	.1
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	.1
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER GUEST HOUSE (Continued)**

**1016603716**

Chromium cleaned up: Not reported  
Copper cleaned up: Not reported  
Iron cleaned up: Not reported  
mercury cleaned up: Not reported  
nickel cleaned up: Not reported  
No clean up: Not reported  
Pesticides cleaned up: Not reported  
Selenium cleaned up: Not reported  
SVOCs cleaned up: Not reported  
Unknown clean up: Not reported  
Arsenic contaminant found: Not reported  
Cadmium contaminant found: Not reported  
Chromium contaminant found: Not reported  
Copper contaminant found: Not reported  
Iron contaminant found: Not reported  
Mercury contaminant found: Not reported  
Nickel contaminant found: Not reported  
No contaminant found: Not reported  
Pesticides contaminant found: Not reported  
Selenium contaminant found: Not reported  
SVOCs contaminant found: Not reported  
Unknown contaminant found: Not reported  
Future Use: Multistory Not reported  
Media affected Bluiding Material: Y  
Media affected indoor air: Not reported  
Building material media cleaned up: Not reported  
Indoor air media cleaned up: Not reported  
Unknown media cleaned up: Not reported  
Past Use: Multistory Not reported

Recipient name: R8 TBA (STAG Funded)  
Grant type: TBA  
Property name: FORMER GUEST HOUSE  
Property #: Not reported  
Parcel size: .1  
Property Description: The Former Guest House was built around the 1940s by the Burea of Indian Affairs. The building was used to house former Marty Indian School employees. The Tribe owns the building, which is located on the Marty Indian School Campus. The school still has classes and boards students. The building, however, was damaged in a flood and has been vacant since 2010. The Tribe would like redevelop the property.  
Latitude: 42.9936404  
Longitude: -98.42523130000001  
HCM label: Address Matching-House Number  
Map scale: Not reported  
Point of reference: Entrance Point of a Facility or Station  
Datum: North American Datum of 1983  
ACRES property ID: 170001  
Start date: Not reported  
Completed date: Not reported  
Acres cleaned up: Not reported  
Cleanup funding: Not reported  
Cleanup funding source: Not reported  
Assessment funding: 2625  
Assessment funding source: US EPA - TBA Funding  
Redevelopment funding: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER GUEST HOUSE (Continued)**

**1016603716**

Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Cleanup Planning
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Government
Current owner:	Yankton Sioux Tribe
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	Yes
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Y
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contaminants found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER GUEST HOUSE (Continued)**

**1016603716**

Cleanup other description: Not reported  
Num. of cleanup and re-dev. jobs: Not reported  
Past use greenspace acreage: Not reported  
Past use residential acreage: .1  
Past use commercial acreage: Not reported  
Past use industrial acreage: Not reported  
Future use greenspace acreage: Not reported  
Future use residential acreage: .1  
Future use commercial acreage: Not reported  
Future use industrial acreage: Not reported  
Greenspace acreage and type: Not reported  
Superfund Fed. landowner flag: Not reported  
Arsenic cleaned up: Not reported  
Cadmium cleaned up: Not reported  
Chromium cleaned up: Not reported  
Copper cleaned up: Not reported  
Iron cleaned up: Not reported  
mercury cleaned up: Not reported  
nickel cleaned up: Not reported  
No clean up: Not reported  
Pesticides cleaned up: Not reported  
Selenium cleaned up: Not reported  
SVOCs cleaned up: Not reported  
Unknown clean up: Not reported  
Arsenic contaminant found: Not reported  
Cadmium contaminant found: Not reported  
Chromium contaminant found: Not reported  
Copper contaminant found: Not reported  
Iron contaminant found: Not reported  
Mercury contaminant found: Not reported  
Nickel contaminant found: Not reported  
No contaminant found: Not reported  
Pesticides contaminant found: Not reported  
Selenium contaminant found: Not reported  
SVOCs contaminant found: Not reported  
Unknown contaminant found: Not reported  
Future Use: Multistory Not reported  
Media affected Bluiding Material: Y  
Media affected indoor air: Not reported  
Building material media cleaned up: Not reported  
Indoor air media cleaned up: Not reported  
Unknown media cleaned up: Not reported  
Past Use: Multistory Not reported

Recipient name: R8 TBA (STAG Funded)  
Grant type: TBA  
Property name: FORMER GUEST HOUSE  
Property #: Not reported  
Parcel size: .1  
Property Description:

The Former Guest House was built around the 1940s by the Burea of Indian Affairs. The building was used to house former Marty Indian School employees. The Tribe owns the building, which is located on the Marty Indian School Campus. The school still has classes and boards students. The building, however, was damaged in a flood and has been vacant since 2010. The Tribe would like redevelop the property.

Latitude: 42.9936404

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER GUEST HOUSE (Continued)**

**1016603716**

Longitude: -98.42523130000001  
HCM label: Address Matching-House Number  
Map scale: Not reported  
Point of reference: Entrance Point of a Facility or Station  
Datum: North American Datum of 1983  
ACRES property ID: 170001  
Start date: Not reported  
Completed date: Not reported  
Acres cleaned up: Not reported  
Cleanup funding: Not reported  
Cleanup funding source: Not reported  
Assessment funding: 5500  
Assessment funding source: US EPA - TBA Funding  
Redevelopment funding: Not reported  
Redev. funding source: Not reported  
Redev. funding entity name: Not reported  
Redevelopment start date: Not reported  
Assessment funding entity: EPA  
Cleanup funding entity: Not reported  
Grant type: N/A  
Accomplishment type: Phase II Environmental Assessment  
Accomplishment count: 0  
Cooperative agreement #: n/a  
Ownership entity: Government  
Current owner: Yankton Sioux Tribe  
Did owner change: N  
Cleanup required: Yes  
Video available: No  
Photo available: Yes  
Institutional controls required: U  
IC Category proprietary controls: Not reported  
IC cat. info. devices: Not reported  
IC cat. gov. controls: Not reported  
IC cat. enforcement permit tools: Not reported  
IC in place date: Not reported  
IC in place: Not reported  
State/tribal program date: Not reported  
State/tribal program ID: Not reported  
State/tribal NFA date: Not reported  
Air contaminated: Not reported  
Air cleaned: Not reported  
Asbestos found: Y  
Asbestos cleaned: Not reported  
Controlled substance found: Not reported  
Controlled substance cleaned: Not reported  
Drinking water affected: Not reported  
Drinking water cleaned: Not reported  
Groundwater affected: Not reported  
Groundwater cleaned: Not reported  
Lead contaminant found: Y  
Lead cleaned up: Not reported  
No media affected: Not reported  
Unknown media affected: Not reported  
Other cleaned up: Not reported  
Other metals found: Not reported  
Other metals cleaned: Not reported  
Other contaminants found: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER GUEST HOUSE (Continued)**

**1016603716**

Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	.1
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	.1
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Y
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER GUEST HOUSE (Continued)**

**1016603716**

**FINDS:**

Registry ID: 110059657330

**Environmental Interest/Information System**

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

**ECHO:**

Envid: 1016603716  
Registry ID: 110059657330  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110059657330](http://echo.epa.gov/detailed_facility_report?fid=110059657330)

**2**  
**East**  
**< 1/8**  
**0.098 mi.**  
**520 ft.**

**ST. KATHERINES BUILDING**  
**9000 388TH AVE**  
**MARTY, SD 57361**

**US BROWNFIELDS 1016952270**  
**N/A**

**Relative:**  
**Higher**

**US BROWNFIELDS:**

Recipient name: R8 TBA (STAG Funded)

Grant type: TBA

Property name: ST. KATHERINES BUILDING

Property #: Not reported

Parcel size: .1

Property Description: St. Katharine's Building is located on the Marty Indian School Campus. Marty is a small rural community on the Yankton Sioux Reservation. St. Pauls Mission was established on the property in 1911. A resident priest was assigned to the mission in 1921. Sometime after that, this building was constructed as part of the mission in the 1920s. The Yankton Sioux Tribe took over ownership and operation of Marty Indian School in 1975. The building was used as an administration building and had class rooms.

Latitude: 42.9942856

Longitude: -98.42468559999997

HCM label: Address Matching-House Number

Map scale: Not reported

Point of reference: Entrance Point of a Facility or Station

Datum: North American Datum of 1983

ACRES property ID: 175761

Start date: Not reported

Completed date: Not reported

Acres cleaned up: Not reported

Cleanup funding: Not reported

Cleanup funding source: Not reported

Assessment funding: 3000

Assessment funding source: US EPA - TBA Funding

Redevelopment funding: Not reported

Redev. funding source: Not reported

Redev. funding entity name: Not reported

Redevelopment start date: Not reported

Assessment funding entity: EPA

Cleanup funding entity: Not reported

Grant type: N/A

Accomplishment type: Phase I Environmental Assessment

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. KATHERINES BUILDING (Continued)**

**1016952270**

Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Government
Current owner:	Yankton Sioux Tribe
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	Yes
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Y
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	.1
Past use industrial acreage:	Not reported
Future use greenspace acreage:	.1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. KATHERINES BUILDING (Continued)**

**1016952270**

Future use residential acreage: Not reported  
Future use commercial acreage: Not reported  
Future use industrial acreage: Not reported  
Greenspace acreage and type: Not reported  
Superfund Fed. landowner flag: Not reported  
Arsenic cleaned up: Not reported  
Cadmium cleaned up: Not reported  
Chromium cleaned up: Not reported  
Copper cleaned up: Not reported  
Iron cleaned up: Not reported  
mercury cleaned up: Not reported  
nickel cleaned up: Not reported  
No clean up: Not reported  
Pesticides cleaned up: Not reported  
Selenium cleaned up: Not reported  
SVOCs cleaned up: Not reported  
Unknown clean up: Not reported  
Arsenic contaminant found: Not reported  
Cadmium contaminant found: Not reported  
Chromium contaminant found: Not reported  
Copper contaminant found: Not reported  
Iron contaminant found: Not reported  
Mercury contaminant found: Not reported  
Nickel contaminant found: Not reported  
No contaminant found: Not reported  
Pesticides contaminant found: Not reported  
Selenium contaminant found: Not reported  
SVOCs contaminant found: Not reported  
Unknown contaminant found: Not reported  
Future Use: Multistory Not reported  
Media affected Bluiding Material: Y  
Media affected indoor air: Not reported  
Building material media cleaned up: Not reported  
Indoor air media cleaned up: Not reported  
Unknown media cleaned up: Not reported  
Past Use: Multistory Not reported

Recipient name: R8 TBA (STAG Funded)

Grant type: TBA

Property name: ST. KATHERINES BUILDING

Property #: Not reported

Parcel size: .1

Property Description: St. Katharine's Building is located on the Marty Indian School Campus. Marty is a small rural community on the Yankton Sioux Reservation. St. Pauls Mission was established on the property in 1911. A resident priest was assigned to the mission in 1921. Sometime after that, this building was constructed as part of the mission in the 1920s. The Yankton Sioux Tribe took over ownership and operation of Marty Indian School in 1975. The building was used as an adminstration building and had class rooms.

Latitude: 42.9942856

Longitude: -98.42468559999997

HCM label: Address Matching-House Number

Map scale: Not reported

Point of reference: Entrance Point of a Facility or Station

Datum: North American Datum of 1983

ACRES property ID: 175761

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. KATHERINES BUILDING (Continued)**

**1016952270**

Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	5500
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Government
Current owner:	Yankton Sioux Tribe
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	Yes
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Y
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contaminants found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. KATHERINES BUILDING (Continued)**

**1016952270**

Petro products cleaned: Not reported  
Sediments found: Not reported  
Sediments cleaned: Not reported  
Soil affected: Not reported  
Soil cleaned up: Not reported  
Surface water cleaned: Not reported  
VOCs found: Not reported  
VOCs cleaned: Not reported  
Cleanup other description: Not reported  
Num. of cleanup and re-dev. jobs: Not reported  
Past use greenspace acreage: Not reported  
Past use residential acreage: Not reported  
Past use commercial acreage: .1  
Past use industrial acreage: Not reported  
Future use greenspace acreage: .1  
Future use residential acreage: Not reported  
Future use commercial acreage: Not reported  
Future use industrial acreage: Not reported  
Greenspace acreage and type: Not reported  
Superfund Fed. landowner flag: Not reported  
Arsenic cleaned up: Not reported  
Cadmium cleaned up: Not reported  
Chromium cleaned up: Not reported  
Copper cleaned up: Not reported  
Iron cleaned up: Not reported  
mercury cleaned up: Not reported  
nickel cleaned up: Not reported  
No clean up: Not reported  
Pesticides cleaned up: Not reported  
Selenium cleaned up: Not reported  
SVOCs cleaned up: Not reported  
Unknown clean up: Not reported  
Arsenic contaminant found: Not reported  
Cadmium contaminant found: Not reported  
Chromium contaminant found: Not reported  
Copper contaminant found: Not reported  
Iron contaminant found: Not reported  
Mercury contaminant found: Not reported  
Nickel contaminant found: Not reported  
No contaminant found: Not reported  
Pesticides contaminant found: Not reported  
Selenium contaminant found: Not reported  
SVOCs contaminant found: Not reported  
Unknown contaminant found: Not reported  
Future Use: Multistory Not reported  
Media affected Bluiding Material: Y  
Media affected indoor air: Not reported  
Building material media cleaned up: Not reported  
Indoor air media cleaned up: Not reported  
Unknown media cleaned up: Not reported  
Past Use: Multistory Not reported

Recipient name: R8 TBA (STAG Funded)  
Grant type: TBA  
Property name: ST. KATHERINES BUILDING  
Property #: Not reported  
Parcel size: .1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. KATHERINES BUILDING (Continued)**

**1016952270**

Property Description: St. Katharine's Building is located on the Marty Indian School Campus. Marty is a small rural community on the Yankton Sioux Reservation. St. Pauls Mission was established on the property in 1911. A resident priest was assigned to the mission in 1921. Sometime after that, this building was constructed as part of the mission in the 1920s. The Yankton Sioux Tribe took over ownership and operation of Marty Indian School in 1975. The building was used as an administration building and had class rooms.

Latitude: 42.9942856  
Longitude: -98.42468559999997  
HCM label: Address Matching-House Number  
Map scale: Not reported  
Point of reference: Entrance Point of a Facility or Station  
Datum: North American Datum of 1983  
ACRES property ID: 175761  
Start date: Not reported  
Completed date: Not reported  
Acres cleaned up: Not reported  
Cleanup funding: Not reported  
Cleanup funding source: Not reported  
Assessment funding: 2625  
Assessment funding source: US EPA - TBA Funding  
Redevelopment funding: Not reported  
Redev. funding source: Not reported  
Redev. funding entity name: Not reported  
Redevelopment start date: Not reported  
Assessment funding entity: EPA  
Cleanup funding entity: Not reported  
Grant type: N/A  
Accomplishment type: Cleanup Planning  
Accomplishment count: 0  
Cooperative agreement #: n/a  
Ownership entity: Government  
Current owner: Yankton Sioux Tribe  
Did owner change: N  
Cleanup required: Yes  
Video available: No  
Photo available: Yes  
Institutional controls required: U  
IC Category proprietary controls: Not reported  
IC cat. info. devices: Not reported  
IC cat. gov. controls: Not reported  
IC cat. enforcement permit tools: Not reported  
IC in place date: Not reported  
IC in place: No  
State/tribal program date: Not reported  
State/tribal program ID: Not reported  
State/tribal NFA date: Not reported  
Air contaminated: Not reported  
Air cleaned: Not reported  
Asbestos found: Y  
Asbestos cleaned: Not reported  
Controlled substance found: Not reported  
Controlled substance cleaned: Not reported  
Drinking water affected: Not reported  
Drinking water cleaned: Not reported  
Groundwater affected: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. KATHERINES BUILDING (Continued)**

**1016952270**

Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	.1
Past use industrial acreage:	Not reported
Future use greenspace acreage:	.1
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. KATHERINES BUILDING (Continued)**

**1016952270**

SVOCs contaminant found: Not reported  
Unknown contaminant found: Not reported  
Future Use: Multistory Not reported  
Media affected Bluiding Material: Y  
Media affected indoor air: Not reported  
Building material media cleaned up: Not reported  
Indoor air media cleaned up: Not reported  
Unknown media cleaned up: Not reported  
Past Use: Multistory Not reported

**3**  
**South**  
**1/8-1/4**  
**0.143 mi.**  
**755 ft.**

**PETROLEUM CONTAMINATED SOILS - MARTY INDIAN SCHOOL**  
**303 STREET & 388 AVENUE, WEST OF BOYS DORM**  
**MARTY, SD 57361**

**LUST S111066552**  
**N/A**

**Relative:**  
**Lower**

**SD LUST:**

Facility ID: 2011.122  
**Facility Status: NFA**  
Quantity Spilled or Released: 0  
Spill Category: Petroleum  
Material: Petroleum  
Source Type: UST  
Site Type: Federal  
Date Reported: 07/05/2011  
Date Closed: 11/16/2011  
Responsible Party: Bureau of Indian Affairs (BIA)  
Property Type: Other(See Case File)  
ATP Number: Not reported  
Lat/Long: 42.992105 / -98.42677  
R1: KM  
Regulated: True  
PRCF Number: Not reported  
Township: Not reported  
Range: Not reported  
Section: Not reported  
First Quarter Section: Not reported  
Acreage: 0  
Institutional Controls: Not reported  
Image: True  
Cause Type: Not reported  
Solidwaste: Not reported  
Microroll: 281  
Site ID: 12035  
SD Dept of Agricultures Case Number: Not reported  
Decode For Fstatus: No Further Action

**Actual:**  
**1445 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

4  
SE  
1/8-1/4  
0.146 mi.  
770 ft.

**ST. JOSEPH'S DORMITORY**  
**9000 388TH AVE**  
**MARTY, SD 57361**

**US BROWNFIELDS**    **1016952269**  
**N/A**

**Relative:**  
**Higher**

US BROWNFIELDS:

**Actual:**  
**1448 ft.**

Recipient name: R8 TBA (STAG Funded)  
Grant type: TBA  
Property name: ST. JOSEPH'S DORMITORY  
Property #: Not reported  
Parcel size: .1  
Property Description: Property is currently located on the Mary Indian School Campus. In 1911, the Saint Paul's Indian Mission was established. St. Josephs dormitory is estimated to have been built in the 1920s. In 1975 the ownership and operation of the school was transferred to the Yankton Sioux Tribe.  
Latitude: 42.992519  
Longitude: -98.424833  
HCM label: Address Matching-House Number  
Map scale: Not reported  
Point of reference: Entrance Point of a Facility or Station  
Datum: North American Datum of 1983  
ACRES property ID: 175741  
Start date: Not reported  
Completed date: Not reported  
Acres cleaned up: Not reported  
Cleanup funding: Not reported  
Cleanup funding source: Not reported  
Assessment funding: 3000  
Assessment funding source: US EPA - TBA Funding  
Redevelopment funding: Not reported  
Redev. funding source: Not reported  
Redev. funding entity name: Not reported  
Redevelopment start date: Not reported  
Assessment funding entity: EPA  
Cleanup funding entity: Not reported  
Grant type: N/A  
Accomplishment type: Phase I Environmental Assessment  
Accomplishment count: 1  
Cooperative agreement #: n/a  
Ownership entity: Government  
Current owner: Yankton Sioux Tribe  
Did owner change: N  
Cleanup required: Yes  
Video available: No  
Photo available: Yes  
Institutional controls required: U  
IC Category proprietary controls: Not reported  
IC cat. info. devices: Not reported  
IC cat. gov. controls: Not reported  
IC cat. enforcement permit tools: Not reported  
IC in place date: Not reported  
IC in place: Not reported  
State/tribal program date: Not reported  
State/tribal program ID: Not reported  
State/tribal NFA date: Not reported  
Air contaminated: Not reported  
Air cleaned: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. JOSEPH'S DORMITORY (Continued)**

**1016952269**

Asbestos found:	Y
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Y
Other contaminants found description:	guano, mold, mercury containing light switches, lithium batteries
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	.1
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	.1
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. JOSEPH'S DORMITORY (Continued)**

**1016952269**

Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Y
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Recipient name:	R8 TBA (STAG Funded)
Grant type:	TBA
Property name:	ST. JOSEPH'S DORMITORY
Property #:	Not reported
Parcel size:	.1
Property Description:	Property is currently located on the Mary Indian School Campus. In 1911, the Saint Paul's Indian Mission was established. St. Josephs dormitory is estimated to have been built in the 1920s. In 1975 the owernship and operation of the school was transferred to the Yankton Sioux Tribe.
Latitude:	42.992519
Longitude:	-98.424833
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	175741
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	5500
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Government
Current owner:	Yankton Sioux Tribe
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. JOSEPH'S DORMITORY (Continued)**

**1016952269**

Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Y
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Y
Other contams found description:	guano, mold, mercury containing light switches, lithium batteries
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	.1
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	.1
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. JOSEPH'S DORMITORY (Continued)**

**1016952269**

Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Y
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Recipient name:	R8 TBA (STAG Funded)
Grant type:	TBA
Property name:	ST. JOSEPH'S DORMITORY
Property #:	Not reported
Parcel size:	.1
Property Description:	Property is currently located on the Mary Indian School Campus. In 1911, the Saint Paul's Indian Mission was established. St. Josephs dormitory is estimated to have been built in the 1920s. In 1975 the owernship and operation of the school was transferred to the Yankton Sioux Tribe.
Latitude:	42.992519
Longitude:	-98.424833
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	175741
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2625
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. JOSEPH'S DORMITORY (Continued)**

**1016952269**

Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Cleanup Planning
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Government
Current owner:	Yankton Sioux Tribe
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	Yes
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Y
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Y
Other contams found description:	guano, mold, mercury containing light switches, lithium batteries
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST. JOSEPH'S DORMITORY (Continued)**

**1016952269**

Past use residential acreage: .1  
Past use commercial acreage: Not reported  
Past use industrial acreage: Not reported  
Future use greenspace acreage: Not reported  
Future use residential acreage: .1  
Future use commercial acreage: Not reported  
Future use industrial acreage: Not reported  
Greenspace acreage and type: Not reported  
Superfund Fed. landowner flag: Not reported  
Arsenic cleaned up: Not reported  
Cadmium cleaned up: Not reported  
Chromium cleaned up: Not reported  
Copper cleaned up: Not reported  
Iron cleaned up: Not reported  
mercury cleaned up: Not reported  
nickel cleaned up: Not reported  
No clean up: Not reported  
Pesticides cleaned up: Not reported  
Selenium cleaned up: Not reported  
SVOCs cleaned up: Not reported  
Unknown clean up: Not reported  
Arsenic contaminant found: Not reported  
Cadmium contaminant found: Not reported  
Chromium contaminant found: Not reported  
Copper contaminant found: Not reported  
Iron contaminant found: Not reported  
Mercury contaminant found: Not reported  
Nickel contaminant found: Not reported  
No contaminant found: Not reported  
Pesticides contaminant found: Not reported  
Selenium contaminant found: Not reported  
SVOCs contaminant found: Not reported  
Unknown contaminant found: Not reported  
Future Use: Multistory Not reported  
Media affected Bluiding Material: Y  
Media affected indoor air: Not reported  
Building material media cleaned up: Not reported  
Indoor air media cleaned up: Not reported  
Unknown media cleaned up: Not reported  
Past Use: Multistory Not reported

**A5**  
**SSW**  
**1/8-1/4**  
**0.184 mi.**  
**973 ft.**

**MARTY INDIAN SCHOOL SHOP (BIA)**  
**6 MILES SOUTH OF WAGNER**  
**MARTY, SD 57361**

**Site 1 of 2 in cluster A**

**RCRA-SQG**  
**INDIAN LUST**  
**INDIAN UST**

**1000423155**  
**SDD119780179**

**Relative:**  
**Lower**

RCRA-SQG:

Date form received by agency: 11/23/1987

Facility name: MARTY INDIAN SCHOOL

Facility address: 6 MI W & 6 MI S OF WAGNER

MARTY, SD 57361

EPA ID: SDD119780179

Mailing address: PO BOX 187

MARTY, SD 57361

Contact: DENNIS SCHUTT

Contact address: PO BOX 187

MARTY, SD 57361

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MARTY INDIAN SCHOOL SHOP (BIA) (Continued)**

**1000423155**

Contact country: US  
Contact telephone: (605) 384-5431  
Contact email: Not reported  
EPA Region: 08  
Land type: Facility is not located on Indian land. Additional information is not known.  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

**Owner/Operator Summary:**

Owner/operator name: YANKTON SIOUX TRIBE  
Owner/operator address: DATA NOT REQUESTED  
DATA NOT REQUESTED, SD 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (999) 999-9999  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D000  
. Waste name: Not Defined

. Waste code: D001  
. Waste name: IGNITABLE WASTE

. Waste code: D002  
. Waste name: CORROSIVE WASTE

. Waste code: P010  
. Waste name: ARSENIC ACID H3ASO4

. Waste code: P098  
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: U002

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MARTY INDIAN SCHOOL SHOP (BIA) (Continued)**

**1000423155**

. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)  
. Waste code: U019  
. Waste name: BENZENE (I,T)  
. Waste code: U044  
. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-  
. Waste code: U072  
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE  
. Waste code: U117  
. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)  
. Waste code: U122  
. Waste name: FORMALDEHYDE  
. Waste code: U144  
. Waste name: ACETIC ACID, LEAD(2+) SALT (OR) LEAD ACETATE  
. Waste code: U188  
. Waste name: PHENOL  
. Waste code: U226  
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

Violation Status: No violations found

**Evaluation Action Summary:**

Evaluation date: 07/13/2006  
Evaluation: COMPLIANCE ASSISTANCE VISIT  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: Native American

**Indian LUST:**

Region: 8  
Facility ID: 4090044  
Tribe Name: Yankton  
Date Closed: 2006-01-12 00:00:00  
Description: Federal Non-Military  
Last Milestone: Site Cleanup Completed  
Latitude: 42.991717000000001  
Longitude: -98.428049999999999  
Event ID: 31  
Facility Status: Confirmed Release  
Caused by Spill: True  
Caused by Overfill: False  
Caused by Leaking Tank: False  
Caused by Leaking Pipe: False  
Caused by Unknown: False  
Status Date: 1995-06-01 00:00:00  
Owner Name: BIA-Yankton Agency  
Owner Address: Unknown  
Owner City/State/Zip: Marty, SD 57361  
Owner County: Charles Mix

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MARTY INDIAN SCHOOL SHOP (BIA) (Continued)**

**1000423155**

Indian UST:  
Region: 8  
Tribe: Yankton  
Facility ID: 4090044  
Latitude: 42.991717000000001  
Longitude: -98.428049999999999  
Tank ID: 1  
Facility Status: Permanently Out of Use  
Fac. Description: Federal Non-Military  
Leak Detected: Evidence of Leak Detected  
Install Date: Not reported  
Date Closed: 1998-09-11  
Owner Name: BIA-Yankton Agency  
Owner Address: Unknown  
Owner City: Marty  
Owner State: SD  
Owner Zip: 57361  
overfill installed: False  
Spill installed: False  
Substance: Gasoline  
Tank Material: Asphalt Coated or Bare Steel  
Pipe Material: Bare Steel

Region: 8  
Tribe: Yankton  
Facility ID: 4090044  
Latitude: 42.991717000000001  
Longitude: -98.428049999999999  
Tank ID: 2  
Facility Status: Permanently Out of Use  
Fac. Description: Federal Non-Military  
Leak Detected: Evidence of Leak Detected  
Install Date: Not reported  
Date Closed: 1999-07-01  
Owner Name: BIA-Yankton Agency  
Owner Address: Unknown  
Owner City: Marty  
Owner State: SD  
Owner Zip: 57361  
overfill installed: False  
Spill installed: False  
Substance: Used Oil  
Tank Material: Asphalt Coated or Bare Steel  
Pipe Material: Bare Steel

6  
SSE  
1/8-1/4  
0.188 mi.  
992 ft.

**MARTY TRIBAL STORE**  
**P.O. BOX 248**  
**MARTY, SD 57361**

**INDIAN LUST** 1009391626  
**INDIAN UST** N/A

**Relative:**  
**Lower**

Indian LUST:  
Region: 8  
Facility ID: 4090045  
Tribe Name: Yankton  
Date Closed: Not reported  
Description: Commercial

**Actual:**  
**1443 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MARTY TRIBAL STORE (Continued)**

**1009391626**

Last Milestone: RBCA Tier 2 Assessment  
Latitude: 42.99165  
Longitude: -98.425233000000006  
Event ID: 219  
Facility Status: Confirmed Release  
Caused by Spill: False  
Caused by Overfill: False  
Caused by Leaking Tank: True  
Caused by Leaking Pipe: False  
Caused by Unknown: False  
Status Date: 1998-09-30 00:00:00  
Owner Name: Yankton Sioux Tribe  
Owner Address: Tribal Council  
Owner City/State/Zip: Marty, SD 57361  
Owner County: Charles Mix

Indian UST:  
Region: 8  
Tribe: Yankton  
Facility ID: 4090045  
Latitude: 42.99165  
Longitude: -98.425233000000006  
Tank ID: 3  
Facility Status: Permanently Out of Use  
Fac. Description: Commercial  
Leak Detected: Evidence of Leak Detected  
Install Date: Not reported  
Date Closed: 1998-09-14  
Owner Name: Yankton Sioux Tribe  
Owner Address: Tribal Council  
Owner City: Marty  
Owner State: SD  
Owner Zip: 57361  
overfill installed: False  
Spill installed: False  
Substance: Gasoline  
Tank Material: Not Listed  
Pipe Material: Not Listed

Region: 8  
Tribe: Yankton  
Facility ID: 4090045  
Latitude: 42.99165  
Longitude: -98.425233000000006  
Tank ID: 2  
Facility Status: Permanently Out of Use  
Fac. Description: Commercial  
Leak Detected: Evidence of Leak Detected  
Install Date: Not reported  
Date Closed: 1998-09-14  
Owner Name: Yankton Sioux Tribe  
Owner Address: Tribal Council  
Owner City: Marty  
Owner State: SD  
Owner Zip: 57361  
overfill installed: False  
Spill installed: False



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MARTY TRIBAL STORE (Continued)**

**1009391626**

Substance: Gasoline  
Tank Material: Not Listed  
Pipe Material: Not Listed  
  
Region: 8  
Tribe: Yankton  
Facility ID: 4090045  
Latitude: 42.99165  
Longitude: -98.425233000000006  
Tank ID: 1  
Facility Status: Permanently Out of Use  
Fac. Description: Commercial  
Leak Detected: Evidence of Leak Detected  
Install Date: Not reported  
Date Closed: 1998-09-14  
Owner Name: Yankton Sioux Tribe  
Owner Address: Tribal Council  
Owner City: Marty  
Owner State: SD  
Owner Zip: 57361  
overfill installed: False  
Spill installed: False  
Substance: Gasoline  
Tank Material: Not Listed  
Pipe Material: Not Listed

**A7**  
**SSW**  
**1/8-1/4**  
**0.193 mi.**  
**1020 ft.**

**FLOODED TANK**  
**TRIBAL BLDG LOCATED NEAR MOSQUITO CREEK**  
**MARTY, SD 57361**

**LUST** **S110494692**  
**N/A**

**Site 2 of 2 in cluster A**

**Relative:**  
**Lower**

**SD LUST:**  
Facility ID: 2010.097  
**Facility Status:** **NFA**  
Quantity Spilled or Released: 0  
Spill Category: Petroleum  
Material: Fuel Oil  
Source Type: UST  
Site Type: Other(See Case File)  
Date Reported: 06/12/2010  
Date Closed: 06/14/2010  
Responsible Party: Yankton Sioux Tribe  
Property Type: Other(See Case File)  
ATP Number: Not reported  
Lat/Long: 42.991514 / -98.427809  
R1: RL  
Regulated: False  
PRCF Number: Not reported  
Township: Not reported  
Range: Not reported  
Section: Not reported  
First Quarter Section: Not reported  
Acreage: 0  
Institutional Controls: Not reported  
Image: True  
Cause Type: Not reported  
Solidwaste: Not reported

**Actual:**  
**1442 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLOODED TANK (Continued)**

**S110494692**

Microroll: 276  
Site ID: 11684  
SD Dept of Agricultures Case Number: Not reported  
Decode For Fstatus: No Further Action

**8**  
**SSE**  
**1/8-1/4**  
**0.222 mi.**  
**1171 ft.**

**MARTY TRIBAL STORE - FEDERAL ID # R400044/45**  
**MARTY INDIAN SCHOOL**  
**MARTY, SD 57361**

**LUST** **S106774928**  
**N/A**

**Relative:**  
**Lower**

**SD LUST:**

Facility ID: 98.345  
**Facility Status:** **O**  
Quantity Spilled or Released: 0  
Spill Category: Petroleum  
Material: Gasoline  
Source Type: UST  
Site Type: Federal  
Date Reported: 11/10/1998  
Date Closed: Not reported  
Responsible Party: Bureau of Indian Affairs  
Property Type: Other(See Case File)  
ATP Number: Not reported  
Lat/Long: 42.991131 / -98.425216  
R1: MH  
Regulated: True  
PRCF Number: 3710  
Township: Not reported  
Range: Not reported  
Section: Not reported  
First Quarter Section: Not reported  
Acreage: 0  
Institutional Controls: Not reported  
Image: False  
Cause Type: Not reported  
Solidwaste: Not reported  
Microroll: Not reported  
Site ID: 5453  
SD Dept of Agricultures Case Number: Not reported  
Decode For Fstatus: Open

**Actual:**  
**1441 ft.**

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

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

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

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

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

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ***Federal Delisted NPL site list***

#### Delisted NPL: National Priority List Deletions

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

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

### ***Federal CERCLIS list***

#### FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/06/2016	Telephone: 703-603-8704
Date Made Active in Reports: 05/20/2016	Last EDR Contact: 04/08/2016
Number of Days to Update: 135	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

#### SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 08/01/2016
	Data Release Frequency: Quarterly

### ***Federal CERCLIS NFRAP site list***

#### SEMS-ARCHIVE: Superfund Enterprise Management System Archive

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 08/01/2016
	Data Release Frequency: Quarterly

### ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015	Source: EPA
Date Data Arrived at EDR: 03/02/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: 303-312-6149
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly

### ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: 303-312-6149
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: 303-312-6149
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly

### RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: 303-312-6149
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Varies

### ***Federal institutional controls / engineering controls registries***

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 05/16/2016
Number of Days to Update: 13	Next Scheduled EDR Contact: 08/29/2016
	Data Release Frequency: Varies

#### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 05/25/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 09/12/2016
	Data Release Frequency: Varies

#### US INST CONTROL: Sites with Institutional Controls

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

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 05/25/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 09/12/2016
	Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

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

Date of Government Version: 03/28/2016

Date Data Arrived at EDR: 03/30/2016

Date Made Active in Reports: 05/20/2016

Number of Days to Update: 51

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 03/30/2016

Next Scheduled EDR Contact: 07/11/2016

Data Release Frequency: Annually

## ***State- and tribal - equivalent CERCLIS***

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

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

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: Department of Environment & Natural Resources

Telephone: 605-773-3296

Last EDR Contact: 03/17/2016

Next Scheduled EDR Contact: 07/04/2016

Data Release Frequency: N/A

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

SWF/LF: Solid Waste Facilities

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

Date of Government Version: 01/04/2016

Date Data Arrived at EDR: 01/05/2016

Date Made Active in Reports: 03/01/2016

Number of Days to Update: 56

Source: Department of Environment and Natural Resources

Telephone: 605-773-3153

Last EDR Contact: 04/04/2016

Next Scheduled EDR Contact: 07/18/2016

Data Release Frequency: Semi-Annually

## ***State and tribal leaking storage tank lists***

LAST: Leaking Aboveground Storage Tanks

Leaking Aboveground Storage Tank Incident Reports.

Date of Government Version: 01/12/2016

Date Data Arrived at EDR: 01/14/2016

Date Made Active in Reports: 03/01/2016

Number of Days to Update: 47

Source: Department of Environment and Natural Resources

Telephone: 605 773-3296

Last EDR Contact: 04/13/2016

Next Scheduled EDR Contact: 07/25/2016

Data Release Frequency: Quarterly

LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. Please be aware that this is not a complete list of reported spills/release for the state of South Dakota.

Date of Government Version: 01/12/2016

Date Data Arrived at EDR: 01/14/2016

Date Made Active in Reports: 03/01/2016

Number of Days to Update: 47

Source: Department of Environment and Natural Resources

Telephone: 605-773-3296

Last EDR Contact: 04/13/2016

Next Scheduled EDR Contact: 07/25/2016

Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/20/2015	Source: EPA Region 6
Date Data Arrived at EDR: 10/30/2015	Telephone: 214-665-6597
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 04/29/2016
Number of Days to Update: 111	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Varies

### INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015	Source: EPA Region 7
Date Data Arrived at EDR: 04/28/2015	Telephone: 913-551-7003
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 04/29/2016
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Varies

### INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: 415-972-3372
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 04/27/2016
Number of Days to Update: 32	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Quarterly

### INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 04/29/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Quarterly

### INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015	Source: EPA, Region 5
Date Data Arrived at EDR: 11/13/2015	Telephone: 312-886-7439
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 04/27/2016
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Varies

### INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/24/2015	Source: EPA Region 4
Date Data Arrived at EDR: 12/01/2015	Telephone: 404-562-8677
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 04/26/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Semi-Annually

### INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015	Source: EPA Region 1
Date Data Arrived at EDR: 10/29/2015	Telephone: 617-918-1313
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 04/29/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015  
Date Data Arrived at EDR: 10/23/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 118

Source: EPA Region 8  
Telephone: 303-312-6271  
Last EDR Contact: 04/27/2016  
Next Scheduled EDR Contact: 08/08/2016  
Data Release Frequency: Quarterly

### ***State and tribal registered storage tank lists***

#### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010  
Date Data Arrived at EDR: 02/16/2010  
Date Made Active in Reports: 04/12/2010  
Number of Days to Update: 55

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 04/11/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Varies

#### UST: Underground Storage Tanks

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

Date of Government Version: 02/09/2016  
Date Data Arrived at EDR: 02/12/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 59

Source: Department of Environment and Natural Resources  
Telephone: 605-773-3296  
Last EDR Contact: 05/13/2016  
Next Scheduled EDR Contact: 08/22/2016  
Data Release Frequency: Varies

#### AST: Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 02/09/2016  
Date Data Arrived at EDR: 02/12/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 59

Source: Department of Environment & Natural Resources  
Telephone: 605-773-3296  
Last EDR Contact: 05/13/2016  
Next Scheduled EDR Contact: 08/22/2016  
Data Release Frequency: Varies

#### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/24/2015  
Date Data Arrived at EDR: 12/01/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 34

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 04/26/2016  
Next Scheduled EDR Contact: 08/08/2016  
Data Release Frequency: Semi-Annually

#### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015  
Date Data Arrived at EDR: 11/13/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 52

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 04/27/2016  
Next Scheduled EDR Contact: 08/08/2016  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/20/2015	Source: EPA Region 6
Date Data Arrived at EDR: 10/30/2015	Telephone: 214-665-7591
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 04/29/2016
Number of Days to Update: 111	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Semi-Annually

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 10/29/2015	Telephone: 617-918-1313
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 04/29/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Varies

### INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/13/2015	Source: EPA Region 8
Date Data Arrived at EDR: 10/23/2015	Telephone: 303-312-6137
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 04/29/2016
Number of Days to Update: 118	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Quarterly

### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 04/29/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Quarterly

### INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014	Source: EPA Region 9
Date Data Arrived at EDR: 02/13/2015	Telephone: 415-972-3368
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 04/27/2016
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Quarterly

### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 04/29/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal institutional control / engineering control registries***

### **INST CONTROL: List of Brownfields Sites**

Sites that have institutional controls in place.

Date of Government Version: 01/12/2016

Date Data Arrived at EDR: 01/14/2016

Date Made Active in Reports: 03/01/2016

Number of Days to Update: 47

Source: Department of Environment & Natural Resources

Telephone: 605-773-3296

Last EDR Contact: 04/13/2016

Next Scheduled EDR Contact: 07/25/2016

Data Release Frequency: Varies

## ***State and tribal voluntary cleanup sites***

### **INDIAN VCP R1: Voluntary Cleanup Priority Listing**

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015

Date Data Arrived at EDR: 09/29/2015

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1

Telephone: 617-918-1102

Last EDR Contact: 04/01/2016

Next Scheduled EDR Contact: 07/11/2016

Data Release Frequency: Varies

### **INDIAN VCP R7: Voluntary Cleanup Priority Listing**

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Date Data Arrived at EDR: 04/22/2008

Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7

Telephone: 913-551-7365

Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

## ***State and tribal Brownfields sites***

### **BROWNFIELDS: List of Brownfields Sites**

The concept of the South Dakota's Brownfields Program is to take contaminated or potentially contaminated, underdeveloped, unproductive property and convert it into productive real estate. Brownfield sites are defined as abandoned, idled or underused industrial or commercial properties where redevelopment is complicated by real or perceived environmental contamination.

Date of Government Version: 01/12/2016

Date Data Arrived at EDR: 01/14/2016

Date Made Active in Reports: 03/01/2016

Number of Days to Update: 47

Source: Department of Environment & Natural Resources

Telephone: 605-773-3296

Last EDR Contact: 04/13/2016

Next Scheduled EDR Contact: 07/25/2016

Data Release Frequency: Varies

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

#### **US BROWNFIELDS: A Listing of Brownfields Sites**

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2015

Date Data Arrived at EDR: 12/23/2015

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 202-566-2777

Last EDR Contact: 03/22/2016

Next Scheduled EDR Contact: 07/04/2016

Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Local Lists of Landfill / Solid Waste Disposal Sites***

### **SWRCY: Businesses that Accept Recyclables**

A listing of recycling facilities.

Date of Government Version: 01/05/2016

Date Data Arrived at EDR: 01/07/2016

Date Made Active in Reports: 03/01/2016

Number of Days to Update: 54

Source: Department of Environmental & Natural Resources

Telephone: 605-773-3153

Last EDR Contact: 04/08/2016

Next Scheduled EDR Contact: 07/18/2016

Data Release Frequency: Semi-Annually

### **INDIAN ODI: Report on the Status of Open Dumps on Indian Lands**

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998

Date Data Arrived at EDR: 12/03/2007

Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245

Last EDR Contact: 04/27/2016

Next Scheduled EDR Contact: 08/15/2016

Data Release Frequency: Varies

### **DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations**

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009

Date Data Arrived at EDR: 05/07/2009

Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9

Telephone: 415-947-4219

Last EDR Contact: 04/21/2016

Next Scheduled EDR Contact: 08/08/2016

Data Release Frequency: No Update Planned

### **ODI: Open Dump Inventory**

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

Date of Government Version: 06/30/1985

Date Data Arrived at EDR: 08/09/2004

Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346

Last EDR Contact: 06/09/2004

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

## ***Local Lists of Hazardous waste / Contaminated Sites***

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/17/2015

Date Data Arrived at EDR: 12/04/2015

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 76

Source: Drug Enforcement Administration

Telephone: 202-307-1000

Last EDR Contact: 03/01/2016

Next Scheduled EDR Contact: 06/13/2016

Data Release Frequency: No Update Planned

### **CDL: Clandestine Drug Labs**

A listing of clandestine drug lab site locations.

Date of Government Version: 01/12/2016

Date Data Arrived at EDR: 01/14/2016

Date Made Active in Reports: 03/01/2016

Number of Days to Update: 47

Source: Department of Environment & Natural Resources

Telephone: 605-773-3296

Last EDR Contact: 04/13/2016

Next Scheduled EDR Contact: 07/25/2016

Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/17/2015	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 12/04/2015	Telephone: 202-307-1000
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 05/31/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 09/12/2016
	Data Release Frequency: Quarterly

### Local Land Records

#### LIENS 2: CERCLA Lien Information

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 04/26/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 08/08/2016
	Data Release Frequency: Varies

### Records of Emergency Release Reports

#### HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 06/24/2015	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-366-4555
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 03/30/2016
Number of Days to Update: 68	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Annually

#### SPILLS: Spills

Spills and releases of regulated substances.

Date of Government Version: 01/12/2016	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 01/14/2016	Telephone: 605-773-3296
Date Made Active in Reports: 03/01/2016	Last EDR Contact: 04/13/2016
Number of Days to Update: 47	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: Quarterly

#### SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 11/02/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/15/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 71	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### Other Ascertainable Records

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: 303-312-6149
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Varies

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 03/11/2016
Number of Days to Update: 97	Next Scheduled EDR Contact: 06/20/2016
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

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

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/15/2016
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: Semi-Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/15/2016
Number of Days to Update: 339	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 05/20/2016
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/29/2016
	Data Release Frequency: Varies

### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/01/2015  
Date Data Arrived at EDR: 09/03/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 61

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 05/18/2016  
Next Scheduled EDR Contact: 08/29/2016  
Data Release Frequency: Quarterly

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 05/09/2016  
Next Scheduled EDR Contact: 08/22/2016  
Data Release Frequency: Quarterly

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013  
Date Data Arrived at EDR: 03/03/2015  
Date Made Active in Reports: 03/09/2015  
Number of Days to Update: 6

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 05/12/2016  
Next Scheduled EDR Contact: 08/22/2016  
Data Release Frequency: Varies

### TSCA: Toxic Substances Control Act

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

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 01/15/2015  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 14

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 03/24/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Every 4 Years

### TRIS: Toxic Chemical Release Inventory System

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

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 11/24/2015  
Date Made Active in Reports: 04/05/2016  
Number of Days to Update: 133

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 05/24/2016  
Next Scheduled EDR Contact: 09/05/2016  
Data Release Frequency: Annually

### SSTS: Section 7 Tracking Systems

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

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 12/10/2010  
Date Made Active in Reports: 02/25/2011  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 04/25/2016  
Next Scheduled EDR Contact: 08/08/2016  
Data Release Frequency: Annually

### ROD: Records Of Decision

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

Date of Government Version: 11/25/2013  
Date Data Arrived at EDR: 12/12/2013  
Date Made Active in Reports: 02/24/2014  
Number of Days to Update: 74

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 03/08/2016  
Next Scheduled EDR Contact: 06/20/2016  
Data Release Frequency: Annually

### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015  
Date Data Arrived at EDR: 08/26/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 69

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 04/25/2016  
Next Scheduled EDR Contact: 08/08/2016  
Data Release Frequency: Varies

### RAATS: RCRA Administrative Action Tracking System

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

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013  
Date Data Arrived at EDR: 10/17/2014  
Date Made Active in Reports: 10/20/2014  
Number of Days to Update: 3

Source: EPA  
Telephone: 202-564-6023  
Last EDR Contact: 05/12/2016  
Next Scheduled EDR Contact: 08/22/2016  
Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

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

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2014  
Date Data Arrived at EDR: 10/15/2014  
Date Made Active in Reports: 11/17/2014  
Number of Days to Update: 33

Source: EPA  
Telephone: 202-566-0500  
Last EDR Contact: 04/12/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Annually

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015  
Date Data Arrived at EDR: 02/06/2015  
Date Made Active in Reports: 03/09/2015  
Number of Days to Update: 31

Source: Environmental Protection Agency  
Telephone: 202-564-5088  
Last EDR Contact: 04/08/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Quarterly

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-566-1667  
Last EDR Contact: 05/20/2016  
Next Scheduled EDR Contact: 09/05/2016  
Data Release Frequency: Quarterly

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA  
Telephone: 202-566-1667  
Last EDR Contact: 05/20/2016  
Next Scheduled EDR Contact: 09/05/2016  
Data Release Frequency: Quarterly

### MLTS: Material Licensing Tracking System

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

Date of Government Version: 03/07/2016  
Date Data Arrived at EDR: 03/18/2016  
Date Made Active in Reports: 04/15/2016  
Number of Days to Update: 28

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169  
Last EDR Contact: 05/06/2016  
Next Scheduled EDR Contact: 08/22/2016  
Data Release Frequency: Quarterly

### COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 08/07/2009  
Date Made Active in Reports: 10/22/2009  
Number of Days to Update: 76

Source: Department of Energy  
Telephone: 202-586-8719  
Last EDR Contact: 04/15/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Varies

### COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 10/20/2014  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: N/A  
Last EDR Contact: 03/11/2016  
Next Scheduled EDR Contact: 06/20/2016  
Data Release Frequency: Varies

### PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011  
Date Data Arrived at EDR: 10/19/2011  
Date Made Active in Reports: 01/10/2012  
Number of Days to Update: 83

Source: Environmental Protection Agency  
Telephone: 202-566-0517  
Last EDR Contact: 04/26/2016  
Next Scheduled EDR Contact: 08/08/2016  
Data Release Frequency: Varies

### RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015  
Date Data Arrived at EDR: 07/09/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 69

Source: Environmental Protection Agency  
Telephone: 202-343-9775  
Last EDR Contact: 04/08/2016  
Next Scheduled EDR Contact: 07/18/2016  
Data Release Frequency: Quarterly

### HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2007  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

### HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

### DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012  
Date Data Arrived at EDR: 08/07/2012  
Date Made Active in Reports: 09/18/2012  
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 05/04/2016  
Next Scheduled EDR Contact: 08/15/2016  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### CONSENT: Superfund (CERCLA) Consent Decrees

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

Date of Government Version: 12/31/2014	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 04/17/2015	Telephone: Varies
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 03/24/2016
Number of Days to Update: 46	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Varies

### BRS: Biennial Reporting System

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

Date of Government Version: 12/31/2013	Source: EPA/NTIS
Date Data Arrived at EDR: 02/24/2015	Telephone: 800-424-9346
Date Made Active in Reports: 09/30/2015	Last EDR Contact: 05/27/2016
Number of Days to Update: 218	Next Scheduled EDR Contact: 09/05/2016
	Data Release Frequency: Biennially

### INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 12/08/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/15/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: Semi-Annually

### FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 11/23/2015	Source: Department of Energy
Date Data Arrived at EDR: 11/24/2015	Telephone: 202-586-3559
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 05/09/2016
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/22/2016
	Data Release Frequency: Varies

### UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010	Source: Department of Energy
Date Data Arrived at EDR: 10/07/2011	Telephone: 505-845-0011
Date Made Active in Reports: 03/01/2012	Last EDR Contact: 05/23/2016
Number of Days to Update: 146	Next Scheduled EDR Contact: 09/05/2016
	Data Release Frequency: Varies

### LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/26/2014	Telephone: 703-603-8787
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 04/07/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015  
Date Data Arrived at EDR: 10/27/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 69

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 03/24/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Annually

### US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015  
Date Data Arrived at EDR: 10/27/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 69

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 03/24/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Annually

### US MINES: Mines Master Index File

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

Date of Government Version: 02/09/2016  
Date Data Arrived at EDR: 03/02/2016  
Date Made Active in Reports: 04/15/2016  
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 03/02/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: Semi-Annually

### US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 03/04/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: Varies

### US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 03/04/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### FINDS: Facility Index System/Facility Registry System

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

Date of Government Version: 07/20/2015	Source: EPA
Date Data Arrived at EDR: 09/09/2015	Telephone: (303) 312-6312
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 03/08/2016
Number of Days to Update: 55	Next Scheduled EDR Contact: 06/20/2016
	Data Release Frequency: Quarterly

### DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 03/01/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 05/25/2016
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/12/2016
	Data Release Frequency: Varies

### UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015	Source: Department of Defense
Date Data Arrived at EDR: 01/29/2016	Telephone: 571-373-0407
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 04/18/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 07/04/2016
	Data Release Frequency: Varies

### AIRS: Air Emissions Listing

A listing of facilities with air emissions.

Date of Government Version: 01/04/2016	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 01/05/2016	Telephone: 605-773-4209
Date Made Active in Reports: 03/01/2016	Last EDR Contact: 04/04/2016
Number of Days to Update: 56	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

### COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 01/07/2014	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 01/09/2014	Telephone: 605-773-3153
Date Made Active in Reports: 02/12/2014	Last EDR Contact: 04/04/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

### DRYCLEANERS: Listing of Registered Drycleaners

A listing of registered drycleaner facility locations.

Date of Government Version: 01/04/2016	Source: Department of Environmental & Natural Resources
Date Data Arrived at EDR: 01/05/2016	Telephone: 605-773-3151
Date Made Active in Reports: 03/01/2016	Last EDR Contact: 04/04/2016
Number of Days to Update: 56	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Financial Assurance: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/18/2015  
Date Data Arrived at EDR: 12/23/2015  
Date Made Active in Reports: 03/01/2016  
Number of Days to Update: 69

Source: Department of Environment & Natural Resources  
Telephone: 605-773-3153  
Last EDR Contact: 04/04/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Varies

### NPDES: Wastewater Permit Listing

A listing of wastewater permit facility locations.

Date of Government Version: 12/21/2015  
Date Data Arrived at EDR: 12/22/2015  
Date Made Active in Reports: 03/01/2016  
Number of Days to Update: 70

Source: Department of Environment & Natural Resources  
Telephone: 605-773-3351  
Last EDR Contact: 03/23/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Varies

### UIC: Underground Injection Wells Listing

A listing of wells identified as underground injection wells, in the South Dakota Oil and Gas Wells data base.

Date of Government Version: 12/14/2015  
Date Data Arrived at EDR: 02/19/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 52

Source: Department of Environment & Natural Resources  
Telephone: 605-394-2229  
Last EDR Contact: 05/20/2016  
Next Scheduled EDR Contact: 08/29/2016  
Data Release Frequency: Varies

### ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015  
Date Data Arrived at EDR: 09/23/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 103

Source: Environmental Protection Agency  
Telephone: 202-564-2280  
Last EDR Contact: 03/23/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Quarterly

### FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2016  
Date Data Arrived at EDR: 02/24/2016  
Date Made Active in Reports: 05/20/2016  
Number of Days to Update: 86

Source: EPA  
Telephone: 800-385-6164  
Last EDR Contact: 05/25/2016  
Next Scheduled EDR Contact: 09/05/2016  
Data Release Frequency: Quarterly

## **EDR HIGH RISK HISTORICAL RECORDS**

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### EDR Hist Auto: EDR Exclusive Historic Gas Stations

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

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

### EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

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

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment & Natural Resources in South Dakota.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/17/2014  
Number of Days to Update: 200

Source: Department of Environment & Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment & Natural Resources in South Dakota.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/04/2014  
Number of Days to Update: 187

Source: Department of Environment & Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### OTHER DATABASE(S)

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

#### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/01/2016  
Date Data Arrived at EDR: 02/03/2016  
Date Made Active in Reports: 03/22/2016  
Number of Days to Update: 48

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 05/06/2016  
Next Scheduled EDR Contact: 08/15/2016  
Data Release Frequency: Annually

#### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 06/19/2015  
Date Made Active in Reports: 07/15/2015  
Number of Days to Update: 26

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 05/23/2016  
Next Scheduled EDR Contact: 09/05/2016  
Data Release Frequency: Annually

#### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 03/19/2015  
Date Made Active in Reports: 04/07/2015  
Number of Days to Update: 19

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 03/14/2016  
Next Scheduled EDR Contact: 06/27/2016  
Data Release Frequency: Annually

#### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

#### Electric Power Transmission Line Data

Source: PennWell Corporation

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

#### AHA Hospitals:

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

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

#### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

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

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

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

### Daycare Centers: Child Care Facility List

Source: Department of Social Services

Telephone: 605-773-4766

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetlands Inventory

Source: Bureau of Information & Telecommunications

Telephone: 605-773-4750

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

YST - OLD TRIBAL HALL  
MARTY, SD  
LAKE ANDES, SD 57356

### **TARGET PROPERTY COORDINATES**

Latitude (North):	42.994175 - 42° 59' 39.03"
Longitude (West):	98.426622 - 98° 25' 35.84"
Universal Transverse Mercator:	Zone 14
UTM X (Meters):	546740.9
UTM Y (Meters):	4760112.5
Elevation:	1447 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	5645772 MARTY, SD
Version Date:	2012
North Map:	5647519 WAGNER SW, SD
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

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

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

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW DIRECTION INFORMATION

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

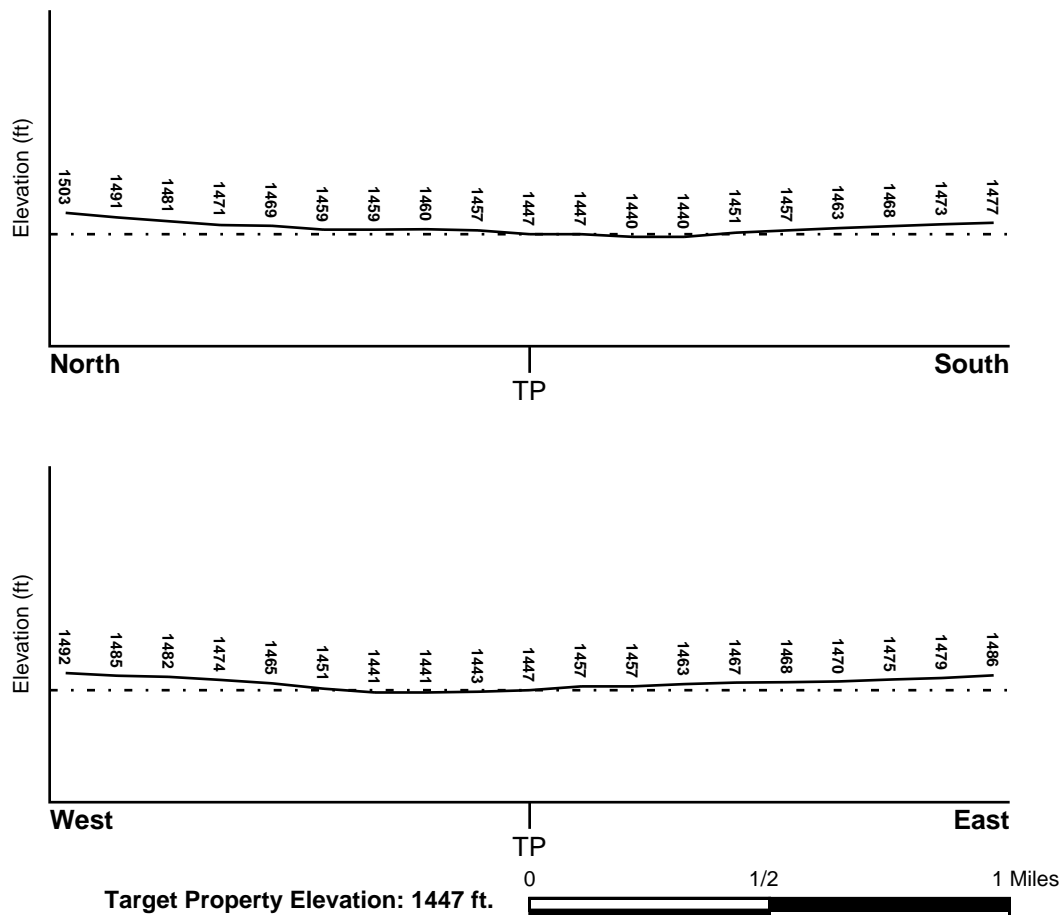
### TOPOGRAPHIC INFORMATION

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

### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



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

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### HYDROLOGIC INFORMATION

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

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

### FEMA FLOOD ZONE

Target Property County  
CHARLES MIX, SD

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

Flood Plain Panel at Target Property:

46023C - FEMA DFIRM Flood data

Additional Panels in search area:

Not Reported

### NATIONAL WETLAND INVENTORY

NWI Quad at Target Property  
MARTY

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

### HYDROGEOLOGIC INFORMATION

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

### AQUIFLOW®

Search Radius: 1.000 Mile.

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

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

## **GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

### **GROUNDWATER FLOW VELOCITY INFORMATION**

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

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

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

#### **ROCK STRATIGRAPHIC UNIT**

Era:	Mesozoic
System:	Cretaceous
Series:	Taylor Group
Code:	uK3 ( <i>decoded above as Era, System &amp; Series</i> )

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

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

The diagram illustrates a central green five-pointed star. Two concentric black circles are centered on the star. The annular region between these two circles is partitioned into six distinct regions by magenta lines. These regions are labeled with numbers 1 through 6 in a magenta font. Region 1 is at the bottom, region 2 is on the right, region 3 is at the top, region 4 is on the right side, region 5 is on the left side, and region 6 is at the top. A cyan line segment is visible on the left side, extending from the outer circle towards the bottom left corner.

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## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

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

#### Soil Map ID: 1

Soil Component Name: AGAR

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	5 inches	18 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.8 Min: 6.6
3	18 inches	38 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
4	38 inches	59 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 9 Min: 7.4

#### Soil Map ID: 2

Soil Component Name: EAKIN

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	7 inches	29 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 6.6
3	29 inches	59 inches	clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 9 Min: 7.4

### Soil Map ID: 3

Soil Component Name: AGAR

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	5 inches	18 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.8 Min: 6.6
3	18 inches	38 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
4	38 inches	59 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 9 Min: 7.4

### Soil Map ID: 4

Soil Component Name: HIGHMORE

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	7 inches	18 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.8 Min: 6.6
3	18 inches	48 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
4	48 inches	59 inches	clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 5

Soil Component Name: BON

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 6.6
2	22 inches	59 inches	stratified fine sandy loam to silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 8.4 Min: 7.4

### Soil Map ID: 6

Soil Component Name: MOBRIDGE

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 130 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	11 inches	22 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.8 Min: 6.1
3	22 inches	59 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS40001065669	0 - 1/8 Mile West
2	USGS40001065719	1/8 - 1/4 Mile NW
A3	USGS40001065640	1/8 - 1/4 Mile SSW
A4	USGS40001065632	1/8 - 1/4 Mile SSW
5	USGS40001065783	1/8 - 1/4 Mile NNW
18	USGS40001065623	1/4 - 1/2 Mile SW
19	USGS40001065659	1/4 - 1/2 Mile West
20	USGS40001065597	1/4 - 1/2 Mile South
21	USGS40001065701	1/4 - 1/2 Mile West
22	USGS40001065650	1/4 - 1/2 Mile WSW
C23	USGS40001065672	1/4 - 1/2 Mile West
C24	USGS40001065673	1/4 - 1/2 Mile West
26	USGS40001065784	1/2 - 1 Mile WNW
27	USGS40001065895	1/2 - 1 Mile NW

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

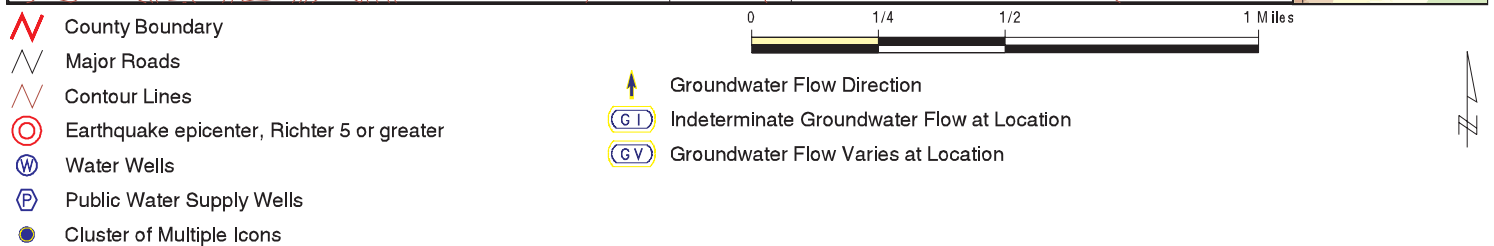
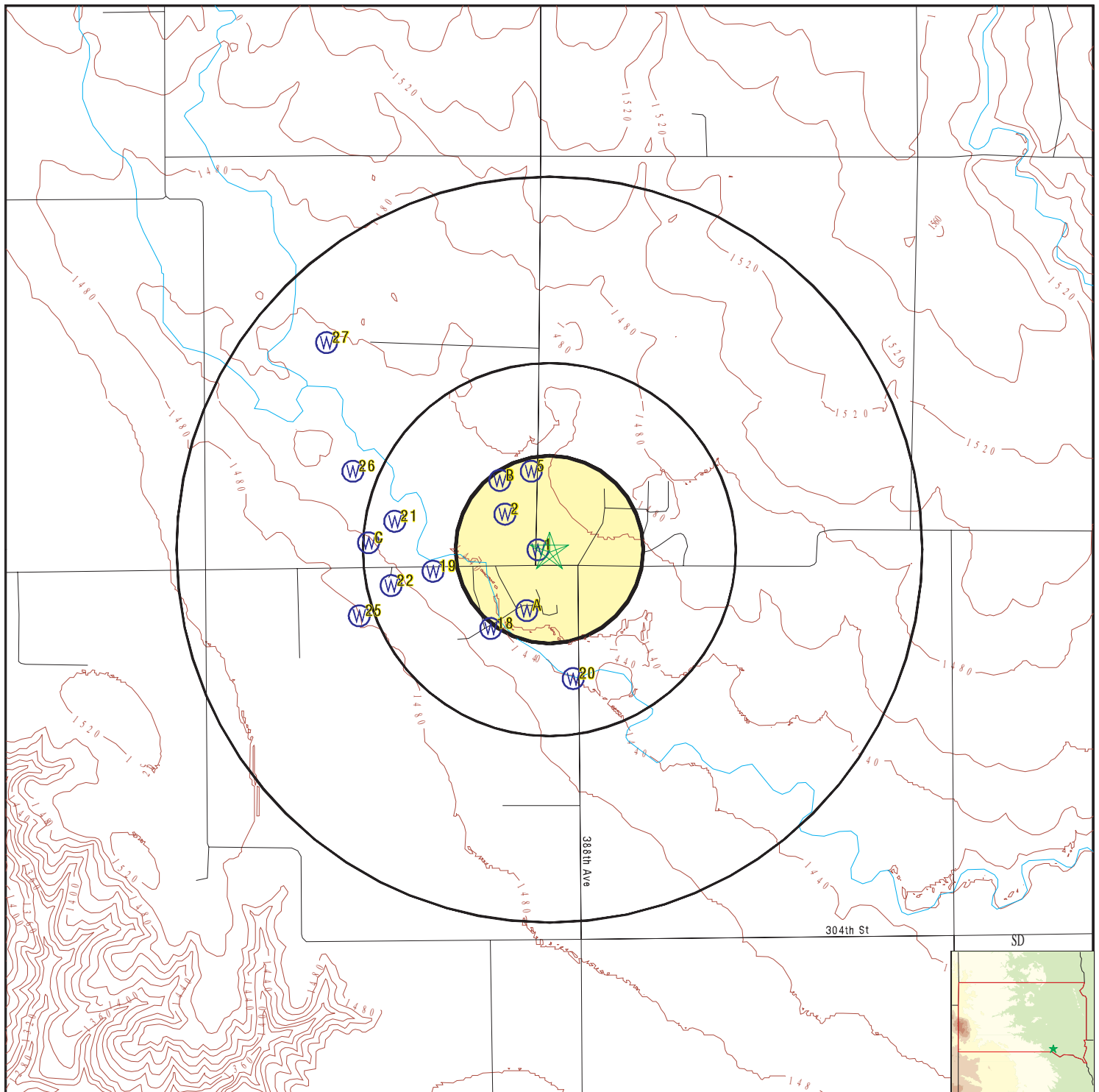
MAP ID	WELL ID	LOCATION FROM TP
<u>No PWS System Found</u>		

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

### STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B6	SD1000000030921	1/8 - 1/4 Mile NW
B7	SD1000000030920	1/8 - 1/4 Mile NW
B8	SD1000000030919	1/8 - 1/4 Mile NW
B9	SD1000000030924	1/8 - 1/4 Mile NW
B10	SD1000000030923	1/8 - 1/4 Mile NW
B11	SD1000000030922	1/8 - 1/4 Mile NW
B12	SD1000000030918	1/8 - 1/4 Mile NW
B13	SD1000000030914	1/8 - 1/4 Mile NW
B14	SD1000000030913	1/8 - 1/4 Mile NW
B15	SD1000000030915	1/8 - 1/4 Mile NW
B16	SD1000000030917	1/8 - 1/4 Mile NW
B17	SD1000000030916	1/8 - 1/4 Mile NW
25	SD1000000049945	1/2 - 1 Mile WSW

# PHYSICAL SETTING SOURCE MAP - 4636056.2s



SITE NAME: YST - Old Tribal Hall  
 ADDRESS: Marty, SD  
 Lake Andes SD 57356  
 LAT/LONG: 42.994175 / 98.426622

CLIENT: Weston Solutions, Inc.  
 CONTACT: Greg Geras  
 INQUIRY #: 4636056.2s  
 DATE: June 02, 2016 5:25 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**1**  
**West**  
**0 - 1/8 Mile**  
**Lower**

**FED USGS USGS40001065669**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425939098253801		
Monloc name:	94N64W 5AAC		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9941667
Longitude:	-98.4272222	Sourcemap scale:	24000
Horiz Acc measure:	3	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	1450
Vert measure units:	feet	Vertacc measure val:	15
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**2**  
**NW**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS USGS40001065719**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425944098254301		
Monloc name:	95N64W32DD		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9955509
Longitude:	-98.4289699	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1450
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Upper Cretaceous aquifers		
Formation type:	Codell Sandstone Member of Carlile Shale		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type: Not Reported  
Construction date: 19731107  
Welldepth units: ft  
Wellholeddepth units: ft  
Welldepth: 297  
Wellholeddepth: 297

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1983-11-07	218.5		1983-11-07	218.5	

**A3**  
**SSW**  
**1/8 - 1/4 Mile**  
**Lower**

**FED USGS USGS40001065640**

Org. Identifier: USGS-SD  
Formal name: USGS South Dakota Water Science Center  
Monloc Identifier: USGS-425931098254201  
Monloc name: 94N64W 5AACA  
Monloc type: Well  
Monloc desc: Not Reported  
Huc code: 10170101  
Drainagearea Units: Not Reported  
Contrib drainagearea units: Not Reported  
Longitude: -98.4283333  
Horiz Acc measure: 3  
Horiz Collection method: Global positioning system (GPS), uncorrected  
Horiz coord refsys: NAD83  
Vert measure units: feet  
Vert accmeasure units: feet  
Vertcollection method: Interpolated from topographic map  
Vert coord refsys: NGVD29  
Aquifername: Not Reported  
Formation type: Not Reported  
Aquifer type: Not Reported  
Construction date: Not Reported  
Welldepth units: Not Reported  
Wellholeddepth units: Not Reported  
Drainagearea value: Not Reported  
Contrib drainagearea: Not Reported  
Latitude: 42.9919444  
Sourcemap scale: 24000  
Horiz Acc measure units: seconds  
Vert measure val: 1450  
Vertacc measure val: 15  
Countrycode: US  
Welldepth: Not Reported  
Wellholeddepth: Not Reported

Ground-water levels, Number of Measurements: 0

**A4**  
**SSW**  
**1/8 - 1/4 Mile**  
**Lower**

**FED USGS USGS40001065632**

Org. Identifier: USGS-SD  
Formal name: USGS South Dakota Water Science Center  
Monloc Identifier: USGS-425930098253701  
Monloc name: 94N64W 4BCB  
Monloc type: Well: Test hole not completed as a well  
Monloc desc: Not Reported  
Huc code: 10170101  
Drainagearea Units: Not Reported  
Contrib drainagearea units: Not Reported  
Longitude: -98.4273032  
Drainagearea value: Not Reported  
Contrib drainagearea: Not Reported  
Latitude: 42.9916621  
Sourcemap scale: Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1435
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19680709	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	57
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1968-07-09	7	

**5**

**NNW**

**1/8 - 1/4 Mile**

**Higher**

**FED USGS**

**USGS40001065783**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425950098253801		
Monloc name:	95N64W32DDAA		
Monloc type:	Well: Test hole not completed as a well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9972175
Longitude:	-98.427581	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1450
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	19690717	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	94
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

**B6**

**NW**

**1/8 - 1/4 Mile**

**Higher**

**SD WELLS**

**SD1000000030921**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	30920	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	13-JUL-99
Well type:	MW	Depth:	15.5
Permit no:	Not Reported	Mw name:	MW-9
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030921

### B7 NW 1/8 - 1/4 Mile Higher

SD WELLS SD1000000030920

Fid:	30919	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	13-JUL-99
Well type:	MW	Depth:	20
Permit no:	Not Reported	Mw name:	MW-8
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030920

### B8 NW 1/8 - 1/4 Mile Higher

SD WELLS SD1000000030919

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	30918	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	14-JUL-99
Well type:	MW	Depth:	18
Permit no:	Not Reported	Mw name:	MW-7
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030919

### B9 NW 1/8 - 1/4 Mile Higher

SD WELLS SD1000000030924

Fid:	30923	Driller no:	575
Date recei:	19991103	Business:	YANKTON S.T. (MARTY INDIAN SCH.-STORE
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	30-JUN-99
Well type:	MW	Depth:	16
Permit no:	Not Reported	Mw name:	MW-7
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039985.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030924

### B10 NW 1/8 - 1/4 Mile Higher

SD WELLS SD1000000030923

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	30922	Driller no:	575
Date recei:	19991103	Business:	YANKTON S.T. (MARTY INDIAN SCH.-STORE
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	30-JUN-99
Well type:	MW	Depth:	16
Permit no:	Not Reported	Mw name:	MW-6
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039985.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030923

**B11**  
**NW**  
**1/8 - 1/4 Mile**  
**Higher**

**SD WELLS SD1000000030922**

Fid:	30921	Driller no:	575
Date recei:	19991103	Business:	YANKTON S.T. (MARTY INDIAN SCH.-STORE
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	29-JUN-99
Well type:	MW	Depth:	16
Permit no:	Not Reported	Mw name:	MW-3
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039985.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030922

**B12**  
**NW**  
**1/8 - 1/4 Mile**  
**Higher**

**SD WELLS SD1000000030918**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	30917	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	13-JUL-99
Well type:	MW	Depth:	20
Permit no:	Not Reported	Mw name:	MW-6
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030918

**B13**  
**NW**  
**1/8 - 1/4 Mile**  
**Higher**

**SD WELLS SD1000000030914**

Fid:	30913	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	13-JUL-99
Well type:	MW	Depth:	15
Permit no:	Not Reported	Mw name:	MW-2
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030914

**B14**  
**NW**  
**1/8 - 1/4 Mile**  
**Higher**

**SD WELLS SD1000000030913**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	30912	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	12-JUL-99
Well type:	MW	Depth:	17
Permit no:	Not Reported	Mw name:	MW-1
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030913

### B15 NW 1/8 - 1/4 Mile Higher

SD WELLS SD1000000030915

Fid:	30914	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	13-JUL-99
Well type:	MW	Depth:	15
Permit no:	Not Reported	Mw name:	MW-3
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030915

### B16 NW 1/8 - 1/4 Mile Higher

SD WELLS SD1000000030917

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	30916	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	14-JUL-99
Well type:	MW	Depth:	20.5
Permit no:	Not Reported	Mw name:	MW-5
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030917

**B17  
NW  
1/8 - 1/4 Mile  
Higher**

**SD WELLS SD1000000030916**

Fid:	30915	Driller no:	575
Date recei:	19991103	Business:	YANKTON SIOUX TRIBE (MARTY INDIAN SCH
Last name:	STONE	First name:	Mr. JAMES
Sndown:	Not Reported	Sndown:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	NENE	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	12-JUL-99
Well type:	MW	Depth:	20
Permit no:	Not Reported	Mw name:	MW-4
No wells:	1		
Published:	Not Reported		
Date enter:	19991103	Image:	00039986.pdf
Latitude:	42.996864		
Longitude:	-98.429243		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000030916

**18  
SW  
1/4 - 1/2 Mile  
Lower**

**FED USGS USGS40001065623**



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425928098254701		
Monloc name:	94N64W 5AACB		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9911111
Longitude:	-98.4297222	Sourcemap scale:	24000
Horiz Acc measure:	3	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**19**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS USGS40001065659**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425936098255801		
Monloc name:	94N64W 5AAB		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9933333
Longitude:	-98.4327778	Sourcemap scale:	24000
Horiz Acc measure:	3	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	15
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**20**  
**South**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS USGS40001065597**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425921098253001		
Monloc name:	94N64W 4BCCA		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9891621
Longitude:	-98.4253588	Sourcemap scale:	Not Reported
Horiz Acc measure:	10	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	1435
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	19890522	Welldepth:	25
Welldepth units:	ft	Wellholedepth:	25
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

**21**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS USGS40001065701**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425943098260401		
Monloc name:	94N64W 5ABA		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9952732
Longitude:	-98.4348033	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	NGVD29	Countrycode:	US
Aquifername:	Upper Cretaceous aquifers		
Formation type:	Codell Sandstone Member of Carlile Shale		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	365
Construction date:	Not Reported	Wellholeddepth:	Not Reported
Welldepth units:	ft		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**22**  
**WSW**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS USGS40001065650**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425934098260601		
Monloc name:	94N64W 5BA		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9927778
Longitude:	-98.435	Sourcemap scale:	24000
Horiz Acc measure:	3	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**C23**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS USGS40001065672**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425940098260901		
Monloc name:	94N64W 5AB		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9944398
Longitude:	-98.4361923	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Lower Cretaceous aquifers		
Formation type:	Dakota Sandstone or Formation		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	994
Construction date:	19400500	Wellholeddepth:	994
Welldepth units:	ft		
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1952	-9.5	

**C24**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS USGS40001065673**

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425940098260902		
Monloc name:	94N64W 5AB2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9944398
Longitude:	-98.4361923	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Reported		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Upper Cretaceous aquifers		
Formation type:	Codell Sandstone Member of Carlile Shale		
Aquifer type:	Not Reported		
Construction date:	19530000	Welldepth:	365
Welldepth units:	ft	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**25**  
**WSW**  
**1/2 - 1 Mile**  
**Higher**

**SD WELLS SD1000000049945**

Fid:	49944	Driller no:	0
Date recei:	Not Reported	Business:	ST. PAUL'S MISSION
Last name:	Not Reported	First name:	Not Reported
Sndownln:	Not Reported	Sndownfn:	Not Reported
Card:	Not Reported	Row :	Not Reported
No :	Not Reported	County:	CM
Qsec:	Not Reported	Section:	5
Township:	94	N s:	N
Range :	64	E w:	W
R :	Not Reported	Well compl:	01-MAY-40

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well type:	DOM	Depth:	994
Permit no:	Not Reported	Mw name:	REFERENCE TO BARKLEY
No wells:	1		
Published:	Not Reported		
Date enter:	20020502	Image:	00014893.pdf
Latitude:	42.9916		
Longitude:	-98.436683		
LI scale:	Not Reported		
LI source:	Not Reported		
Methodcode:	TRSOTH100	Reference :	WELL SITE
Accuracy:	0	Site id:	SD1000000049945

26  
WNW  
1/2 - 1 Mile  
Higher

FED USGS USGS40001065784

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-425950098261201		
Monloc name:	95N64W32DCBC		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.9972176
Longitude:	-98.4370256	Sourcemap scale:	Not Reported
Horiz Acc measure:	10	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsyst:	NAD83	Vert measure val:	1456
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsyst:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	19890523	Welldepth:	23
Welldepth units:	ft	Wellholedepth:	23
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

27  
NW  
1/2 - 1 Mile  
Higher

FED USGS USGS40001065895

Org. Identifier:	USGS-SD		
Formal name:	USGS South Dakota Water Science Center		
Monloc Identifier:	USGS-430008098261701		
Monloc name:	95N64W32		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10170101	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	43.0022175
Longitude:	-98.4384145	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	10	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsyz:	NAD83	Vert measure val:	1461
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsyz:	NGVD29	Countrycode:	US
Aquifername:	Upper Cretaceous aquifers		
Formation type:	Codell Sandstone Member of Carlile Shale		
Aquifer type:	Not Reported		
Construction date:	19731107	Welldepth:	335
Welldepth units:	ft	Wellholedepth:	335
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel		Date	Feet below Surface	Feet to Sealevel
1973-11-07	252			1973-11-07	252	

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: SD Radon

### Radon Test Results

City	Rm Used	Rm Level	Captured	Measured	Result
Lake Andes	Living Room	First Floor	01/14/93	01/01/93	6
Platte		Basement	07/17/92	07/21/92	1
Lake Andes	Classroom	Basement	11/30/93	12/09/93	5.5
Lake Andes	Lounge	Basement	12/03/93	12/09/93	1.9
Lake Andes	Lounge	Basement	12/03/93	12/09/93	3.8
Lake Andes	Classroom	Basement	12/03/93	12/09/93	3.9
Platte	Classroom	First Floor	12/12/93	12/17/93	0.8
Platte	Classroom	First Floor	12/12/93	12/17/93	1.4
Platte	Classroom	First Floor	12/12/93	12/17/93	1.6
Platte	Classroom	Basement	12/12/93	12/17/93	1.8
Platte	Classroom	First Floor	12/12/93	12/17/93	1.9
Platte	Classroom	Basement	12/12/93	12/17/93	2
Platte	Classroom	First Floor	12/12/93	12/17/93	2.5
Platte	Classroom	First Floor	12/12/93	12/17/93	2.6
Platte	Library	Basement	12/12/93	12/17/93	2.8
Platte	Classroom	First Floor	12/12/93	12/17/93	3
Platte	Classroom	First Floor	12/12/93	12/17/93	3.2
Platte	Classroom	First Floor	12/12/93	12/17/93	6.5
Platte	Office	Basement	02/11/93	02/17/93	18.3
Lake Andes	Laundry	Basement	10/01/93	10/06/93	10.2
Geddes	Band Room	First Floor	02/09/94	02/11/94	2
Geddes	Furnace Room	Basement	02/09/94	02/11/94	2
Geddes	Furnace Room	Basement	02/09/94	02/11/94	2.3
Geddes	Band Room	First Floor	02/09/94	02/11/94	2.3
Geddes	Ag Shop	First Floor	02/09/94	02/11/94	3
Geddes	Supplies	Basement	02/09/94	02/11/94	3.3
Geddes	Supply Room	Basement	02/09/94	02/11/94	3.3
Geddes	Ag Shop	First Floor	02/09/94	02/11/94	3.4
Platte	Offices	Basement	01/03/94	01/11/94	3.1
Platte	Offices	Basement	01/03/94	01/11/94	3.3
Wagner	Theater	4' below ground	01/03/94	01/11/94	0.8
Wagner	Classroom	4' below ground	01/03/94	01/11/94	0.9
Wagner	Music	4' below ground	01/03/94	01/11/94	1
Wagner	Music	4' below ground	01/03/94	01/11/94	1.2
Wagner	Classroom	Kindergarten	01/03/94	01/11/94	1.6
Wagner	Living Room	First Floor	01/11/96	01/13/96	3.6
Wagner	Unfinished	Basement	01/11/96	01/13/96	7.7
Wagner	Laundry	Basement	06/20/96	06/25/96	11.5
Wagner		Basement	10/25/94	10/27/94	3.1
Geddes		Basement	01/31/95	02/02/95	10
Platte	Living Room	1st Floor	04/10/06	04/12/06	4.8
Wagner	Living Room	Living Room	05/04/08	05/07/08	1.5

## **GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON**

### **AREA RADON INFORMATION**

Federal EPA Radon Zone for CHARLES MIX County: 1

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 57356

Number of sites tested: 6

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	7.033 pCi/L	50%	50%	0%



# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetlands Inventory

Source: Bureau of Information & Telecommunications

Telephone: 605-773-4750

## HYDROGEOLOGIC INFORMATION

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

Source: EDR proprietary database of groundwater flow information

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

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

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

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

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

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

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

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

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

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

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

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

### STATE RECORDS

#### South Dakota Public Water Systems

Source: Department of Environmental and Natural Resources

Telephone: 605-773-3153

## OTHER STATE DATABASE INFORMATION

#### Oil and Gas Wells Listing

Department of Environment and Natural Resources

A listing of oil and gas well locations in the state.

### RADON

#### State Database: SD Radon

Source: Department of Environment & Natural Resources

Telephone: 605-773-3151

Radon Test Results

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

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

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

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

### OTHER

#### Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STREET AND ADDRESS INFORMATION

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**APPENDIX C**  
**THE EDR AERIAL PHOTO DECADE REPORT**

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YST - Old Tribal Hall

Marty, SD

Lake Andes, SD 57356

Inquiry Number: 4636056.5

June 06, 2016

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## EDR Aerial Photo Decade Package

06/06/16

**Site Name:**

YST - Old Tribal Hall  
Marty, SD  
Lake Andes, SD 57356  
EDR Inquiry # 4636056.5

**Client Name:**

Weston Solutions, Inc.  
1435 Garrison St Suite 100  
Lakewood, CO 80215  
Contact: Greg Geras



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

### Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=750'	Flight Date: May, 03 1998	USGS
1994	1"=750'	Flight Date: March, 22 1994	USGS
1991	1"=500'	Acquisition Date: March, 22 1994	USGS/DOQQ
1988	1"=750'	Flight Date: June, 21 1988	USGS
1984	1"=1000'	Flight Date: June, 02 1984	USGS
1962	1"=500'	Flight Date: April, 24 1962	USGS

**When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.**

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INQUIRY #: 4636056.5

YEAR: 2012

— = 500'







INQUIRY #: 4636056.5

YEAR: 2010

— = 500'







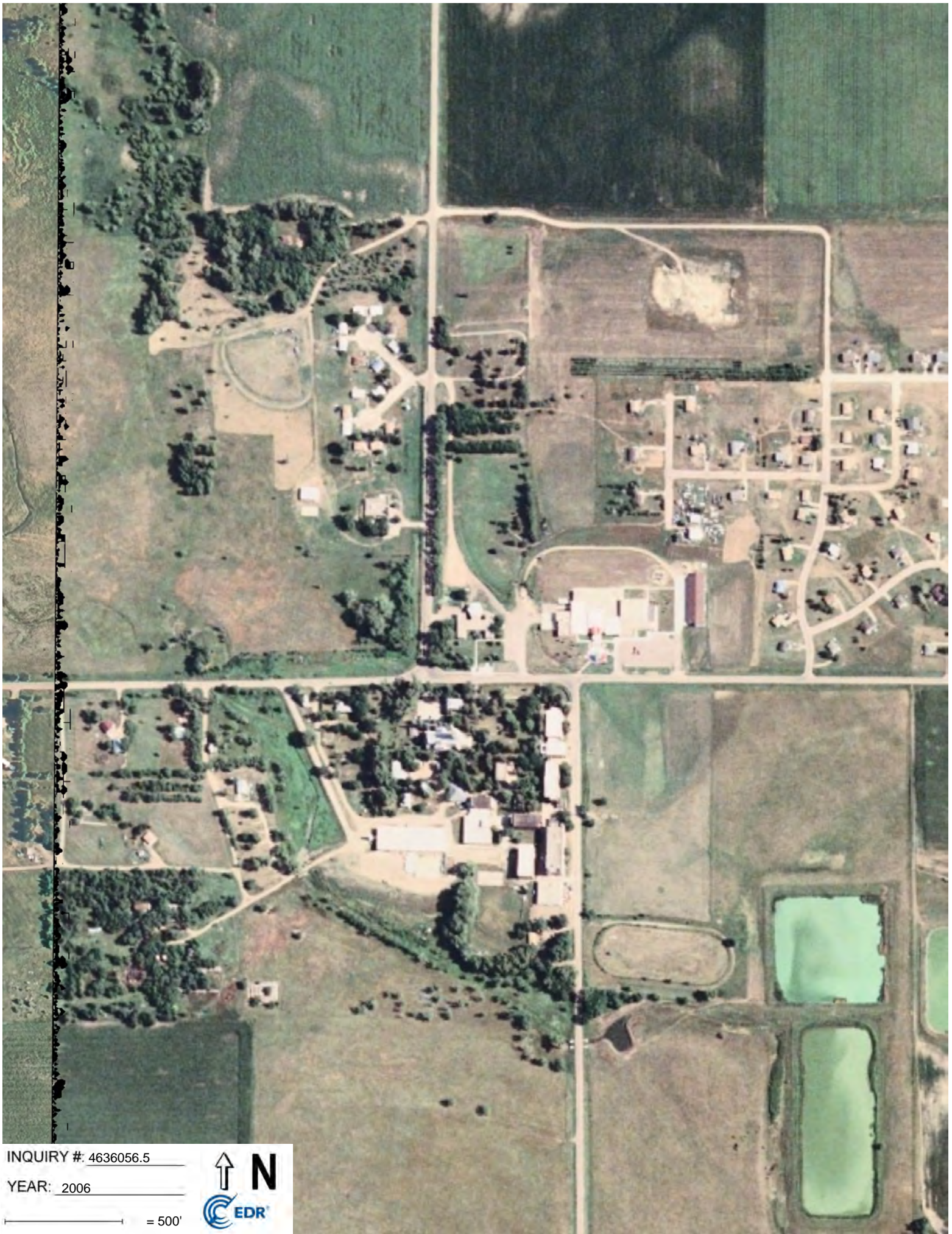
INQUIRY #: 4636056.5

YEAR: 2008

— = 500'







INQUIRY #: 4636056.5

YEAR: 2006

— = 500'







INQUIRY #: 4636056.5

YEAR: 2005

— = 500'





INQUIRY #: 4636056.5

YEAR: 1998

— = 750'







INQUIRY #: 4636056.5

YEAR: 1994

— = 750'





INQUIRY #: 4636056.5

YEAR: 1991

— = 500'





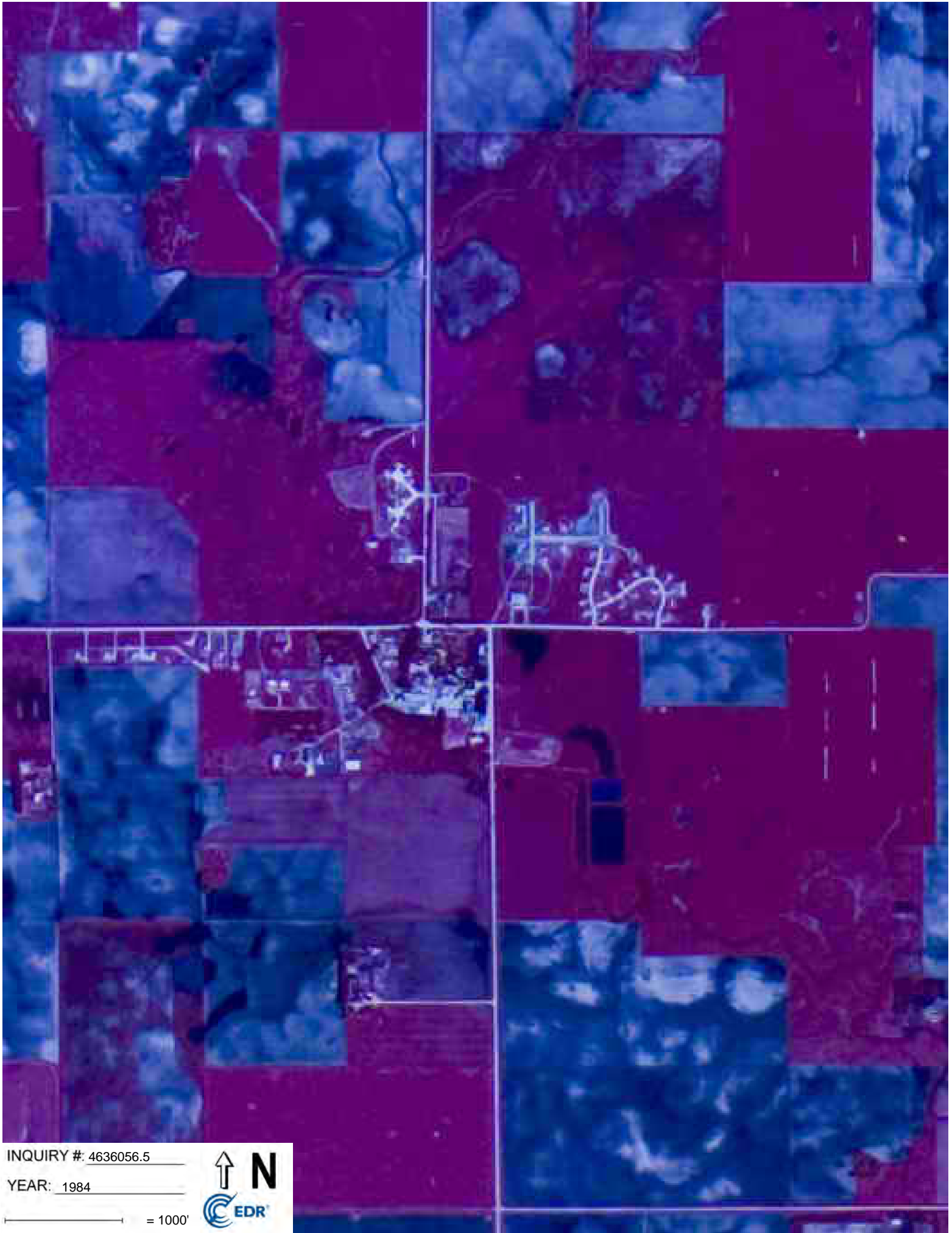


INQUIRY #: 4636056.5

YEAR: 1988

— = 750'





INQUIRY #: 4636056.5

YEAR: 1984

— = 1000'







INQUIRY #: 4636056.5

YEAR: 1962

— = 500'



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**APPENDIX D**  
**CERTIFIED SANBORN MAP REPORT**

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YST - Old Tribal Hall

Marty, SD

Lake Andes, SD 57356

Inquiry Number: 4636056.3

June 02, 2016

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

06/02/16

**Site Name:**

YST - Old Tribal Hall  
Marty, SD  
Lake Andes, SD 57356  
EDR Inquiry # 4636056.3

**Client Name:**

Weston Solutions, Inc.  
1435 Garrison St Suite 100  
Lakewood, CO 80215  
Contact: Greg Geras



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Weston Solutions, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** C098-4551-ABA3  
**PO #** 20408.016.003.0361.00  
**Project** YST - Old Tribal Hall

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: C098-4551-ABA3

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☒ Library of Congress
- ☒ University Publications of America
- ☒ EDR Private Collection

*The Sanborn Library LLC Since 1866™*

## Limited Permission To Make Copies

Weston Solutions, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

### Disclaimer - Copyright and Trademark Notice

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**APPENDIX E**  
**SUPPLEMENTARY INFORMATION**

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## Phase I Environmental Site Assessment Interview Questionnaire

Project Information (To be completed by START personnel)	
Environmental Assessor:	Elliott Petri, PE
Environmental Assessor's E-mail:	<a href="mailto:Elliott.Petri@westonsolutions.com">Elliott.Petri@westonsolutions.com</a>
Environmental Assessor's Phone Number:	303-729-6156
TDD Number/Project Number:	0003/1605-17
Property Name:	Former YST Admin Building
Property Address(es):	388 <sup>th</sup> Avenue / 100 Main St. Marty, SD
County Tax Assessor Parcel Number(s):	Unknown

We thank you for your time in completing this questionnaire. **Please answer all questions to the best of your knowledge** and provide additional information where applicable. When complete, please scan and e-mail the questionnaire to the Environmental Assessor as noted above or send via fax to (303) 729 - 6101 to the attention of the Environmental Assessor. Please contact the Environmental Assessor if you have any questions.

### I. PREPARER/INTERVIEWEE INFORMATION

Preparer/Interviewee	
Date Questionnaire Completed:	6/6/2016
Full Name:	Sister Miriam
Company/Title:	Religious Community - Oblate Sisters
Years (Dates) of Employment:	52 Years
What is your affiliation with the property:	Superior –before current owners
How long have you been affiliated with the property (include date):	1950 - 82
Phone Number/E-mail:	605-384-3305

### II. PROPERTY INFORMATION

Original Development	
When was the property originally developed:	1958
What was the original purpose or use of the property:	Novitant – Training Sisters into the community

Original Development	
Current Ownership and Operations	
Current Property Owner:	Yankton Sioux Tribe
Date of Purchase:	1982
Size of Property:	~ 4 - 7 Acres
Property Zoning:	Unknown
Number of Employees:	Community building – 0
Number of Tenants:	16
Do any sensitive environments exist on the property (i.e., wetlands or threatened species habitat)?	Lots of wetlands nearby, flooded out many times.
Current Operations:	Vacant

Past Ownership and Operations	
Previous Property Owner:	Oblate Sisters – Catholic Church
Years of Operation:	1958-1982
Previous Use/Operations:	Vacant Land

Past Ownership and Operations	
Previous Property Owner:	Unknown
Years of Operation:	Pre 1958



Past Ownership and Operations	
Previous Use/Operations:	Open Land

### III. PROPERTY IMPROVEMENTS

Description of Building(s)				Not Applicable	
<input type="checkbox"/> Are building(s) present on the property?				<b>Yes</b> <input checked="" type="checkbox"/>	<b>No</b> <input type="checkbox"/>
If the property is currently vacant, please describe former buildings on the property, if applicable:		Not Vacant			
Number and type of building(s) associated with property (If multiple buildings, please detail in table below):		1 – Community Building			
Have any additions or major renovations been made to the property building(s) since original construction? Please detail in table below.				<b>Yes</b> <input type="checkbox"/>	<b>No</b> <input checked="" type="checkbox"/>
Building Name, Address, or Number (e.g., suite, unit)	Number of Stories	Dates of Construction/ Demolition (mm/dd/yyyy)	Approx. Size of Building Footprint (square feet)	Current Tenants (indicate former tenants, if known, for buildings no longer present)	
Additional comments on buildings:					

Utilities (Please indicate a utility provider, source, or that the service is not available to the property)	
Electric:	Electric heat was used in the building during 1958 - 1982
Natural gas:	-
Potable (Drinking) Water / Non-potable Water	-
Sanitary sewer (excluding septic):	-
Storm sewer:	-
Telephone/Internet:	-

Utilities (Please indicate a utility provider, source, or that the service is not available to the property)	
Solid waste disposal:	-
Does the property have a backup generator? (If yes, what is the fuel source?)	-
Do any water wells exist on the property?	-
Additional comments on utilities: -	

Septic System(s)		Not Applicable <input type="checkbox"/>	
Number and size(s) of septic tank(s):	-		
Number and approx. size(s) of leach field(s):	-		
Location(s) of tank(s) and leach field(s) on the property:-			
Does wastewater, other than domestic wastewater from sinks, toilets, showers, etc., discharge to the septic system?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unknown <input checked="" type="checkbox"/>

#### IV. ADJOINING PROPERTY INFORMATION

Adjoining Properties Usage			
What are the primary uses of the surrounding properties? (e.g., Industrial, commercial, residential, etc.)	Residential, School		
<b>Question:</b> To the best of your knowledge, are there currently, or have there been in the past, any of the following associated with the adjoining properties:	<b>Yes</b>	<b>No</b>	<b>Unknown</b>
Adjoining property used for an industrial use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility or has been in the past (if applicable, identify which)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Any chemical spills or releases of hazardous substances that have occurred on adjoining properties?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Storm water runoff from facilities with the potential to impact this property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### V. ENVIRONMENTAL QUESTIONS

<b>Question:</b> To the best of your knowledge, are there currently, or have there been in the past, any of the following characteristics or conditions on the property:	<b>Yes</b>	<b>No</b>	<b>Unknown</b>
<b>General Property Use</b>			
1. Property used for an industrial use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Property Characteristics and Observations</b>			
3. Fill dirt present that <b>originated from a contaminated site</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Fill dirt present that is of <b>unknown origin</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Pits, ponds, or lagoons associated with waste treatment or waste disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Stained soil(s) on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Wells, including supply, monitoring, and dry (injection) wells?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Transformers, capacitors, or any hydraulic equipment containing PCBs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Property discharge waste water, on or adjacent to the property, other than storm water, into a storm water sewer system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Property discharge waste water, on or adjacent to the property, other than storm water, into a sanitary sewer system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Property served by a private well or non-public water system in which contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Property served by a private well or non-public water system that has been designated as contaminated by any government environmental or health agency?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Hazardous Materials Storage</b>			
13. Any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the property or at the facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Any industrial drums (typically 55-gallon [208 L]) or sacks of chemicals located on the property or at the facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. Other than small quantities of cleaning and janitorial supplies, are hazardous substances or petroleum products stored on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Are there any herbicides or pesticides stored or used on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Existence of hazardous substances or petroleum products with respect to the property or any facility located on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Spills and Releases</b>			
18. Chemical spills or releases of hazardous substances on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Storage Tanks</b>			
19. Any registered or unregistered storage tanks (above or underground) located on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>Question:</b> To the best of your knowledge, are there currently, or have there been in the past, any of the following characteristics or conditions on the property:	<b>Yes</b>	<b>No</b>	<b>Unknown</b>
20. Any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Solid Waste Disposal</b>			
21. Any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials dumped above grade, buried, and/or burned on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22. Landfills, waste disposal pits, or buried waste on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Building Features</b>			
23. Areas that are stained by substances other than water or areas emitting foul odors (e.g., flooring, drains, or walls located within the facility)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24. Any hydraulic lifts/jacks or elevators on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25. Any oil/water separators, sand/sediment traps, and/or other types of interceptors on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Hazardous Building Materials and Building Issues</b>			
26. Any asbestos-containing material (ACM) in the building? If so, are records of past asbestos surveys or past asbestos removals available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27. Any lead-based paint (LBP) in the building(s) at the property? If so, are records of past LBP surveys or past LBP removals available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28. Operations & Maintenance plan(s), as identified by the U.S. EPA, in-place for the property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29. Any mold, moisture, and/or water damage in the building(s)? If so, are records including mold/microbial growth surveys available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Any thermostat switches containing mercury at the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
31. Existence of lead in drinking water testing for the property? (High Sulfur)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
32. Any fires that have occurred at the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Environmental Violations and Actions Against Property</b>			
33. Any deed restrictions or recorded activity and use limitations (AULs)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
34. Any environmental liens or governmental notification relating to past activities or violations of environmental laws?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
35. Existence of environmental violations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
36. Any past, threatened, or pending lawsuits or administrative proceedings concerning any hazardous substances or petroleum products (e.g., a release or threatened release)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Environmental Permits and Operations &amp; Maintenance Plans</b>			
37. Any environmental permits associated with the property (e.g., air emission, wastewater discharge, storm water, or other)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

# Phase I ESA Interview Questionnaire

<b>Question:</b> To the best of your knowledge, are there currently, or have there been in the past, any of the following characteristics or conditions on the property:	<b>Yes</b>	<b>No</b>	<b>Unknown</b>
<b>Previous Environmental Reports</b>			
38. Any environmental site assessments of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
39. Phase I Environmental Site Assessments (ESAs)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
40. Phase II ESAs or other type of subsurface investigation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
41. Drinking water quality tests?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
42. Indoor air quality tests?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
43. Radon surveys?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
44. Geotechnical investigations, studies, or tests?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
45. Community Right-to-Know plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
46. Safety plans such as spill prevention, preparedness/preventions plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
47. Hydrogeologic reports for the property and/or surrounding area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
48. Risk assessments conducted?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
49. Any other relevant information not addressed in the previous questions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
50. If you answered "Yes" to any of the previous questions, please provide additional information below, including a description of environmental concerns or recommendations for additional action that were stated in the report(s). We request that copies of any available report(s) be forwarded to us for review.			

**VI. PREPARER/INTERVIEWEE SIGNATURE**

The preparer/interviewee represents that to the best of their knowledge, the statements and facts provided in this questionnaire are true and correct. To the best of the preparer's/interviewee's actual knowledge, no material facts have been suppressed or misstated.

Elliott Petri

**Signature**

6/6/2016

**Date**

## **Geras, Greg**

---

**From:** Petri, Elliott  
**Sent:** Tuesday, June 07, 2016 12:47 PM  
**To:** Geras, Greg  
**Subject:** YST Questionnaires  
**Attachments:** YST Admin bldg - Sister Miriam - Phase I ESA Interview Questionnaire.docx

11:13 MST – Perry Little – Not in office told to call his cell (605-469-6056) – In a meeting, asked that I call back in a hour. Left a VM an hour later, tried today, no answer. Sent form via email.

11:15 MST – Sister Miriam - Electric Heat in the building, no known issues outside of mold from flooding, prior to this use was vacant land (1958), owned the building until 1982 (leased to YST then sold under trust) – Attached Interview Form.

*Elliott Petri, PE, PMP*

Weston Solutions, Inc.  
1435 Garrison St, Ste 100  
Lakewood, CO 80215  
Ph: 303-729-6156  
Cell: 719-216-2754  
Fax: 303-729-6101



**Geras, Greg**

---

**Subject:** RE: YST Admin Building (Marty Old Tribal Hall) Phase II ESA

**From:** Danielle Zephier [[mailto:yst\\_gap\\_tech@hotmail.com](mailto:yst_gap_tech@hotmail.com)]  
**Sent:** Friday, June 10, 2016 3:31 PM  
**To:** Quiet, Natalie <[Natalie.Quiet@WestonSolutions.com](mailto:Natalie.Quiet@WestonSolutions.com)>  
**Subject:** RE: YST Admin Building (Marty Old Tribal Hall) Phase II ESA

Good afternoon Natalie!

I spoke with Bryan Heth/YST Utilities Program and Louis Golus Jr./YST Roads Department. They both assisted in draining the UST. Information obtained from Bryan and Louie says that it was a 5,000-8,000 gallon tank.....? Diesel fuel was drained from the tank, but there was still some diesel and water in the system.

The UST is located about 10-15 feet from the building on the west side. There is a grove of trees growing just west of the UST. There is also, an old cistern just south of the UST about 25-30 feet from the location of the UST.

The Old Tribal Hall removed the old broiler system from its location around 1984.

Hopefully this is helpful. Thanks and have a good day!

*Danielle Zephier*  
*YST/EPP Brownfields Coordinator*  
*YST Environmental Protection Program*  
[yst\\_gap\\_tech@hotmail.com](mailto:yst_gap_tech@hotmail.com)  
*Phone: (605)384-5012*  
*Fax: (605)384-5006*  
*Cell: (605)469-5572*

---

**From:** [Natalie.Quiet@WestonSolutions.com](mailto:Natalie.Quiet@WestonSolutions.com)  
**To:** [yst\\_gap\\_tech@hotmail.com](mailto:yst_gap_tech@hotmail.com)  
**Subject:** YST Admin Building (Marty Old Tribal Hall) Phase II ESA  
**Date:** Fri, 10 Jun 2016 16:45:11 +0000

Hi Danielle,

I am working with Greg Geras on the Phase II ESA for the YST Admin Building (Marty Old Tribal Hall) property and was asked to contact you regarding the underground storage tank (UST) that you have information on. Would you be able to indicate on the attached map the approximate location of the tank and/or associated piping and send back to me? Please also let me know what contents in contained, years of operation, when and how it was closed (if applicable), contact information for who closed or oversaw its closure, or if you were present for that, was it removed or left in place, was any associated piping removed, and if that was/is the only tank that is present?

Please feel free to give me a call if it would be easier to go over these questions with you.

Thank you,

*Natalie Quiet*

Senior Project Scientist  
Weston Solutions, Inc.  
1435 Garrison Street  
Suite 100  
Lakewood, CO. 80215  
Ph. 303-729-6124  
[Natalie.Quiet@westonsolutions.com](mailto:Natalie.Quiet@westonsolutions.com)



CONFIDENTIALITY: This email and attachments may contain information which is confidential and proprietary. Disclosure or use of any such confidential or proprietary information without the written permission of Weston Solutions, Inc. is strictly prohibited. If you received this email in error, please notify the sender by return e-mail and delete this email from your system. Thank you.

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**APPENDIX F**  
**LABORATORY REPORTS**

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July 21, 2016

**Subcontract Number:** NA  
**Laboratory Report:** RES 355016-2  
**Project # / P.O. #** 20408.016.003.0361.00  
**Project Description:** YST Admin Building (Marty, SD)

Greg Geras  
Weston Solutions, Inc. (CO)  
1435 Garrison St. Ste. 100  
Lakewood CO 80215

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

**RES 355016-2** is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

A handwritten signature in blue ink that reads "Elisa Mari". Below the signature, the text "Elisa Mari for" is printed in a small, blue, sans-serif font.

Jeanne Spencer  
President

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

**TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME**

RES Job Number: **RES 355016-2**  
 Client: **Weston Solutions, Inc. (CO)**  
 Client Project Number / P.O.: **20408.016.003.0361.00**  
 Client Project Description: **YST Admin Building (Marty, SD)**  
 Date Samples Received: **July 08, 2016**  
 Method: **EPA 600/R-93/116 - Point Count, Bulk**  
 Turnaround: **3-5 Day**  
 Date Samples Analyzed: **July 21, 2016**

ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
YSTAS-DW01-01	EM 1664508	A	White texture w/ white paint	20		ND	0	100
		B	White joint compound	20		ND	0	100
		C	White tape	60		ND	98	2
YSTAS-WT01-02	EM 1664509	A	White texture w/ white paint	100		ND	0	100
YSTAS-WT01-03	EM 1664510	A	White texture w/ white paint	100		ND	0	100
YSTAS-WT01-04	EM 1664511	A	White compound	100		ND	0	100
YSTAS-FT01-05	EM 1664512	A	Tan floor tile	100		ND	0	100
YSTAS-FT02-06	EM 1664513	A	Green floor tile	100		ND	0	100
YSTAS-PI01-07	EM 1664514	A	Gray fibrous plaster	100	Chrysotile	25	0	75
YSTAS-CB01-08	EM 1664515	A	Peach cove base	100		ND	0	100
YSTAS-FT03-09	EM 1664516	A	Green floor tile	100		ND	0	100
YSTAS-WC01-10	EM 1664517	A	Off white caulk w/ white paint	100	Chrysotile	10	0	90
YSTAS-WG01-11	EM 1664518	A	White glazing w/ yellow paint	100		ND	0	100
YSTAS-WB01-12	EM 1664519	A	Tan/black wall board	100		ND	95	5

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

**TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME**

RES Job Number: **RES 355016-2**  
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ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
YSTAS-WC01-13	EM 1664520	A	Off white caulk w/ off white paint	100		ND	0	100
YSTAS-WB01-14	EM 1664521	A	Tan/black wall board	100		ND	95	5
YSTAS-FT04-15	EM 1664522	A	Light gray floor tile	100		ND	0	100
YSTAS-FT04-16	EM 1664523	A	Gray floor tile	100		ND	0	100
YSTAS-FT04-17	EM 1664524	A	Light gray floor tile	100		ND	0	100
YSTAS-FT05-18	EM 1664525	A	Black mastic	10		ND	0	100
		B	Tan/brown floor tile	90	Chrysotile	18	0	82
YSTAS-FT05-19	EM 1664526	A	Black mastic	10		ND	0	100
		B	Tan/brown floor tile	90	Chrysotile	18	0	82
YSTAS-FT06-20	EM 1664527	A	Black mastic	10		ND	0	100
		B	Tan/multi-colored floor tile	90	Chrysotile	15	0	85
YSTAS-FT06-21	EM 1664528	A	Black mastic	8		ND	0	100
		B	Tan/multi-colored floor tile	92	Chrysotile	15	0	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

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ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
YSTAS-FT06-22	EM 1664529	A	Black mastic	10	Chrysotile	ND	0	100
		B	Tan/multi-colored floor tile	90		15	0	85
YSTAS-CT01-23	EM 1664530	A	Tan/white perlite ceiling tile	100		ND	60	40
YSTAS-CT01-24	EM 1664531	A	Tan/white perlite ceiling tile	100		ND	60	40
YSTAS-CT01-25	EM 1664532	A	Tan/white perlite ceiling tile	100		ND	60	40
YSTAS-CT02-26	EM 1664533	A	Brown/white ceiling tile	100		ND	90	10
YSTAS-CT02-27	EM 1664534	A	Brown/white ceiling tile	100		ND	90	10
YSTAS-CT02-28	EM 1664535	A	Brown/white ceiling tile	100		ND	90	10
YSTAS-DW02-29	EM 1664536	A	White/tan drywall	100		ND	20	80
YSTAS-DW02-30	EM 1664537	A	White/tan drywall	100		ND	20	80
YSTAS-DW02-31	EM 1664538	A	White/tan drywall	100		ND	20	80
YSTAS-GP01-32	EM 1664539	A	Brown adhesive	100	Chrysotile Point Count	3 2.25		97

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

**TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME**

RES Job Number: **RES 355016-2**  
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 Date Samples Analyzed: **July 21, 2016**

ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non- Fibrous Components (%)
					Mineral	Visual Estimate (%)		
YSTAS-GP01-33	EM 1664540	A	Brown adhesive	100	Chrysotile Point Count	3 1.75	0	97
YSTAS-GP01-34	EM 1664541	A	Brown adhesive	100	Chrysotile Point Count	3 2.75	0	97

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

  
 Paige Terry

Analyst / Data QA



713-515  
1001

RES 355016



**Reservoirs Environmental, Inc.**  
5801 Logan St. Denver, CO 80216 • Ph: 303.954.1986 • Fax 303.477.4275 • Toll Free 866.RES-ENV

**After Hours Cell Phone: 720-339-9228**

INVOICE TO: (IF DIFFERENT)

**CONTACT INFORMATION:**

Company:	<b>Weston Solutions, Inc</b>	Company:	<b>Weston Solutions, Inc</b>	Contact:	<b>Greg Geras</b>
Address:	1435 Garrison St Suite 100	Address:		Phone:	<b>303-729-6142</b>
	Lakewood, CO 80215			Fax:	
				Cell/pager:	<b>303-801-7470</b>
Project Number and/or P.O. #		20408 016.003.0361.00		Final Data Deliverable Email Address:	
Project Description/Location:		YST Admin Building (Marty, SD)			



[Greg.Geras@WestonSolutions.com](mailto:Greg.Geras@WestonSolutions.com)

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm					
PLM / PCM / TEM	___ RUSH (Same Day) ___ PRIORITY (Next Day)	<input checked="" type="checkbox"/> STANDARD (Rush PCM = 2hr, TEM = 6hr.)			
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm					
Metal(s) / Dust	___ RUSH ___ 24 hr. ___ 3-5 Day				
RCRA 8 / Metals & Welding	___ RUSH ___ 5 day ___ 10 day	**Prior notification is required for RUSH turnarounds.**			
Fume Scan / TCLP	___ 24 hr. ___ 3 day ___ 5 Day				
Organics					
MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm					
E.coli O157:H7, Coliforms, S.aureus	___ 24 hr. ___ 2 Day ___ 3-5 Day				
Salmonella, Listeria, E.coli, APC, Y & M	___ 48 Hr. ___ 3-5 Day				
Mold	___ RUSH ___ 24 Hr ___ 48 Hr ___ 3 Day ___ 5 Day				
**Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.**					
<b>Special Instructions:</b>					
(Sample ID's must be unique)					
Client sample ID number					
1 YSTAB-DW01-01	X				
2 YSTAB-WT01-02	X				
3 YSTAB-WT01-03	X				
4 YSTAB-WT01-04	X				
5 YSTAB-FT01-05	X				
6 YSTAB-FT02-06	X				
7 YSTAB-PI01-07	X				
8 YSTAB-CB01-08	X				
9 YSTAB-FT03-09	X				
10 YSTAB-WC01-10	X				

(Additional samples shall be listed on attached long form.)

Number of samples received:

**NOTE:** REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: 		Date/Time: 7/8/16		Sample Condition: On Ice Yes / No		Sealed Yes / No		Intact Yes / No	
Laboratory Use Only		Date/Time: 7/8/16		Carrier: hand					
Received By: 		Date		Time		Initials			
Results:		Contact	Phone	Email	Fax	Contact	Time	Initials	
		Contact	Phone	Email	Fax	Contact	Time	Initials	

7-2011 version 1



Submitted by: \_\_\_\_\_

REQUESTED ANALYSIS		VALID MATRIX CODES				LAB NOTES:	
PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - METH	OTHER -	
						MICROBIOLOGY	
						Mold: +/- or Quantification	
						Y & M: +/- or Quantification	
						S aureus: +/- or Quantification	
						Coliforms: +/- or Quantification	
						E coli: +/- or Quantification	
						Aerobic Plate Count: +/- or Quantification	
						Listeria: +/-	
						E coli O157:H7: +/-	
						Salmonella: +/-	
						Matrix Code	
						# Containers	
						Date Collected mmm/dd/yy	
						Time Collected h:mm a/p	
						Sample Volume (L) / Area	
						EM Number (Laboratory Use Only)	



July 27, 2016

## Weston Solutions - CO

Sample Delivery Group: L847721  
Samples Received: 07/16/2016  
Project Number:  
Description: Yankton Sioux Tribe Admin Bldg  
  
Report To: Joe Rudi  
1435 Garrison St., Ste 100  
Denver, CO 80215

Entire Report Reviewed By:



Shane Gambill  
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



<b><sup>1</sup>Cp: Cover Page</b>	<b>1</b>
<b><sup>2</sup>Tc: Table of Contents</b>	<b>2</b>
<b><sup>3</sup>Ss: Sample Summary</b>	<b>3</b>
<b><sup>4</sup>Cn: Case Narrative</b>	<b>5</b>
<b><sup>5</sup>Sr: Sample Results</b>	<b>6</b>
YSTAB-BH01 (8-9 FT) L847721-01	6
YSTAB-BH01 (19-20 FT) L847721-02	8
YSTAB-BH02 (8-9 FT) L847721-03	10
YSTAB-BH02 (12-13 FT) L847721-04	12
YSTAB-BH03 (10-11 FT) L847721-05	14
YSTAB-BH03 (6-7 FT) L847721-06	16
YSTAB-DUP (8-9 FT) L847721-07	18
<b><sup>6</sup>Qc: Quality Control Summary</b>	<b>20</b>
Metals (ICP) by Method 6010B	20
Volatile Organic Compounds (GC) by Method 8015D/GRO	21
Volatile Organic Compounds (GC/MS) by Method 8260B	22
Semi-Volatile Organic Compounds (GC) by Method 8015	34
<b><sup>7</sup>Gl: Glossary of Terms</b>	<b>35</b>
<b><sup>8</sup>Al: Accreditations &amp; Locations</b>	<b>36</b>
<b><sup>9</sup>Sc: Chain of Custody</b>	<b>37</b>





## YSTAB-BH01 (8-9 FT) L847721-01 Solid

Collected by  
Eric SanduskyCollected date/time  
07/12/16 10:50Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG889792	1	07/19/16 18:09	07/20/16 19:41	ST
Semi-Volatile Organic Compounds (GC) by Method 8015	WG890532	1	07/20/16 19:37	07/21/16 10:33	KLM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890734	1	07/20/16 13:04	07/20/16 18:52	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG891042	1	07/21/16 11:24	07/26/16 02:59	JHH

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## YSTAB-BH01 (19-20 FT) L847721-02 Solid

Collected by  
Eric SanduskyCollected date/time  
07/12/16 10:45Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG889792	1	07/19/16 18:09	07/20/16 19:44	ST
Semi-Volatile Organic Compounds (GC) by Method 8015	WG890532	1	07/20/16 19:37	07/21/16 10:45	KLM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890734	1	07/20/16 13:04	07/20/16 19:22	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG891042	1	07/21/16 11:24	07/26/16 03:19	JHH

## YSTAB-BH02 (8-9 FT) L847721-03 Solid

Collected by  
Eric SanduskyCollected date/time  
07/12/16 12:05Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG889792	1	07/19/16 18:09	07/20/16 19:47	ST
Semi-Volatile Organic Compounds (GC) by Method 8015	WG890532	1	07/20/16 19:37	07/21/16 11:29	KLM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890734	1	07/20/16 13:04	07/20/16 19:51	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG891042	1	07/21/16 11:24	07/26/16 03:39	JHH

## YSTAB-BH02 (12-13 FT) L847721-04 Solid

Collected by  
Eric SanduskyCollected date/time  
07/12/16 12:10Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG889792	1	07/19/16 18:09	07/20/16 19:50	ST
Semi-Volatile Organic Compounds (GC) by Method 8015	WG890532	1	07/20/16 19:37	07/21/16 11:41	KLM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890734	1	07/20/16 13:04	07/20/16 20:21	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG891042	1	07/21/16 11:24	07/26/16 04:00	JHH

## YSTAB-BH03 (10-11 FT) L847721-05 Solid

Collected by  
Eric SanduskyCollected date/time  
07/12/16 13:03Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG889792	1	07/19/16 18:09	07/20/16 19:53	ST
Semi-Volatile Organic Compounds (GC) by Method 8015	WG890532	1	07/20/16 19:37	07/21/16 11:52	KLM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890734	1	07/20/16 13:04	07/20/16 20:50	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG891575	1	07/22/16 21:22	07/23/16 18:58	ACG

## YSTAB-BH03 (6-7 FT) L847721-06 Solid

Collected by  
Eric SanduskyCollected date/time  
07/12/16 13:09Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG889792	1	07/19/16 18:09	07/20/16 18:41	ST
Semi-Volatile Organic Compounds (GC) by Method 8015	WG890532	1	07/20/16 19:37	07/21/16 12:03	KLM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890734	1	07/20/16 13:04	07/20/16 21:19	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG891575	24.75	07/22/16 21:22	07/26/16 17:38	BMB



YSTAB-DUP (8-9 FT) L847721-07 Solid

Collected by  
Eric SanduskyCollected date/time  
07/12/16 00:00Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG889792	1	07/19/16 18:09	07/20/16 19:56	ST
Semi-Volatile Organic Compounds (GC) by Method 8015	WG890532	1	07/20/16 19:37	07/21/16 12:36	KLM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890734	1	07/20/16 13:04	07/23/16 17:59	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG891575	1	07/22/16 21:22	07/23/16 19:22	ACG

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Shane Gambill  
Technical Service Representative

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Lead	10.2		0.500	1	07/20/2016 19:41	<a href="#">WG889792</a>

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/20/2016 18:52	<a href="#">WG890734</a>
(S) a,a,a-Trifluorotoluene(FID)	101		59.0-128		07/20/2016 18:52	<a href="#">WG890734</a>

6  
Qc7  
Gl8  
Al9  
Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	07/26/2016 02:59	<a href="#">WG891042</a>
Acrylonitrile	ND		0.0100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Benzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Bromobenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Bromodichloromethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Bromoform	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Bromomethane	ND	J4	0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
n-Butylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
sec-Butylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
tert-Butylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Carbon tetrachloride	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Chlorobenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Chlorodibromomethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Chloroethane	ND		0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
2-Chloroethyl vinyl ether	ND		0.0500	1	07/26/2016 02:59	<a href="#">WG891042</a>
Chloroform	ND		0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
Chloromethane	ND		0.00250	1	07/26/2016 02:59	<a href="#">WG891042</a>
2-Chlorotoluene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
4-Chlorotoluene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2-Dibromoethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Dibromomethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2-Dichlorobenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,3-Dichlorobenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,4-Dichlorobenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Dichlorodifluoromethane	ND	J4	0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1-Dichloroethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2-Dichloroethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1-Dichloroethene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
cis-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
trans-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2-Dichloropropane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1-Dichloropropene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,3-Dichloropropane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
cis-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
trans-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
2,2-Dichloropropane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Di-isopropyl ether	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Ethylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Hexachloro-1,3-butadiene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Isopropylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
p-Isopropyltoluene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
2-Butanone (MEK)	ND		0.0100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Methylene Chloride	ND		0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>





## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Methyl tert-butyl ether	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Naphthalene	ND		0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
n-Propylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Styrene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1,1,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Tetrachloroethene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Toluene	ND		0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2,3-Trichlorobenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2,4-Trichlorobenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1,1-Trichloroethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,1,2-Trichloroethane	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Trichloroethene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Trichlorofluoromethane	ND		0.00500	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2,3-Trichloropropane	ND		0.00250	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2,4-Trimethylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,2,3-Trimethylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Vinyl chloride	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
1,3,5-Trimethylbenzene	ND		0.00100	1	07/26/2016 02:59	<a href="#">WG891042</a>
Xylenes, Total	ND		0.00300	1	07/26/2016 02:59	<a href="#">WG891042</a>
(S) Toluene-d8	98.7		88.7-115		07/26/2016 02:59	<a href="#">WG891042</a>
(S) Dibromofluoromethane	99.0		76.3-123		07/26/2016 02:59	<a href="#">WG891042</a>
(S) 4-Bromofluorobenzene	97.5		69.7-129		07/26/2016 02:59	<a href="#">WG891042</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	07/21/2016 10:33	<a href="#">WG890532</a>
(S) o-Terphenyl	79.0		50.0-150		07/21/2016 10:33	<a href="#">WG890532</a>



## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Lead	7.42		0.500	1	07/20/2016 19:44	<a href="#">WG889792</a>

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/20/2016 19:22	<a href="#">WG890734</a>
(S) a,a,a-Trifluorotoluene(FID)	101		59.0-128		07/20/2016 19:22	<a href="#">WG890734</a>

6  
Qc7  
Gl8  
Al9  
Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	07/26/2016 03:19	<a href="#">WG891042</a>
Acrylonitrile	ND		0.0100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Benzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Bromobenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Bromodichloromethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Bromoform	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Bromomethane	ND	J4	0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
n-Butylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
sec-Butylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
tert-Butylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Carbon tetrachloride	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Chlorobenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Chlorodibromomethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Chloroethane	ND		0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
2-Chloroethyl vinyl ether	ND		0.0500	1	07/26/2016 03:19	<a href="#">WG891042</a>
Chloroform	ND		0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
Chloromethane	ND		0.00250	1	07/26/2016 03:19	<a href="#">WG891042</a>
2-Chlorotoluene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
4-Chlorotoluene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2-Dibromoethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Dibromomethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2-Dichlorobenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,3-Dichlorobenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,4-Dichlorobenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Dichlorodifluoromethane	ND	J4	0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1-Dichloroethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2-Dichloroethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1-Dichloroethene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
cis-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
trans-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2-Dichloropropane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1-Dichloropropene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,3-Dichloropropane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
cis-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
trans-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
2,2-Dichloropropane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Di-isopropyl ether	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Ethylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Hexachloro-1,3-butadiene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Isopropylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
p-Isopropyltoluene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
2-Butanone (MEK)	ND		0.0100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Methylene Chloride	ND		0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Methyl tert-butyl ether	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Naphthalene	ND		0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
n-Propylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Styrene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1,1,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Tetrachloroethene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Toluene	ND		0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2,3-Trichlorobenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2,4-Trichlorobenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1,1-Trichloroethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,1,2-Trichloroethane	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Trichloroethene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Trichlorofluoromethane	ND		0.00500	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2,3-Trichloropropane	ND		0.00250	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2,4-Trimethylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,2,3-Trimethylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Vinyl chloride	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
1,3,5-Trimethylbenzene	ND		0.00100	1	07/26/2016 03:19	<a href="#">WG891042</a>
Xylenes, Total	ND		0.00300	1	07/26/2016 03:19	<a href="#">WG891042</a>
(S) Toluene-d8	100		88.7-115		07/26/2016 03:19	<a href="#">WG891042</a>
(S) Dibromofluoromethane	96.9		76.3-123		07/26/2016 03:19	<a href="#">WG891042</a>
(S) 4-Bromofluorobenzene	91.9		69.7-129		07/26/2016 03:19	<a href="#">WG891042</a>

## Sample Narrative:

8260B L847721-02 WG891042: Previous run also had low IS/SURR recovery. Matrix effect.

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	07/21/2016 10:45	<a href="#">WG890532</a>
(S) o-Terphenyl	75.2		50.0-150		07/21/2016 10:45	<a href="#">WG890532</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Lead	6.08		0.500	1	07/20/2016 19:47	<a href="#">WG889792</a>

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/20/2016 19:51	<a href="#">WG890734</a>
(S) a,a,a-Trifluorotoluene(FID)	101		59.0-128		07/20/2016 19:51	<a href="#">WG890734</a>

6  
Qc7  
Gl8  
Al9  
Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	07/26/2016 03:39	<a href="#">WG891042</a>
Acrylonitrile	ND		0.0100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Benzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Bromobenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Bromodichloromethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Bromoform	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Bromomethane	ND	J4	0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
n-Butylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
sec-Butylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
tert-Butylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Carbon tetrachloride	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Chlorobenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Chlorodibromomethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Chloroethane	ND		0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
2-Chloroethyl vinyl ether	ND		0.0500	1	07/26/2016 03:39	<a href="#">WG891042</a>
Chloroform	ND		0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
Chloromethane	ND		0.00250	1	07/26/2016 03:39	<a href="#">WG891042</a>
2-Chlorotoluene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
4-Chlorotoluene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2-Dibromoethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Dibromomethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2-Dichlorobenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,3-Dichlorobenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,4-Dichlorobenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Dichlorodifluoromethane	ND	J4	0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1-Dichloroethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2-Dichloroethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1-Dichloroethene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
cis-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
trans-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2-Dichloropropane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1-Dichloropropene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,3-Dichloropropane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
cis-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
trans-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
2,2-Dichloropropane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Di-isopropyl ether	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Ethylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Hexachloro-1,3-butadiene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Isopropylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
p-Isopropyltoluene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
2-Butanone (MEK)	ND		0.0100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Methylene Chloride	ND		0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Methyl tert-butyl ether	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Naphthalene	ND		0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
n-Propylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Styrene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1,1,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Tetrachloroethene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Toluene	ND		0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2,3-Trichlorobenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2,4-Trichlorobenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1,1-Trichloroethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,1,2-Trichloroethane	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Trichloroethene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Trichlorofluoromethane	ND		0.00500	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2,3-Trichloropropane	ND		0.00250	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2,4-Trimethylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,2,3-Trimethylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Vinyl chloride	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
1,3,5-Trimethylbenzene	ND		0.00100	1	07/26/2016 03:39	<a href="#">WG891042</a>
Xylenes, Total	ND		0.00300	1	07/26/2016 03:39	<a href="#">WG891042</a>
(S) Toluene-d8	99.2		88.7-115		07/26/2016 03:39	<a href="#">WG891042</a>
(S) Dibromofluoromethane	103		76.3-123		07/26/2016 03:39	<a href="#">WG891042</a>
(S) 4-Bromofluorobenzene	101		69.7-129		07/26/2016 03:39	<a href="#">WG891042</a>

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

## Sample Narrative:

8260B L847721-03 WG891042: Previous run also had low IS/SURR recovery. Matrix effect.

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	07/21/2016 11:29	<a href="#">WG890532</a>
(S) o-Terphenyl	72.4		50.0-150		07/21/2016 11:29	<a href="#">WG890532</a>



## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Lead	6.52		0.500	1	07/20/2016 19:50	<a href="#">WG889792</a>

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/20/2016 20:21	<a href="#">WG890734</a>
(S) a,a,a-Trifluorotoluene(FID)	101		59.0-128		07/20/2016 20:21	<a href="#">WG890734</a>

6  
Qc7  
Gl8  
Al9  
Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	07/26/2016 04:00	<a href="#">WG891042</a>
Acrylonitrile	ND		0.0100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Benzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Bromobenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Bromodichloromethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Bromoform	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Bromomethane	ND	J4	0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
n-Butylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
sec-Butylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
tert-Butylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Carbon tetrachloride	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Chlorobenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Chlorodibromomethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Chloroethane	ND		0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
2-Chloroethyl vinyl ether	ND		0.0500	1	07/26/2016 04:00	<a href="#">WG891042</a>
Chloroform	ND		0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
Chloromethane	ND		0.00250	1	07/26/2016 04:00	<a href="#">WG891042</a>
2-Chlorotoluene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
4-Chlorotoluene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2-Dibromoethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Dibromomethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2-Dichlorobenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,3-Dichlorobenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,4-Dichlorobenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Dichlorodifluoromethane	ND	J4	0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1-Dichloroethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2-Dichloroethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1-Dichloroethene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
cis-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
trans-1,2-Dichloroethene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2-Dichloropropane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1-Dichloropropene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,3-Dichloropropane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
cis-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
trans-1,3-Dichloropropene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
2,2-Dichloropropane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Di-isopropyl ether	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Ethylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Hexachloro-1,3-butadiene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Isopropylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
p-Isopropyltoluene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
2-Butanone (MEK)	ND		0.0100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Methylene Chloride	ND		0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Methyl tert-butyl ether	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Naphthalene	ND		0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
n-Propylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Styrene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1,1,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Tetrachloroethene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Toluene	ND		0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2,3-Trichlorobenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2,4-Trichlorobenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1,1-Trichloroethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,1,2-Trichloroethane	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Trichloroethene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Trichlorofluoromethane	ND		0.00500	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2,3-Trichloropropane	ND		0.00250	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2,4-Trimethylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,2,3-Trimethylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Vinyl chloride	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
1,3,5-Trimethylbenzene	ND		0.00100	1	07/26/2016 04:00	<a href="#">WG891042</a>
Xylenes, Total	ND		0.00300	1	07/26/2016 04:00	<a href="#">WG891042</a>
(S) Toluene-d8	98.0		88.7-115		07/26/2016 04:00	<a href="#">WG891042</a>
(S) Dibromofluoromethane	95.0		76.3-123		07/26/2016 04:00	<a href="#">WG891042</a>
(S) 4-Bromofluorobenzene	94.3		69.7-129		07/26/2016 04:00	<a href="#">WG891042</a>

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

## Sample Narrative:

8260B L847721-04 WG891042: Previous run also had low IS/SURR recovery. Matrix effect.

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	07/21/2016 11:41	<a href="#">WG890532</a>
(S) o-Terphenyl	76.0		50.0-150		07/21/2016 11:41	<a href="#">WG890532</a>





## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Lead	10.9		0.500	1	07/20/2016 19:53	<a href="#">WG889792</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.446		0.100	1	07/20/2016 20:50	<a href="#">WG890734</a>
(S) a,a,a-Trifluorotoluene(FID)	102		59.0-128		07/20/2016 20:50	<a href="#">WG890734</a>

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	07/23/2016 18:58	<a href="#">WG891575</a>
Acrylonitrile	ND		0.0100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Benzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Bromobenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Bromodichloromethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Bromoform	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Bromomethane	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
n-Butylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
sec-Butylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
tert-Butylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Carbon tetrachloride	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Chlorobenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Chlorodibromomethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Chloroethane	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
2-Chloroethyl vinyl ether	ND	J4	0.0500	1	07/23/2016 18:58	<a href="#">WG891575</a>
Chloroform	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
Chloromethane	ND		0.00250	1	07/23/2016 18:58	<a href="#">WG891575</a>
2-Chlorotoluene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
4-Chlorotoluene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2-Dibromoethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Dibromomethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2-Dichlorobenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,3-Dichlorobenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,4-Dichlorobenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Dichlorodifluoromethane	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1-Dichloroethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2-Dichloroethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1-Dichloroethene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
cis-1,2-Dichloroethene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
trans-1,2-Dichloroethene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2-Dichloropropane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1-Dichloropropene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,3-Dichloropropane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
cis-1,3-Dichloropropene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
trans-1,3-Dichloropropene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
2,2-Dichloropropane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Di-isopropyl ether	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Ethylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Hexachloro-1,3-butadiene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Isopropylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
p-Isopropyltoluene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
2-Butanone (MEK)	ND		0.0100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Methylene Chloride	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Methyl tert-butyl ether	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Naphthalene	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
n-Propylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Styrene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1,1,2-Tetrachloroethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Tetrachloroethene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Toluene	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2,3-Trichlorobenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2,4-Trichlorobenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1,1-Trichloroethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,1,2-Trichloroethane	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Trichloroethene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Trichlorofluoromethane	ND		0.00500	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2,3-Trichloropropane	ND		0.00250	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2,4-Trimethylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,2,3-Trimethylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Vinyl chloride	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
1,3,5-Trimethylbenzene	ND		0.00100	1	07/23/2016 18:58	<a href="#">WG891575</a>
Xylenes, Total	ND		0.00300	1	07/23/2016 18:58	<a href="#">WG891575</a>
(S) Toluene-d8	101		88.7-115		07/23/2016 18:58	<a href="#">WG891575</a>
(S) Dibromofluoromethane	94.9		76.3-123		07/23/2016 18:58	<a href="#">WG891575</a>
(S) 4-Bromofluorobenzene	95.5		69.7-129		07/23/2016 18:58	<a href="#">WG891575</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	07/21/2016 11:52	<a href="#">WG890532</a>
(S) o-Terphenyl	77.1		50.0-150		07/21/2016 11:52	<a href="#">WG890532</a>



## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Lead	9.61		0.500	1	07/20/2016 18:41	<a href="#">WG889792</a>

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/20/2016 21:19	<a href="#">WG890734</a>
(S) a,a,a-Trifluorotoluene(FID)	101		59.0-128		07/20/2016 21:19	<a href="#">WG890734</a>

6  
Qc7  
Gl8  
Al9  
Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		1.24	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Acrylonitrile	ND		0.248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Benzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Bromobenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Bromodichloromethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Bromoform	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Bromomethane	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
n-Butylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
sec-Butylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
tert-Butylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Carbon tetrachloride	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Chlorobenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Chlorodibromomethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Chloroethane	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
2-Chloroethyl vinyl ether	ND	J4	1.24	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Chloroform	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Chloromethane	ND		0.0619	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
2-Chlorotoluene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
4-Chlorotoluene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2-Dibromo-3-Chloropropane	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2-Dibromoethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Dibromomethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2-Dichlorobenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,3-Dichlorobenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,4-Dichlorobenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Dichlorodifluoromethane	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1-Dichloroethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2-Dichloroethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1-Dichloroethene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
cis-1,2-Dichloroethene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
trans-1,2-Dichloroethene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2-Dichloropropane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1-Dichloropropene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,3-Dichloropropane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
cis-1,3-Dichloropropene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
trans-1,3-Dichloropropene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
2,2-Dichloropropane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Di-isopropyl ether	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Ethylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Hexachloro-1,3-butadiene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Isopropylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
p-Isopropyltoluene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
2-Butanone (MEK)	ND		0.248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Methylene Chloride	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		0.248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Methyl tert-butyl ether	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Naphthalene	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
n-Propylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Styrene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1,1,2-Tetrachloroethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1,2,2-Tetrachloroethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1,2-Trichlorotrifluoroethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Tetrachloroethene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Toluene	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2,3-Trichlorobenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2,4-Trichlorobenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1,1-Trichloroethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,1,2-Trichloroethane	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Trichloroethene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Trichlorofluoromethane	ND		0.124	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2,3-Trichloropropane	ND		0.0619	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2,4-Trimethylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,2,3-Trimethylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Vinyl chloride	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
1,3,5-Trimethylbenzene	ND		0.0248	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
Xylenes, Total	ND		0.0742	24.75	07/26/2016 17:38	<a href="#">WG891575</a>
(S) Toluene-d8	101		88.7-115		07/26/2016 17:38	<a href="#">WG891575</a>
(S) Dibromofluoromethane	105		76.3-123		07/26/2016 17:38	<a href="#">WG891575</a>
(S) 4-Bromofluorobenzene	104		69.7-129		07/26/2016 17:38	<a href="#">WG891575</a>

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

## Sample Narrative:

8260B L847721-06 WG891575: No bisulfates remain for analysis.

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	07/21/2016 12:03	<a href="#">WG890532</a>
(S) o-Terphenyl	69.8		50.0-150		07/21/2016 12:03	<a href="#">WG890532</a>



## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Lead	6.97		0.500	1	07/20/2016 19:56	<a href="#">WG889792</a>

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr6  
Qc7  
Gl8  
Al9  
Sc

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/23/2016 17:59	<a href="#">WG890734</a>
(S) a,a,a-Trifluorotoluene(FID)	101		59.0-128		07/23/2016 17:59	<a href="#">WG890734</a>

## Sample Narrative:

8015D/GRO L847721-07 WG890734: Previous run also had low IS/SURR recovery. Matrix effect.

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	07/23/2016 19:22	<a href="#">WG891575</a>
Acrylonitrile	ND		0.0100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Benzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Bromobenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Bromodichloromethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Bromoform	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Bromomethane	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
n-Butylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
sec-Butylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
tert-Butylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Carbon tetrachloride	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Chlorobenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Chlorodibromomethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Chloroethane	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
2-Chloroethyl vinyl ether	ND	J4	0.0500	1	07/23/2016 19:22	<a href="#">WG891575</a>
Chloroform	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
Chloromethane	ND		0.00250	1	07/23/2016 19:22	<a href="#">WG891575</a>
2-Chlorotoluene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
4-Chlorotoluene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2-Dibromoethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Dibromomethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2-Dichlorobenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,3-Dichlorobenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,4-Dichlorobenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Dichlorodifluoromethane	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1-Dichloroethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2-Dichloroethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1-Dichloroethene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
cis-1,2-Dichloroethene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
trans-1,2-Dichloroethene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2-Dichloropropane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1-Dichloropropene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,3-Dichloropropane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
cis-1,3-Dichloropropene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
trans-1,3-Dichloropropene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
2,2-Dichloropropane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Di-isopropyl ether	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Ethylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Hexachloro-1,3-butadiene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Isopropylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
p-Isopropyltoluene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
2-Butanone (MEK)	ND		0.0100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Methylene Chloride	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Methyl tert-butyl ether	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Naphthalene	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
n-Propylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Styrene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1,1,2-Tetrachloroethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Tetrachloroethene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Toluene	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2,3-Trichlorobenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2,4-Trichlorobenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1,1-Trichloroethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,1,2-Trichloroethane	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Trichloroethene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Trichlorofluoromethane	ND		0.00500	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2,3-Trichloropropane	ND		0.00250	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2,4-Trimethylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,2,3-Trimethylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Vinyl chloride	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
1,3,5-Trimethylbenzene	ND		0.00100	1	07/23/2016 19:22	<a href="#">WG891575</a>
Xylenes, Total	ND		0.00300	1	07/23/2016 19:22	<a href="#">WG891575</a>
(S) Toluene-d8	99.5		88.7-115		07/23/2016 19:22	<a href="#">WG891575</a>
(S) Dibromofluoromethane	108		76.3-123		07/23/2016 19:22	<a href="#">WG891575</a>
(S) 4-Bromofluorobenzene	89.0		69.7-129		07/23/2016 19:22	<a href="#">WG891575</a>

## Sample Narrative:

8260B L847721-07 WG891575: Previous run also had low IS/SURR recovery. Matrix effect.

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	07/21/2016 12:36	<a href="#">WG890532</a>
(S) o-Terphenyl	77.2		50.0-150		07/21/2016 12:36	<a href="#">WG890532</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L847721-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R3151110-1 07/20/16 18:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Lead	U		0.19	0.500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3151110-2 07/20/16 18:35 • (LCSD) R3151110-3 07/20/16 18:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	100	101	97.5	101	98	80-120			4	20

L847721-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847721-06 07/20/16 18:41 • (MS) R3151110-6 07/20/16 18:49 • (MSD) R3151110-7 07/20/16 18:58

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	100	9.61	113	113	103	104	1	75-125			0	20





Method Blank (MB)

(MB) R3151069-3 07/20/16 13:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID) 102				59.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3151069-1 07/20/16 11:47 • (LCSD) R3151069-2 07/20/16 12:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.25	5.04	95.5	91.7	63.5-137			4.05	20
(S) a,a,a-Trifluorotoluene(FID)				99.2	99.5	59.0-128				

L847721-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847721-06 07/20/16 21:19 • (MS) R3151069-4 07/20/16 22:18 • (MSD) R3151069-5 07/20/16 22:47

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	3.82	4.09	69.4	74.4	1	28.5-138			6.83	23.6
(S) a,a,a-Trifluorotoluene(FID)					97.4	96.9		59.0-128				



Method Blank (MB)

(MB) R3151356-5 07/21/16 11:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
2-Chloroethyl vinyl ether	U		0.00234	0.0500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3151356-5 07/21/16 11:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	104			88.7-115
(S) Dibromofluoromethane	99.3			76.3-123
(S) 4-Bromofluorobenzene	99.7			69.7-129

1

Cp

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Tc

3

Ss

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Cn

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Sr

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Qc

7

Gl

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Al

9

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3151356-1 07/21/16 06:17 • (LCSD) R3151356-2 07/21/16 06:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0762	0.0842	60.9	67.4	25.3-178			10.0	22.9
Acrylonitrile	0.125	0.130	0.142	104	114	57.8-143			8.99	20
Benzene	0.0250	0.0250	0.0277	100	111	72.6-120			10.0	20
Bromobenzene	0.0250	0.0241	0.0259	96.6	103	80.3-115			6.84	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3151356-1 07/21/16 06:17 • (LCSD) R3151356-2 07/21/16 06:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	0.0250	0.0250	0.0267	100	107	75.3-119			6.49	20
Bromoform	0.0250	0.0213	0.0233	85.1	93.3	69.1-135			9.23	20
Bromomethane	0.0250	0.0509	0.0542	204	217	23.0-191	J4	J4	6.22	20
n-Butylbenzene	0.0250	0.0282	0.0290	113	116	74.2-134			2.74	20
sec-Butylbenzene	0.0250	0.0256	0.0268	103	107	77.8-129			4.55	20
tert-Butylbenzene	0.0250	0.0249	0.0275	99.6	110	77.2-129			9.77	20
Carbon tetrachloride	0.0250	0.0267	0.0280	107	112	69.4-129			4.68	20
Chlorobenzene	0.0250	0.0243	0.0263	97.4	105	78.9-122			7.57	20
Chlorodibromomethane	0.0250	0.0228	0.0248	91.0	99.4	76.4-126			8.79	20
Chloroethane	0.0250	0.0288	0.0302	115	121	47.2-147			4.63	20
2-Chloroethyl vinyl ether	0.125	0.111	0.125	88.5	100	16.7-162			12.4	23.7
Chloroform	0.0250	0.0258	0.0272	103	109	73.3-122			5.33	20
Chloromethane	0.0250	0.0263	0.0278	105	111	53.1-135			5.38	20
2-Chlorotoluene	0.0250	0.0261	0.0273	104	109	74.6-127			4.36	20
4-Chlorotoluene	0.0250	0.0258	0.0271	103	109	79.5-123			5.21	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0243	0.0252	97.3	101	64.9-131			3.45	20
1,2-Dibromoethane	0.0250	0.0231	0.0262	92.3	105	78.7-123			12.6	20
Dibromomethane	0.0250	0.0248	0.0265	99.3	106	78.5-117			6.59	20
1,2-Dichlorobenzene	0.0250	0.0267	0.0277	107	111	83.6-119			3.61	20
1,3-Dichlorobenzene	0.0250	0.0241	0.0261	96.4	104	75.9-129			7.91	20
1,4-Dichlorobenzene	0.0250	0.0245	0.0259	97.8	104	81.0-115			5.74	20
Dichlorodifluoromethane	0.0250	0.0321	0.0349	129	140	50.9-139		J4	8.31	20
1,1-Dichloroethane	0.0250	0.0272	0.0287	109	115	71.7-125			5.52	20
1,2-Dichloroethane	0.0250	0.0255	0.0288	102	115	67.2-121			12.3	20
1,1-Dichloroethene	0.0250	0.0266	0.0283	106	113	60.6-133			6.20	20
cis-1,2-Dichloroethene	0.0250	0.0261	0.0275	105	110	76.1-121			5.22	20
trans-1,2-Dichloroethene	0.0250	0.0264	0.0272	106	109	70.7-124			3.10	20
1,2-Dichloropropane	0.0250	0.0259	0.0275	104	110	76.9-123			5.95	20
1,1-Dichloropropene	0.0250	0.0267	0.0292	107	117	71.2-126			9.01	20
1,3-Dichloropropane	0.0250	0.0244	0.0269	97.5	108	80.3-114			9.79	20
cis-1,3-Dichloropropene	0.0250	0.0251	0.0280	100	112	77.3-123			10.7	20
trans-1,3-Dichloropropene	0.0250	0.0259	0.0292	104	117	73.0-127			12.1	20
2,2-Dichloropropane	0.0250	0.0280	0.0271	112	108	61.9-132			3.22	20
Di-isopropyl ether	0.0250	0.0258	0.0274	103	109	67.2-131			5.96	20
Ethylbenzene	0.0250	0.0249	0.0265	99.4	106	78.6-124			6.40	20
Hexachloro-1,3-butadiene	0.0250	0.0256	0.0269	102	108	69.2-136			5.19	20
Isopropylbenzene	0.0250	0.0251	0.0263	100	105	79.4-126			4.88	20
p-Isopropyltoluene	0.0250	0.0259	0.0271	103	108	75.4-132			4.76	20
2-Butanone (MEK)	0.125	0.0953	0.110	76.2	88.4	44.5-154			14.8	21.3
Methylene Chloride	0.0250	0.0266	0.0279	106	112	68.2-119			4.68	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3151356-1 07/21/16 06:17 • (LCSD) R3151356-2 07/21/16 06:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	0.125	0.132	0.146	105	116	61.1-138			9.85	20
Methyl tert-butyl ether	0.0250	0.0247	0.0268	98.8	107	70.2-122			8.22	20
Naphthalene	0.0250	0.0264	0.0275	106	110	69.9-132			4.03	20
n-Propylbenzene	0.0250	0.0253	0.0269	101	108	80.2-124			6.05	20
Styrene	0.0250	0.0255	0.0278	102	111	79.4-124			8.52	20
1,1,1,2-Tetrachloroethane	0.0250	0.0236	0.0250	94.3	99.9	76.7-127			5.76	20
1,1,2,2-Tetrachloroethane	0.0250	0.0232	0.0253	93.0	101	78.8-124			8.59	20
Tetrachloroethene	0.0250	0.0235	0.0251	94.0	101	71.1-133			6.79	20
Toluene	0.0250	0.0247	0.0263	99.0	105	76.7-116			6.07	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0263	0.0278	105	111	62.6-138			5.64	20
1,2,3-Trichlorobenzene	0.0250	0.0259	0.0259	104	104	72.5-137			0.200	20
1,2,4-Trichlorobenzene	0.0250	0.0273	0.0277	109	111	74.0-137			1.69	20
1,1,1-Trichloroethane	0.0250	0.0258	0.0268	103	107	69.9-127			4.09	20
1,1,2-Trichloroethane	0.0250	0.0217	0.0248	86.8	99.2	81.9-119			13.3	20
Trichloroethene	0.0250	0.0242	0.0262	96.6	105	77.2-122			8.25	20
Trichlorofluoromethane	0.0250	0.0262	0.0276	105	111	51.5-151			5.54	20
1,2,3-Trichloropropane	0.0250	0.0240	0.0262	95.9	105	74.0-124			8.98	20
1,2,3-Trimethylbenzene	0.0250	0.0266	0.0275	106	110	79.4-118			3.38	20
1,2,4-Trimethylbenzene	0.0250	0.0249	0.0260	99.6	104	77.1-124			4.18	20
1,3,5-Trimethylbenzene	0.0250	0.0251	0.0263	100	105	79.0-125			4.68	20
Vinyl chloride	0.0250	0.0280	0.0298	112	119	58.4-134			6.12	20
Xylenes, Total	0.0750	0.0733	0.0768	97.7	102	78.1-123			4.73	20
(S) Toluene-d8				106	104	88.7-115				
(S) Dibromofluoromethane				107	108	76.3-123				
(S) 4-Bromofluorobenzene				98.4	98.3	69.7-129				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

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Gl

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Al

9

Sc

L846855-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L846855-14 07/21/16 13:53 • (MS) R3151356-8 07/21/16 15:23 • (MSD) R3151356-9 07/21/16 15:46

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.158	0.0236	0.142	0.143	74.8	75.6	1	10.0-130			0.880	31.5
Acrylonitrile	0.158	U	0.166	0.169	105	107	1	39.3-152			1.61	27.2
Benzene	0.0316	U	0.0293	0.0288	93.0	91.3	1	47.8-131			1.84	22.8
Bromobenzene	0.0316	U	0.0265	0.0267	84.0	84.7	1	40.0-130			0.780	27.4
Bromodichloromethane	0.0316	U	0.0290	0.0294	92.0	93.1	1	50.6-128			1.18	22.8
Bromoform	0.0316	U	0.0254	0.0267	80.4	84.7	1	43.3-139			5.19	25.9
Bromomethane	0.0316	U	0.0418	0.0395	132	125	1	5.00-189			5.68	26.7
n-Butylbenzene	0.0316	U	0.0254	0.0250	80.3	79.1	1	23.6-146			1.60	39.2

L846855-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L846855-14 07/21/16 13:53 • (MS) R3151356-8 07/21/16 15:23 • (MSD) R3151356-9 07/21/16 15:46

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
sec-Butylbenzene	0.0316	U	0.0262	0.0254	82.9	80.5	1	31.0-142			2.92	34.7
tert-Butylbenzene	0.0316	U	0.0276	0.0280	87.5	88.8	1	36.9-142			1.51	31.7
Carbon tetrachloride	0.0316	U	0.0294	0.0272	93.0	86.3	1	46.0-140			7.50	27.2
Chlorobenzene	0.0316	U	0.0270	0.0271	85.6	85.9	1	44.1-134			0.270	25.7
Chlorodibromomethane	0.0316	U	0.0272	0.0278	86.1	88.1	1	49.7-134			2.28	24
Chloroethane	0.0316	U	0.0288	0.0269	91.4	85.2	1	5.00-164			6.95	28.4
2-Chloroethyl vinyl ether	0.158	U	0.146	0.154	92.8	97.9	1	5.00-159			5.27	40
Chloroform	0.0316	U	0.0316	0.0297	100	94.3	1	51.2-133			6.03	22.8
Chloromethane	0.0316	U	0.0247	0.0232	78.3	73.7	1	31.4-141			6.08	24.6
2-Chlorotoluene	0.0316	U	0.0270	0.0268	85.4	84.9	1	36.1-137			0.650	28.9
4-Chlorotoluene	0.0316	U	0.0275	0.0270	87.1	85.6	1	35.4-137			1.72	29.8
1,2-Dibromo-3-Chloropropane	0.0316	U	0.0276	0.0310	87.4	98.1	1	40.4-138			11.6	30.8
1,2-Dibromoethane	0.0316	U	0.0284	0.0301	90.1	95.3	1	50.2-133			5.56	23.6
Dibromomethane	0.0316	U	0.0307	0.0304	97.2	96.5	1	52.4-128			0.760	23
1,2-Dichlorobenzene	0.0316	U	0.0276	0.0284	87.6	89.9	1	34.6-139			2.53	29.9
1,3-Dichlorobenzene	0.0316	U	0.0251	0.0250	79.4	79.2	1	28.4-142			0.290	31.2
1,4-Dichlorobenzene	0.0316	U	0.0252	0.0262	79.8	83.0	1	35.0-133			3.99	31.1
Dichlorodifluoromethane	0.0316	U	0.0315	0.0282	99.7	89.3	1	31.2-144			11.0	30.2
1,1-Dichloroethane	0.0316	U	0.0319	0.0308	101	97.5	1	49.1-136			3.56	22.9
1,2-Dichloroethane	0.0316	U	0.0329	0.0329	104	104	1	47.1-129			0.0800	22.7
1,1-Dichloroethene	0.0316	U	0.0294	0.0285	93.3	90.4	1	36.1-142			3.08	25.6
cis-1,2-Dichloroethene	0.0316	U	0.0305	0.0287	96.6	91.0	1	50.6-133			5.94	23
trans-1,2-Dichloroethene	0.0316	U	0.0280	0.0253	88.8	80.2	1	43.8-135			10.2	24.8
1,2-Dichloropropane	0.0316	U	0.0283	0.0293	89.6	93.0	1	50.3-134			3.75	22.7
1,1-Dichloropropene	0.0316	U	0.0306	0.0293	96.8	93.0	1	43.0-137			4.07	26.4
1,3-Dichloropropane	0.0316	U	0.0297	0.0308	94.2	97.5	1	51.4-127			3.48	23.1
cis-1,3-Dichloropropene	0.0316	U	0.0296	0.0300	93.7	95.0	1	48.4-134			1.35	23.6
trans-1,3-Dichloropropene	0.0316	U	0.0311	0.0322	98.6	102	1	46.6-135			3.35	25.3
2,2-Dichloropropane	0.0316	U	0.0276	0.0249	87.3	78.8	1	45.2-141			10.3	26.6
Di-isopropyl ether	0.0316	U	0.0303	0.0300	95.9	95.0	1	46.7-140			0.930	23.5
Ethylbenzene	0.0316	U	0.0267	0.0264	84.6	83.6	1	44.8-135			1.24	26.9
Hexachloro-1,3-butadiene	0.0316	U	0.0229	0.0229	72.5	72.4	1	10.0-149			0.0500	40
Isopropylbenzene	0.0316	U	0.0263	0.0260	83.2	82.2	1	41.9-139			1.17	29.3
p-Isopropyltoluene	0.0316	U	0.0258	0.0251	81.7	79.7	1	27.3-146			2.52	35.1
2-Butanone (MEK)	0.158	0.00594	0.158	0.169	96.7	103	1	23.9-170			6.40	28.3
Methylene Chloride	0.0316	U	0.0295	0.0277	93.6	87.9	1	46.7-125			6.33	22.2
4-Methyl-2-pentanone (MIBK)	0.158	U	0.170	0.173	108	110	1	42.4-146			1.75	26.7
Methyl tert-butyl ether	0.0316	U	0.0311	0.0303	98.5	96.1	1	50.4-131			2.51	24.8
Naphthalene	0.0316	U	0.0273	0.0280	86.4	88.8	1	18.4-145			2.75	34

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L846855-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L846855-14 07/21/16 13:53 • (MS) R3151356-8 07/21/16 15:23 • (MSD) R3151356-9 07/21/16 15:46

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Propylbenzene	0.0316	U	0.0261	0.0253	82.7	80.3	1	35.2-139			2.93	31.9
Styrene	0.0316	U	0.0278	0.0283	88.0	89.6	1	39.7-137			1.83	28.2
1,1,1,2-Tetrachloroethane	0.0316	U	0.0256	0.0265	81.1	83.9	1	48.8-136			3.37	25.5
1,1,2,2-Tetrachloroethane	0.0316	U	0.0293	0.0296	92.7	93.8	1	45.7-140			1.12	26.4
Tetrachloroethene	0.0316	U	0.0247	0.0241	78.4	76.3	1	37.7-140			2.61	29.2
Toluene	0.0316	U	0.0276	0.0274	87.5	86.9	1	47.8-127			0.690	24.3
1,1,2-Trichlorotrifluoroethane	0.0316	U	0.0292	0.0258	92.6	81.8	1	35.7-146			12.4	28.8
1,2,3-Trichlorobenzene	0.0316	U	0.0233	0.0231	73.8	73.3	1	10.0-150			0.640	38.5
1,2,4-Trichlorobenzene	0.0316	U	0.0240	0.0233	76.2	73.8	1	10.0-153			3.21	39.3
1,1,1-Trichloroethane	0.0316	U	0.0300	0.0279	94.9	88.3	1	49.0-138			7.27	25.3
1,1,2-Trichloroethane	0.0316	U	0.0274	0.0281	87.0	89.0	1	52.3-132			2.28	23.4
Trichloroethene	0.0316	U	0.0270	0.0263	85.6	83.4	1	48.0-132			2.61	24.8
Trichlorofluoromethane	0.0316	U	0.0266	0.0240	84.3	76.0	1	12.8-169			10.4	29.7
1,2,3-Trichloropropane	0.0316	U	0.0293	0.0299	92.8	94.7	1	44.4-138			2.03	26.3
1,2,3-Trimethylbenzene	0.0316	U	0.0274	0.0279	86.8	88.6	1	41.0-133			1.96	27.6
1,2,4-Trimethylbenzene	0.0316	U	0.0255	0.0252	80.7	79.7	1	32.9-139			1.20	30.6
1,3,5-Trimethylbenzene	0.0316	U	0.0258	0.0253	81.8	80.1	1	37.1-138			2.13	30.6
Vinyl chloride	0.0316	U	0.0277	0.0258	87.9	81.8	1	32.0-146			7.13	26.3
Xylenes, Total	0.0947	U	0.0777	0.0781	82.1	82.5	1	42.7-135			0.540	26.6
(S) Toluene-d8					105	102		88.7-115				
(S) Dibromofluoromethane					113	109		76.3-123				
(S) 4-Bromofluorobenzene					99.7	99.5		69.7-129				

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Method Blank (MB)

(MB) R3152352-3 07/23/16 14:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
2-Chloroethyl vinyl ether	U		0.00234	0.0500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3152352-3 07/23/16 14:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	100			88.7-115
(S) Dibromofluoromethane	88.3			76.3-123
(S) 4-Bromofluorobenzene	97.4			69.7-129

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3152352-1 07/23/16 12:24 • (LCSD) R3152352-2 07/23/16 12:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.125	0.123	99.9	98.4	25.3-178			1.48	22.9
Acrylonitrile	0.125	0.123	0.127	98.2	102	57.8-143			3.43	20
Benzene	0.0250	0.0217	0.0213	86.9	85.2	72.6-120			1.92	20
Bromobenzene	0.0250	0.0233	0.0238	93.2	95.3	80.3-115			2.20	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3152352-1 07/23/16 12:24 • (LCSD) R3152352-2 07/23/16 12:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromodichloromethane	0.0250	0.0228	0.0214	91.1	85.6	75.3-119			6.19	20
Bromoform	0.0250	0.0237	0.0237	94.6	94.7	69.1-135			0.0300	20
Bromomethane	0.0250	0.0209	0.0206	83.5	82.5	23.0-191			1.25	20
n-Butylbenzene	0.0250	0.0271	0.0261	108	104	74.2-134			3.65	20
sec-Butylbenzene	0.0250	0.0245	0.0245	98.1	98.1	77.8-129			0.0100	20
tert-Butylbenzene	0.0250	0.0240	0.0240	95.9	96.0	77.2-129			0.0800	20
Carbon tetrachloride	0.0250	0.0180	0.0180	72.1	71.9	69.4-129			0.220	20
Chlorobenzene	0.0250	0.0247	0.0245	98.9	98.0	78.9-122			0.970	20
Chlorodibromomethane	0.0250	0.0219	0.0228	87.5	91.0	76.4-126			3.90	20
Chloroethane	0.0250	0.0238	0.0242	95.0	96.7	47.2-147			1.71	20
2-Chloroethyl vinyl ether	0.125	ND	ND	0.000	0.000	16.7-162	J4	J4	0.000	23.7
Chloroform	0.0250	0.0211	0.0208	84.6	83.3	73.3-122			1.58	20
Chloromethane	0.0250	0.0224	0.0208	89.5	83.2	53.1-135			7.36	20
2-Chlorotoluene	0.0250	0.0244	0.0250	97.6	99.9	74.6-127			2.36	20
4-Chlorotoluene	0.0250	0.0247	0.0250	98.7	99.9	79.5-123			1.19	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0260	0.0270	104	108	64.9-131			3.72	20
1,2-Dibromoethane	0.0250	0.0249	0.0259	99.4	104	78.7-123			4.14	20
Dibromomethane	0.0250	0.0232	0.0235	92.7	94.1	78.5-117			1.45	20
1,2-Dichlorobenzene	0.0250	0.0265	0.0267	106	107	83.6-119			0.930	20
1,3-Dichlorobenzene	0.0250	0.0253	0.0259	101	104	75.9-129			2.60	20
1,4-Dichlorobenzene	0.0250	0.0259	0.0261	104	105	81.0-115			0.900	20
Dichlorodifluoromethane	0.0250	0.0227	0.0222	90.8	88.8	50.9-139			2.18	20
1,1-Dichloroethane	0.0250	0.0215	0.0214	86.1	85.6	71.7-125			0.550	20
1,2-Dichloroethane	0.0250	0.0205	0.0206	81.9	82.4	67.2-121			0.580	20
1,1-Dichloroethene	0.0250	0.0203	0.0209	81.1	83.4	60.6-133			2.79	20
cis-1,2-Dichloroethene	0.0250	0.0202	0.0199	80.9	79.7	76.1-121			1.41	20
trans-1,2-Dichloroethene	0.0250	0.0204	0.0202	81.6	80.6	70.7-124			1.24	20
1,2-Dichloropropane	0.0250	0.0247	0.0245	98.9	97.9	76.9-123			1.06	20
1,1-Dichloropropene	0.0250	0.0208	0.0204	83.2	81.7	71.2-126			1.79	20
1,3-Dichloropropane	0.0250	0.0259	0.0263	104	105	80.3-114			1.56	20
cis-1,3-Dichloropropene	0.0250	0.0247	0.0242	98.8	96.8	77.3-123			2.11	20
trans-1,3-Dichloropropene	0.0250	0.0268	0.0263	107	105	73.0-127			1.71	20
2,2-Dichloropropane	0.0250	0.0199	0.0204	79.6	81.8	61.9-132			2.68	20
Di-isopropyl ether	0.0250	0.0211	0.0214	84.6	85.6	67.2-131			1.13	20
Ethylbenzene	0.0250	0.0244	0.0245	97.5	98.0	78.6-124			0.480	20
Hexachloro-1,3-butadiene	0.0250	0.0248	0.0252	99.4	101	69.2-136			1.33	20
Isopropylbenzene	0.0250	0.0244	0.0242	97.6	96.7	79.4-126			0.950	20
p-Isopropyltoluene	0.0250	0.0246	0.0255	98.6	102	75.4-132			3.37	20
2-Butanone (MEK)	0.125	0.148	0.148	119	118	44.5-154			0.370	21.3
Methylene Chloride	0.0250	0.0203	0.0202	81.2	80.7	68.2-119			0.600	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3152352-1 07/23/16 12:24 • (LCSD) R3152352-2 07/23/16 12:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	0.125	0.150	0.149	120	119	61.1-138			0.770	20
Methyl tert-butyl ether	0.0250	0.0203	0.0205	81.1	82.1	70.2-122			1.25	20
Naphthalene	0.0250	0.0254	0.0262	102	105	69.9-132			3.06	20
n-Propylbenzene	0.0250	0.0245	0.0246	98.2	98.5	80.2-124			0.320	20
Styrene	0.0250	0.0249	0.0256	99.6	102	79.4-124			2.77	20
1,1,1,2-Tetrachloroethane	0.0250	0.0231	0.0236	92.4	94.5	76.7-127			2.31	20
1,1,2,2-Tetrachloroethane	0.0250	0.0270	0.0281	108	113	78.8-124			4.11	20
Tetrachloroethene	0.0250	0.0245	0.0246	97.9	98.3	71.1-133			0.440	20
Toluene	0.0250	0.0246	0.0236	98.2	94.3	76.7-116			4.12	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0214	0.0213	85.6	85.2	62.6-138			0.450	20
1,2,3-Trichlorobenzene	0.0250	0.0261	0.0268	105	107	72.5-137			2.34	20
1,2,4-Trichlorobenzene	0.0250	0.0275	0.0269	110	108	74.0-137			2.21	20
1,1,1-Trichloroethane	0.0250	0.0182	0.0182	72.8	72.8	69.9-127			0.0300	20
1,1,2-Trichloroethane	0.0250	0.0250	0.0251	99.9	100	81.9-119			0.400	20
Trichloroethene	0.0250	0.0234	0.0222	93.8	88.9	77.2-122			5.29	20
Trichlorofluoromethane	0.0250	0.0180	0.0178	71.8	71.0	51.5-151			1.09	20
1,2,3-Trichloropropane	0.0250	0.0257	0.0254	103	101	74.0-124			1.16	20
1,2,3-Trimethylbenzene	0.0250	0.0235	0.0232	94.0	92.9	79.4-118			1.17	20
1,2,4-Trimethylbenzene	0.0250	0.0232	0.0234	92.7	93.7	77.1-124			0.980	20
1,3,5-Trimethylbenzene	0.0250	0.0239	0.0239	95.5	95.6	79.0-125			0.120	20
Vinyl chloride	0.0250	0.0227	0.0222	90.7	88.9	58.4-134			2.01	20
Xylenes, Total	0.0750	0.0738	0.0733	98.4	97.8	78.1-123			0.630	20
(S) Toluene-d8				102	100	88.7-115				
(S) Dibromofluoromethane				88.1	88.4	76.3-123				
(S) 4-Bromofluorobenzene				95.6	97.0	69.7-129				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L847721-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847721-06 07/26/16 17:38 • (MS) R3152462-1 07/26/16 18:01 • (MSD) R3152462-2 07/26/16 18:23

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	ND	2.45	2.63	79.1	85.1	24.75	10.0-130			7.36	31.5
Acrylonitrile	0.125	ND	3.34	3.67	108	119	24.75	39.3-152			9.45	27.2
Benzene	0.0250	ND	0.674	0.738	109	119	24.75	47.8-131			9.13	22.8
Bromobenzene	0.0250	ND	0.599	0.643	96.9	104	24.75	40.0-130			7.02	27.4
Bromodichloromethane	0.0250	ND	0.580	0.639	93.7	103	24.75	50.6-128			9.64	22.8
Bromoform	0.0250	ND	0.429	0.444	69.4	71.7	24.75	43.3-139			3.24	25.9
Bromomethane	0.0250	ND	0.303	0.352	48.9	56.8	24.75	5.00-189			14.9	26.7
n-Butylbenzene	0.0250	ND	0.652	0.713	105	115	24.75	23.6-146			9.05	39.2

L847721-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847721-06 07/26/16 17:38 • (MS) R3152462-1 07/26/16 18:01 • (MSD) R3152462-2 07/26/16 18:23

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
sec-Butylbenzene	0.0250	ND	0.639	0.677	103	109	24.75	31.0-142			5.83	34.7
tert-Butylbenzene	0.0250	ND	0.650	0.692	105	112	24.75	36.9-142			6.36	31.7
Carbon tetrachloride	0.0250	ND	0.578	0.644	93.5	104	24.75	46.0-140			10.7	27.2
Chlorobenzene	0.0250	ND	0.600	0.651	96.9	105	24.75	44.1-134			8.19	25.7
Chlorodibromomethane	0.0250	ND	0.514	0.556	83.1	89.9	24.75	49.7-134			7.91	24
Chloroethane	0.0250	ND	0.0854	0.0915	13.8	14.8	24.75	5.00-164			6.83	28.4
2-Chloroethyl vinyl ether	0.125	ND	3.59	4.10	116	133	24.75	5.00-159			13.3	40
Chloroform	0.0250	ND	0.662	0.728	107	118	24.75	51.2-133			9.47	22.8
Chloromethane	0.0250	ND	0.583	0.635	94.2	103	24.75	31.4-141			8.63	24.6
2-Chlorotoluene	0.0250	ND	0.638	0.681	103	110	24.75	36.1-137			6.51	28.9
4-Chlorotoluene	0.0250	ND	0.628	0.660	102	107	24.75	35.4-137			4.90	29.8
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.510	0.555	82.3	89.7	24.75	40.4-138			8.60	30.8
1,2-Dibromoethane	0.0250	ND	0.575	0.629	92.9	102	24.75	50.2-133			8.99	23.6
Dibromomethane	0.0250	ND	0.616	0.700	99.5	113	24.75	52.4-128			12.8	23
1,2-Dichlorobenzene	0.0250	ND	0.621	0.685	100	111	24.75	34.6-139			9.91	29.9
1,3-Dichlorobenzene	0.0250	ND	0.604	0.635	97.6	103	24.75	28.4-142			5.04	31.2
1,4-Dichlorobenzene	0.0250	ND	0.572	0.654	92.4	106	24.75	35.0-133			13.5	31.1
Dichlorodifluoromethane	0.0250	ND	0.697	0.722	113	117	24.75	31.2-144			3.59	30.2
1,1-Dichloroethane	0.0250	ND	0.681	0.741	110	120	24.75	49.1-136			8.45	22.9
1,2-Dichloroethane	0.0250	ND	0.710	0.800	115	129	24.75	47.1-129			11.9	22.7
1,1-Dichloroethene	0.0250	ND	0.357	0.380	57.6	61.4	24.75	36.1-142			6.32	25.6
cis-1,2-Dichloroethene	0.0250	ND	0.659	0.718	106	116	24.75	50.6-133			8.55	23
trans-1,2-Dichloroethene	0.0250	ND	0.599	0.646	96.7	104	24.75	43.8-135			7.60	24.8
1,2-Dichloropropane	0.0250	ND	0.623	0.692	101	112	24.75	50.3-134			10.5	22.7
1,1-Dichloropropene	0.0250	ND	0.691	0.763	112	123	24.75	43.0-137			9.91	26.4
1,3-Dichloropropane	0.0250	ND	0.618	0.670	99.9	108	24.75	51.4-127			8.05	23.1
cis-1,3-Dichloropropene	0.0250	ND	0.595	0.666	96.2	108	24.75	48.4-134			11.3	23.6
trans-1,3-Dichloropropene	0.0250	ND	0.588	0.683	95.0	110	24.75	46.6-135			15.0	25.3
2,2-Dichloropropane	0.0250	ND	0.512	0.544	82.7	87.9	24.75	45.2-141			6.09	26.6
Di-isopropyl ether	0.0250	ND	0.644	0.708	104	114	24.75	46.7-140			9.40	23.5
Ethylbenzene	0.0250	ND	0.605	0.641	97.7	104	24.75	44.8-135			5.88	26.9
Hexachloro-1,3-butadiene	0.0250	ND	0.640	0.682	103	110	24.75	10.0-149			6.43	40
Isopropylbenzene	0.0250	ND	0.611	0.648	98.8	105	24.75	41.9-139			5.74	29.3
p-Isopropyltoluene	0.0250	ND	0.636	0.666	103	108	24.75	27.3-146			4.60	35.1
2-Butanone (MEK)	0.125	ND	3.03	3.31	97.9	107	24.75	23.9-170			8.78	28.3
Methylene Chloride	0.0250	ND	0.623	0.685	101	111	24.75	46.7-125			9.47	22.2
4-Methyl-2-pentanone (MIBK)	0.125	ND	2.93	3.24	94.7	105	24.75	42.4-146			10.2	26.7
Methyl tert-butyl ether	0.0250	ND	0.618	0.680	98.8	109	24.75	50.4-131			9.46	24.8
Naphthalene	0.0250	ND	0.685	0.722	111	117	24.75	18.4-145			5.22	34
n-Propylbenzene	0.0250	ND	0.614	0.655	99.2	106	24.75	35.2-139			6.51	31.9

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L847721-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847721-06 07/26/16 17:38 • (MS) R3152462-1 07/26/16 18:01 • (MSD) R3152462-2 07/26/16 18:23

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Styrene	0.0250	ND	0.627	0.665	101	108	24.75	39.7-137			5.91	28.2
1,1,1,2-Tetrachloroethane	0.0250	ND	0.571	0.603	92.4	97.5	24.75	48.8-136			5.38	25.5
1,1,2,2-Tetrachloroethane	0.0250	ND	0.572	0.592	92.4	95.7	24.75	45.7-140			3.48	26.4
Tetrachloroethene	0.0250	ND	0.570	0.604	92.1	97.7	24.75	37.7-140			5.86	29.2
Toluene	0.0250	ND	0.576	0.631	93.0	102	24.75	47.8-127			9.12	24.3
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.375	0.416	60.5	67.2	24.75	35.7-146			10.5	28.8
1,2,3-Trichlorobenzene	0.0250	ND	0.664	0.711	107	115	24.75	10.0-150			6.88	38.5
1,2,4-Trichlorobenzene	0.0250	ND	0.676	0.736	109	119	24.75	10.0-153			8.53	39.3
1,1,1-Trichloroethane	0.0250	ND	0.594	0.648	96.0	105	24.75	49.0-138			8.63	25.3
1,1,2-Trichloroethane	0.0250	ND	0.566	0.614	91.5	99.3	24.75	52.3-132			8.12	23.4
Trichloroethene	0.0250	ND	0.621	0.670	100	108	24.75	48.0-132			7.57	24.8
Trichlorofluoromethane	0.0250	ND	0.187	0.203	30.2	32.8	24.75	12.8-169			8.15	29.7
1,2,3-Trichloropropane	0.0250	ND	0.577	0.619	93.3	100	24.75	44.4-138			6.99	26.3
1,2,3-Trimethylbenzene	0.0250	ND	0.625	0.683	101	110	24.75	41.0-133			8.94	27.6
1,2,4-Trimethylbenzene	0.0250	ND	0.604	0.638	97.6	103	24.75	32.9-139			5.58	30.6
1,3,5-Trimethylbenzene	0.0250	ND	0.617	0.644	99.7	104	24.75	37.1-138			4.26	30.6
Vinyl chloride	0.0250	ND	0.625	0.672	101	109	24.75	32.0-146			7.22	26.3
Xylenes, Total	0.0750	ND	1.78	1.87	95.7	101	24.75	42.7-135			5.21	26.6
(S) Toluene-d8					99.7	101		88.7-115				
(S) Dibromofluoromethane					111	112		76.3-123				
(S) 4-Bromofluorobenzene					101	97.0		69.7-129				

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3151341-1 07/21/16 09:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	82.3			50.0-150

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3151341-2 07/21/16 09:38 • (LCSD) R3151341-3 07/21/16 09:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	60.0	49.4	48.5	82.3	80.8	50.0-150			1.95	20
(S) o-Terphenyl				93.6	79.5	50.0-150				

L847721-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847721-06 07/21/16 12:03 • (MS) R3151341-4 07/21/16 12:14 • (MSD) R3151341-5 07/21/16 12:25

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	60.0	ND	49.7	49.8	82.8	83.0	1	50.0-150			0.210	20
(S) o-Terphenyl					77.8	81.3		50.0-150				





## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J4	The associated batch QC was outside the established quality control range for accuracy.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

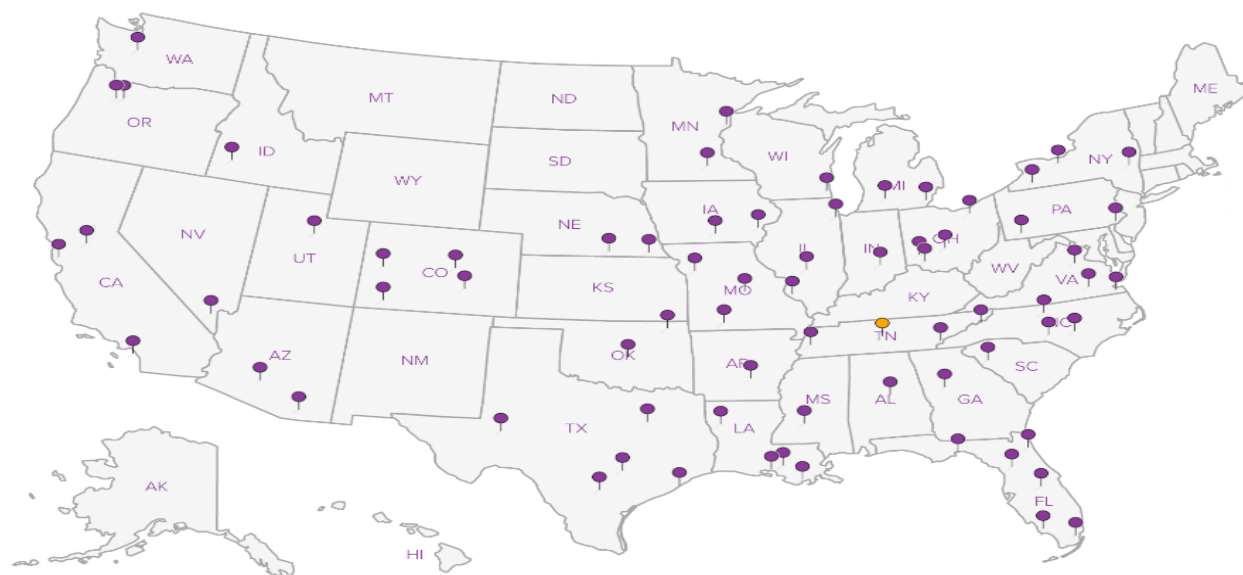
## Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> Accreditation not applicable

## Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:

**Weston Solutions**1435 Garrison St., Ste. 100  
Lakewood, CO 80215

Billing Information:

Analysis / Container / Preservative

Chain of Custody Page    of   

YOUR LAB OF CHOICE

12065 Lebanon Rd  
Mount Juliet, TN 37122  
Phone: 615-758-5858  
Phone: 800-767-5859  
Fax: 615-758-5859

Report to:

**Joe Rudi**

Email To:

**Joe Rudi @westonsolutions.com**Project  
Description: Yankton Sioux Tribe Admin Bldg.City/State  
Collected: Yankton, SDPhone: **303-729-6146**

Client Project #

Lab Project #

Fax:

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

**Rush?** (Lab MUST Be Notified)

Date Results Needed

Immediately  
Packed on Ice N    Y   

☐ Same Day .....200%  
☐ Next Day .....100%  
☐ Two Day .....50%  
☐ Three Day .....25%

Email? ☐ No ☒ YesFAX? ☐ No ☐ YesNo.  
of  
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	VOC/TVPH - 4oz Soil Jar	TEPH - 4oz Soil Jar	Lead - 4oz Soil Jar										
YSTAB-BH01(8-9)	Grab	SS	8-9	7/12	1050	3	X	X	X										
YSTAB-BH01(19-20)	Grab	SS	19-20	7/12	1045	3	X	X	X										
YSTAB-BH02(8-9)	Grab	SS	8-9	7/12	1205	3	X	X	X										
YSTAB-BH02(12-13)	Grab	SS	12-13	7/12	1210	3	X	X	X										
YSTAB-BH03(10-11)	Grab	SS	10-11	7/12	1303	3	X	X	X										
YSTAB-BH03(6-7)	Grab	SS	6-7	7/12	1309	9	X	X	X										
YSTAB-DUP(8-9)	Grab	SS	8-9	7/12	0000	3	X	X	X										
	Grab	SS																	
	Grab	SS																	
	Grab	SS																	

Shipped Via:

Rem./Contaminant Sample # (lab only)

01  
 02  
 03  
 04  
 05  
 06  
 07

\* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Remarks:

Flow \_\_\_\_\_ Other \_\_\_\_\_

Hold #

Relinquished by: (Signature)

Date: 7/13

Time: AM

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

☒ FedEx ☐ Courier ☐ \_\_\_\_\_

DB9

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Temp: 1.4 °C Bottles Received: 27402

COC Seal Intact: ☒ Y ☐ N ☐ NA

Date: 7-16-16 Time: 0900

pH Checked:

NCF:

## Weston Solutions - CO

Sample Delivery Group: L847716  
Samples Received: 07/16/2016  
Project Number:  
Description: Yankton Sioux Tribe Admin Bldg  
  
Report To: Joe Rudi  
1435 Garrison St., Ste 100  
Denver, CO 80215

Entire Report Reviewed By:



Shane Gambill  
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



<b><sup>1</sup>Cp: Cover Page</b>	<b>1</b>
<b><sup>2</sup>Tc: Table of Contents</b>	<b>2</b>
<b><sup>3</sup>Ss: Sample Summary</b>	<b>3</b>
<b><sup>4</sup>Cn: Case Narrative</b>	<b>4</b>
<b><sup>5</sup>Sr: Sample Results</b>	<b>5</b>
YSTAB-GW-BH02 L847716-01	5
YSTAB-GW-BH03 L847716-02	7
YSTAB-GW-DUP L847716-03	9
TB-01 L847716-04	11
<b><sup>6</sup>Qc: Quality Control Summary</b>	<b>13</b>
Volatile Organic Compounds (GC) by Method 8015D/GRO	13
Volatile Organic Compounds (GC/MS) by Method 8260B	14
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	20
<b><sup>7</sup>Gl: Glossary of Terms</b>	<b>21</b>
<b><sup>8</sup>Al: Accreditations &amp; Locations</b>	<b>22</b>
<b><sup>9</sup>Sc: Chain of Custody</b>	<b>23</b>





# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## YSTAB-GW-BH02 L847716-01 GW

Collected by  
E. Sandusky

Collected date/time  
07/12/16 12:40

Received date/time  
07/16/16 09:00

<sup>1</sup>Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG889694	1	07/17/16 22:09	07/18/16 20:57	TRF
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890856	1	07/20/16 19:36	07/20/16 19:36	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG890925	1	07/25/16 10:54	07/25/16 10:54	BMB

<sup>2</sup>Tc

<sup>3</sup>Ss

## YSTAB-GW-BH03 L847716-02 GW

Collected by  
E. Sandusky

Collected date/time  
07/12/16 14:30

Received date/time  
07/16/16 09:00

<sup>4</sup>Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG889694	1	07/17/16 22:09	07/18/16 21:57	TRF
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890856	1	07/21/16 00:33	07/21/16 00:33	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG890925	1	07/25/16 14:58	07/25/16 14:58	BMB

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

## YSTAB-GW-DUP L847716-03 GW

Collected by  
E. Sandusky

Collected date/time  
07/12/16 00:00

Received date/time  
07/16/16 09:00

<sup>8</sup>Al

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG889694	1	07/17/16 22:09	07/18/16 22:17	TRF
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890856	1	07/21/16 00:55	07/21/16 00:55	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG890925	1	07/25/16 15:18	07/25/16 15:18	BMB

<sup>9</sup>Sc

## TB-01 L847716-04 GW

Collected by  
E. Sandusky

Collected date/time  
07/12/16 00:00

Received date/time  
07/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG889694	1	07/17/16 22:09	07/18/16 22:36	TRF
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG890856	1	07/21/16 01:16	07/21/16 01:16	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG890925	1	07/25/16 08:31	07/25/16 08:31	BMB



All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Shane Gambill  
Technical Service Representative

### Sample Handling and Receiving

The analysis for 2-Chloroethyl Vinyl Ether was conducted from a chemically preserved container.

<u>ESC Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L847716-01</a>	<a href="#">YSTAB-GW-BH02</a>	8260B
<a href="#">L847716-02</a>	<a href="#">YSTAB-GW-BH03</a>	8260B
<a href="#">L847716-03</a>	<a href="#">YSTAB-GW-DUP</a>	8260B
<a href="#">L847716-04</a>	<a href="#">TB-01</a>	8260B

VOC pH outside of method requirement.

<u>ESC Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L847716-02</a>	<a href="#">YSTAB-GW-BH03</a>	8015D/GRO
<a href="#">L847716-03</a>	<a href="#">YSTAB-GW-DUP</a>	8015D/GRO

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc





## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	07/20/2016 19:36	<a href="#">WG890856</a>
(S) a,a,a-Trifluorotoluene(FID)	100		62.0-128		07/20/2016 19:36	<a href="#">WG890856</a>

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	07/25/2016 10:54	<a href="#">WG890925</a>
Acrolein	ND		50.0	1	07/25/2016 10:54	<a href="#">WG890925</a>
Acrylonitrile	ND		10.0	1	07/25/2016 10:54	<a href="#">WG890925</a>
Benzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Bromobenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Bromodichloromethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Bromoform	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Bromomethane	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
n-Butylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
sec-Butylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
tert-Butylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Carbon tetrachloride	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Chlorobenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Chlorodibromomethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Chloroethane	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
2-Chloroethyl vinyl ether	ND	<a href="#">J6</a>	50.0	1	07/25/2016 10:54	<a href="#">WG890925</a>
Chloroform	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Chloromethane	ND		2.50	1	07/25/2016 10:54	<a href="#">WG890925</a>
2-Chlorotoluene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
4-Chlorotoluene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2-Dibromoethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Dibromomethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2-Dichlorobenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,3-Dichlorobenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,4-Dichlorobenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Dichlorodifluoromethane	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1-Dichloroethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2-Dichloroethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1-Dichloroethene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
cis-1,2-Dichloroethene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
trans-1,2-Dichloroethene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2-Dichloropropane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1-Dichloropropene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,3-Dichloropropane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
cis-1,3-Dichloropropene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
trans-1,3-Dichloropropene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
2,2-Dichloropropane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Di-isopropyl ether	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Ethylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Hexachloro-1,3-butadiene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Isopropylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
p-Isopropyltoluene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
2-Butanone (MEK)	ND		10.0	1	07/25/2016 10:54	<a href="#">WG890925</a>
Methylene Chloride	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/25/2016 10:54	<a href="#">WG890925</a>
Methyl tert-butyl ether	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Naphthalene	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
n-Propylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

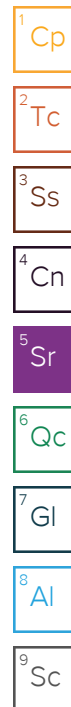


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## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Styrene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Tetrachloroethene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Toluene	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2,3-Trichlorobenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2,4-Trichlorobenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1,1-Trichloroethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,1,2-Trichloroethane	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Trichloroethene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Trichlorofluoromethane	ND		5.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2,3-Trichloropropane	ND		2.50	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2,4-Trimethylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,2,3-Trimethylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
1,3,5-Trimethylbenzene	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Vinyl chloride	ND		1.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
Xylenes, Total	ND		3.00	1	07/25/2016 10:54	<a href="#">WG890925</a>
(S) Toluene-d8	102		90.0-115		07/25/2016 10:54	<a href="#">WG890925</a>
(S) Dibromofluoromethane	102		79.0-121		07/25/2016 10:54	<a href="#">WG890925</a>
(S) 4-Bromofluorobenzene	103		80.1-120		07/25/2016 10:54	<a href="#">WG890925</a>



## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		100	1	07/18/2016 20:57	<a href="#">WG889694</a>
(S) o-Terphenyl	105		50.0-150		07/18/2016 20:57	<a href="#">WG889694</a>



## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	07/21/2016 00:33	<a href="#">WG890856</a>
(S) a,a,a-Trifluorotoluene(FID)	100		62.0-128		07/21/2016 00:33	<a href="#">WG890856</a>

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	07/25/2016 14:58	<a href="#">WG890925</a>
Acrolein	ND		50.0	1	07/25/2016 14:58	<a href="#">WG890925</a>
Acrylonitrile	ND		10.0	1	07/25/2016 14:58	<a href="#">WG890925</a>
Benzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Bromobenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Bromodichloromethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Bromoform	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Bromomethane	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
n-Butylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
sec-Butylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
tert-Butylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Carbon tetrachloride	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Chlorobenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Chlorodibromomethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Chloroethane	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
2-Chloroethyl vinyl ether	ND		50.0	1	07/25/2016 14:58	<a href="#">WG890925</a>
Chloroform	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Chloromethane	ND		2.50	1	07/25/2016 14:58	<a href="#">WG890925</a>
2-Chlorotoluene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
4-Chlorotoluene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2-Dibromoethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Dibromomethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2-Dichlorobenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,3-Dichlorobenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,4-Dichlorobenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Dichlorodifluoromethane	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1-Dichloroethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2-Dichloroethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1-Dichloroethene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
cis-1,2-Dichloroethene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
trans-1,2-Dichloroethene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2-Dichloropropane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1-Dichloropropene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,3-Dichloropropane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
cis-1,3-Dichloropropene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
trans-1,3-Dichloropropene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
2,2-Dichloropropane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Di-isopropyl ether	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Ethylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Hexachloro-1,3-butadiene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Isopropylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
p-Isopropyltoluene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
2-Butanone (MEK)	ND		10.0	1	07/25/2016 14:58	<a href="#">WG890925</a>
Methylene Chloride	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/25/2016 14:58	<a href="#">WG890925</a>
Methyl tert-butyl ether	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Naphthalene	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
n-Propylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

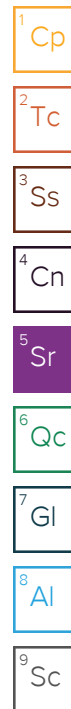


Collected date/time: 07/12/16 14:30

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## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Styrene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Tetrachloroethene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Toluene	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2,3-Trichlorobenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2,4-Trichlorobenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1,1-Trichloroethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,1,2-Trichloroethane	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Trichloroethene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Trichlorofluoromethane	ND		5.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2,3-Trichloropropane	ND		2.50	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2,4-Trimethylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,2,3-Trimethylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
1,3,5-Trimethylbenzene	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Vinyl chloride	ND		1.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
Xylenes, Total	ND		3.00	1	07/25/2016 14:58	<a href="#">WG890925</a>
(S) Toluene-d8	104		90.0-115		07/25/2016 14:58	<a href="#">WG890925</a>
(S) Dibromofluoromethane	100		79.0-121		07/25/2016 14:58	<a href="#">WG890925</a>
(S) 4-Bromofluorobenzene	102		80.1-120		07/25/2016 14:58	<a href="#">WG890925</a>



## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		100	1	07/18/2016 21:57	<a href="#">WG889694</a>
(S) o-Terphenyl	104		50.0-150		07/18/2016 21:57	<a href="#">WG889694</a>



## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	07/21/2016 00:55	<a href="#">WG890856</a>
(S) a,a,a-Trifluorotoluene(FID)	101		62.0-128		07/21/2016 00:55	<a href="#">WG890856</a>

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	07/25/2016 15:18	<a href="#">WG890925</a>
Acrolein	ND		50.0	1	07/25/2016 15:18	<a href="#">WG890925</a>
Acrylonitrile	ND		10.0	1	07/25/2016 15:18	<a href="#">WG890925</a>
Benzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Bromobenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Bromodichloromethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Bromoform	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Bromomethane	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
n-Butylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
sec-Butylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
tert-Butylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Carbon tetrachloride	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Chlorobenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Chlorodibromomethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Chloroethane	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
2-Chloroethyl vinyl ether	ND		50.0	1	07/25/2016 15:18	<a href="#">WG890925</a>
Chloroform	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Chloromethane	ND		2.50	1	07/25/2016 15:18	<a href="#">WG890925</a>
2-Chlorotoluene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
4-Chlorotoluene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2-Dibromoethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Dibromomethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2-Dichlorobenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,3-Dichlorobenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,4-Dichlorobenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Dichlorodifluoromethane	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1-Dichloroethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2-Dichloroethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1-Dichloroethene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
cis-1,2-Dichloroethene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
trans-1,2-Dichloroethene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2-Dichloropropane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1-Dichloropropene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,3-Dichloropropane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
cis-1,3-Dichloropropene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
trans-1,3-Dichloropropene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
2,2-Dichloropropane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Di-isopropyl ether	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Ethylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Hexachloro-1,3-butadiene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Isopropylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
p-Isopropyltoluene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
2-Butanone (MEK)	ND		10.0	1	07/25/2016 15:18	<a href="#">WG890925</a>
Methylene Chloride	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/25/2016 15:18	<a href="#">WG890925</a>
Methyl tert-butyl ether	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Naphthalene	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
n-Propylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/12/16 00:00

L847716

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Styrene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Tetrachloroethene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Toluene	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2,3-Trichlorobenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2,4-Trichlorobenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1,1-Trichloroethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,1,2-Trichloroethane	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Trichloroethene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Trichlorofluoromethane	ND		5.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2,3-Trichloropropane	ND		2.50	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2,4-Trimethylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,2,3-Trimethylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
1,3,5-Trimethylbenzene	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Vinyl chloride	ND		1.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
Xylenes, Total	ND		3.00	1	07/25/2016 15:18	<a href="#">WG890925</a>
(S) Toluene-d8	104		90.0-115		07/25/2016 15:18	<a href="#">WG890925</a>
(S) Dibromofluoromethane	99.9		79.0-121		07/25/2016 15:18	<a href="#">WG890925</a>
(S) 4-Bromofluorobenzene	103		80.1-120		07/25/2016 15:18	<a href="#">WG890925</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		100	1	07/18/2016 22:17	<a href="#">WG889694</a>
(S) o-Terphenyl	103		50.0-150		07/18/2016 22:17	<a href="#">WG889694</a>



Collected date/time: 07/12/16 00:00

L847716

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	07/21/2016 01:16	<a href="#">WG890856</a>
(S) a,a,a-Trifluorotoluene(FID)	102		62.0-128		07/21/2016 01:16	<a href="#">WG890856</a>

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	07/25/2016 08:31	<a href="#">WG890925</a>
Acrolein	ND		50.0	1	07/25/2016 08:31	<a href="#">WG890925</a>
Acrylonitrile	ND		10.0	1	07/25/2016 08:31	<a href="#">WG890925</a>
Benzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Bromobenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Bromodichloromethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Bromoform	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Bromomethane	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
n-Butylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
sec-Butylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
tert-Butylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Carbon tetrachloride	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Chlorobenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Chlorodibromomethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Chloroethane	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
2-Chloroethyl vinyl ether	ND		50.0	1	07/25/2016 08:31	<a href="#">WG890925</a>
Chloroform	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Chloromethane	ND		2.50	1	07/25/2016 08:31	<a href="#">WG890925</a>
2-Chlorotoluene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
4-Chlorotoluene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2-Dibromoethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Dibromomethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2-Dichlorobenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,3-Dichlorobenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,4-Dichlorobenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Dichlorodifluoromethane	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1-Dichloroethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2-Dichloroethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1-Dichloroethene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
cis-1,2-Dichloroethene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
trans-1,2-Dichloroethene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2-Dichloropropane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1-Dichloropropene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,3-Dichloropropane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
cis-1,3-Dichloropropene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
trans-1,3-Dichloropropene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
2,2-Dichloropropane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Di-isopropyl ether	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Ethylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Hexachloro-1,3-butadiene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Isopropylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
p-Isopropyltoluene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
2-Butanone (MEK)	ND		10.0	1	07/25/2016 08:31	<a href="#">WG890925</a>
Methylene Chloride	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/25/2016 08:31	<a href="#">WG890925</a>
Methyl tert-butyl ether	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Naphthalene	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
n-Propylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc





Collected date/time: 07/12/16 00:00

L847716

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Styrene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Tetrachloroethene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Toluene	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2,3-Trichlorobenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2,4-Trichlorobenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1,1-Trichloroethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,1,2-Trichloroethane	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Trichloroethene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Trichlorofluoromethane	ND		5.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2,3-Trichloropropane	ND		2.50	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2,4-Trimethylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,2,3-Trimethylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
1,3,5-Trimethylbenzene	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Vinyl chloride	ND		1.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
Xylenes, Total	ND		3.00	1	07/25/2016 08:31	<a href="#">WG890925</a>
(S) Toluene-d8	103		90.0-115		07/25/2016 08:31	<a href="#">WG890925</a>
(S) Dibromofluoromethane	101		79.0-121		07/25/2016 08:31	<a href="#">WG890925</a>
(S) 4-Bromofluorobenzene	104		80.1-120		07/25/2016 08:31	<a href="#">WG890925</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		100	1	07/18/2016 22:36	<a href="#">WG889694</a>
(S) o-Terphenyl	110		50.0-150		07/18/2016 22:36	<a href="#">WG889694</a>



Method Blank (MB)

(MB) R3151211-3 07/20/16 13:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
(S) a,a,a-Trifluorotoluene(FID)	99.9			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3151211-1 07/20/16 12:24 • (LCSD) R3151211-2 07/20/16 12:46

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5500	6320	6130	115	111	67.0-132			3.07	20
(S) a,a,a-Trifluorotoluene(FID)				102	102	62.0-128				

L847716-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847716-01 07/20/16 19:36 • (MS) R3151211-4 07/20/16 17:46 • (MSD) R3151211-5 07/20/16 18:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPH (GC/FID) Low Fraction	5500	ND	6460	6060	117	110	1	50.0-143			6.41	20
(S) a,a,a-Trifluorotoluene(FID)					102	101		62.0-128				

L848004-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L848004-29 07/20/16 19:58 • (MS) R3151211-6 07/20/16 18:30 • (MSD) R3151211-7 07/20/16 18:52

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPH (GC/FID) Low Fraction	5500	ND	6110	6170	110	111	1	50.0-143			0.930	20
(S) a,a,a-Trifluorotoluene(FID)					101	101		62.0-128				



Method Blank (MB)

(MB) R3152034-3 07/25/16 07:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrolein	U		8.87	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
2-Chloroethyl vinyl ether	U		3.01	50.0
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3152034-3 07/25/16 07:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.256	1.00
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.780	5.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
1,2,3-Trimethylbenzene	U		0.321	1.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	103			90.0-115
(S) Dibromofluoromethane	99.3			79.0-121
(S) 4-Bromofluorobenzene	103			80.1-120

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3152034-1 07/25/16 05:48 • (LCSD) R3152034-2 07/25/16 06:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	86.7	86.7	69.3	69.4	28.7-175			0.0400	20.9
Acrolein	125	145	145	116	116	40.4-172			0.0300	20
Acrylonitrile	125	126	125	100	99.7	58.2-145			0.740	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3152034-1 07/25/16 05:48 • (LCSD) R3152034-2 07/25/16 06:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	24.3	23.5	97.2	94.1	73.0-122			3.33	20
Bromobenzene	25.0	25.3	24.6	101	98.5	81.5-115			2.56	20
Bromodichloromethane	25.0	23.2	22.8	92.6	91.1	75.5-121			1.69	20
Bromoform	25.0	26.9	26.3	107	105	71.5-131			2.27	20
Bromomethane	25.0	25.0	24.2	99.9	96.6	22.4-187			3.39	20
n-Butylbenzene	25.0	23.8	23.3	95.2	93.1	75.9-134			2.16	20
sec-Butylbenzene	25.0	26.5	25.6	106	102	80.6-126			3.70	20
tert-Butylbenzene	25.0	27.1	26.3	109	105	79.3-127			3.27	20
Carbon tetrachloride	25.0	23.3	22.5	93.3	89.8	70.9-129			3.77	20
Chlorobenzene	25.0	26.8	25.9	107	104	79.7-122			3.47	20
Chlorodibromomethane	25.0	27.0	26.5	108	106	78.2-124			1.73	20
Chloroethane	25.0	24.8	24.1	99.2	96.6	41.2-153			2.68	20
2-Chloroethyl vinyl ether	125	108	109	86.4	87.5	23.4-162			1.23	23.5
Chloroform	25.0	24.3	23.4	97.1	93.7	73.2-125			3.52	20
Chloromethane	25.0	22.6	21.9	90.4	87.5	55.8-134			3.32	20
2-Chlorotoluene	25.0	26.5	25.7	106	103	76.4-125			3.24	20
4-Chlorotoluene	25.0	26.0	25.1	104	100	81.5-121			3.49	20
1,2-Dibromo-3-Chloropropane	25.0	24.1	25.3	96.5	101	64.8-131			4.64	20
1,2-Dibromoethane	25.0	26.7	26.1	107	104	79.8-122			2.35	20
Dibromomethane	25.0	25.7	25.5	103	102	79.5-118			0.470	20
1,2-Dichlorobenzene	25.0	25.7	25.6	103	102	84.7-118			0.450	20
1,3-Dichlorobenzene	25.0	26.6	25.8	106	103	77.6-127			2.95	20
1,4-Dichlorobenzene	25.0	24.2	23.9	97.0	95.8	82.2-114			1.22	20
Dichlorodifluoromethane	25.0	24.8	24.0	99.1	95.9	56.0-134			3.37	20
1,1-Dichloroethane	25.0	24.8	24.1	99.2	96.4	71.7-127			2.91	20
1,2-Dichloroethane	25.0	25.2	24.7	101	98.9	65.3-126			1.81	20
1,1-Dichloroethene	25.0	25.3	24.8	101	99.2	59.9-137			2.10	20
cis-1,2-Dichloroethene	25.0	25.2	24.7	101	98.6	77.3-122			2.25	20
trans-1,2-Dichloroethene	25.0	24.9	24.1	99.5	96.5	72.6-125			3.09	20
1,2-Dichloropropane	25.0	24.6	24.3	98.4	97.1	77.4-125			1.32	20
1,1-Dichloropropene	25.0	25.1	24.4	101	97.8	72.5-127			2.84	20
1,3-Dichloropropane	25.0	27.0	26.3	108	105	80.6-115			2.65	20
cis-1,3-Dichloropropene	25.0	25.3	25.0	101	100	77.7-124			1.10	20
trans-1,3-Dichloropropene	25.0	25.1	24.5	101	98.1	73.5-127			2.41	20
2,2-Dichloropropane	25.0	22.9	22.1	91.7	88.3	61.3-134			3.77	20
Di-isopropyl ether	25.0	23.3	22.6	93.2	90.5	65.1-135			2.94	20
Ethylbenzene	25.0	26.1	25.2	104	101	80.9-121			3.50	20
Hexachloro-1,3-butadiene	25.0	25.2	25.1	101	101	73.7-133			0.170	20
Isopropylbenzene	25.0	26.0	25.4	104	102	81.6-124			2.53	20
p-Isopropyltoluene	25.0	27.5	26.7	110	107	77.6-129			3.13	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3152034-1 07/25/16 05:48 • (LCSD) R3152034-2 07/25/16 06:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	125	100	100	80.2	80.1	46.4-155			0.130	20
Methylene Chloride	25.0	23.4	22.6	93.6	90.3	69.5-120			3.63	20
4-Methyl-2-pentanone (MIBK)	125	122	123	97.7	98.5	63.3-138			0.860	20
Methyl tert-butyl ether	25.0	25.1	24.6	100	98.4	70.1-125			1.96	20
Naphthalene	25.0	24.0	24.8	95.9	99.2	69.7-134			3.43	20
n-Propylbenzene	25.0	26.4	25.6	106	102	81.9-122			3.19	20
Styrene	25.0	27.1	26.6	108	106	79.9-124			1.96	20
1,1,1,2-Tetrachloroethane	25.0	27.3	26.2	109	105	78.5-125			3.84	20
1,1,2,2-Tetrachloroethane	25.0	25.7	25.3	103	101	79.3-123			1.54	20
Tetrachloroethene	25.0	27.1	25.8	108	103	73.5-130			4.85	20
Toluene	25.0	24.0	23.7	96.1	94.8	77.9-116			1.31	20
1,1,2-Trichlorotrifluoroethane	25.0	26.6	25.4	106	101	62.0-141			4.79	20
1,2,3-Trichlorobenzene	25.0	25.7	26.3	103	105	75.7-134			2.48	20
1,2,4-Trichlorobenzene	25.0	25.3	25.2	101	101	76.1-136			0.520	20
1,1,1-Trichloroethane	25.0	23.8	23.2	95.3	92.7	71.1-129			2.76	20
1,1,2-Trichloroethane	25.0	26.2	25.6	105	102	81.6-120			2.25	20
Trichloroethene	25.0	26.1	25.6	104	102	79.5-121			1.94	20
Trichlorofluoromethane	25.0	24.4	23.1	97.8	92.4	49.1-157			5.60	20
1,2,3-Trichloropropane	25.0	26.9	26.2	107	105	74.9-124			2.37	20
1,2,3-Trimethylbenzene	25.0	24.0	23.7	95.8	94.7	79.9-118			1.18	20
1,2,4-Trimethylbenzene	25.0	25.9	25.4	104	101	79.0-122			2.23	20
1,3,5-Trimethylbenzene	25.0	26.2	25.5	105	102	81.0-123			2.84	20
Vinyl chloride	25.0	23.7	22.8	94.9	91.0	61.5-134			4.19	20
Xylenes, Total	75.0	78.9	76.5	105	102	79.2-122			3.08	20
(S) Toluene-d8				103	104	90.0-115				
(S) Dibromofluoromethane				102	101	79.0-121				
(S) 4-Bromofluorobenzene				101	101	80.1-120				

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L847716-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847716-01 07/25/16 10:54 • (MS) R3152034-4 07/25/16 11:15 • (MSD) R3152034-5 07/25/16 11:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	ND	57.1	55.7	45.7	44.6	1	25.0-156			2.46	21.5
Acrolein	125	ND	176	169	140	135	1	34.0-194			3.96	21.5
Acrylonitrile	125	ND	135	131	108	105	1	55.9-161			3.17	20
Benzene	25.0	ND	24.5	23.7	97.8	94.7	1	58.6-133			3.23	20
Bromobenzene	25.0	ND	24.3	24.2	97.2	96.8	1	70.6-125			0.400	20
Bromodichloromethane	25.0	ND	23.3	22.7	93.4	90.8	1	69.2-127			2.76	20



L847716-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847716-01 07/25/16 10:54 • (MS) R3152034-4 07/25/16 11:15 • (MSD) R3152034-5 07/25/16 11:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromoform	25.0	ND	26.1	26.8	105	107	1	66.3-140			2.32	20
Bromomethane	25.0	ND	25.6	24.2	102	97.0	1	16.6-183			5.43	20.5
n-Butylbenzene	25.0	ND	22.3	23.1	89.3	92.5	1	64.8-145			3.54	20
sec-Butylbenzene	25.0	ND	23.9	24.6	95.6	98.4	1	66.8-139			2.81	20
tert-Butylbenzene	25.0	ND	24.7	25.5	98.9	102	1	67.1-138			3.09	20
Carbon tetrachloride	25.0	ND	22.7	22.3	90.8	89.2	1	60.6-139			1.70	20
Chlorobenzene	25.0	ND	25.5	25.3	102	101	1	70.1-130			0.590	20
Chlorodibromomethane	25.0	ND	26.3	26.3	105	105	1	71.6-132			0.0700	20
Chloroethane	25.0	ND	24.8	23.7	99.2	94.8	1	33.3-155			4.55	20
2-Chloroethyl vinyl ether	125	ND	ND	ND	0.000	0.000	1	5.00-149	J6	J6	0.000	40
Chloroform	25.0	ND	24.5	23.6	98.1	94.3	1	66.1-133			3.91	20
Chloromethane	25.0	ND	23.3	22.3	93.3	89.1	1	40.7-139			4.62	20
2-Chlorotoluene	25.0	ND	24.8	24.9	99.2	99.5	1	66.9-134			0.290	20
4-Chlorotoluene	25.0	ND	24.2	24.6	96.9	98.4	1	66.8-134			1.51	20
1,2-Dibromo-3-Chloropropane	25.0	ND	26.0	26.4	104	106	1	63.9-142			1.77	20.2
1,2-Dibromoethane	25.0	ND	26.8	26.4	107	106	1	73.8-131			1.54	20
Dibromomethane	25.0	ND	26.6	25.7	106	103	1	72.8-127			3.40	20
1,2-Dichlorobenzene	25.0	ND	25.4	25.2	102	101	1	77.4-127			0.870	20
1,3-Dichlorobenzene	25.0	ND	24.8	24.9	99.0	99.6	1	67.9-136			0.580	20
1,4-Dichlorobenzene	25.0	ND	23.6	24.0	94.4	96.0	1	74.4-123			1.63	20
Dichlorodifluoromethane	25.0	ND	25.4	24.2	102	96.9	1	42.2-146			4.62	20
1,1-Dichloroethane	25.0	ND	25.3	24.3	101	97.4	1	64.0-134			3.89	20
1,2-Dichloroethane	25.0	ND	26.0	25.2	104	101	1	60.7-132			3.17	20
1,1-Dichloroethene	25.0	ND	25.4	24.9	101	99.6	1	48.8-144			1.77	20
cis-1,2-Dichloroethene	25.0	ND	25.6	24.7	102	99.0	1	60.6-136			3.46	20
trans-1,2-Dichloroethene	25.0	ND	24.9	24.1	99.6	96.4	1	61.0-132			3.30	20
1,2-Dichloropropane	25.0	ND	24.8	23.9	99.3	95.5	1	69.7-130			3.88	20
1,1-Dichloropropene	25.0	ND	24.9	24.5	99.7	98.0	1	61.5-136			1.77	20
1,3-Dichloropropane	25.0	ND	27.0	26.4	108	106	1	74.3-123			2.09	20
cis-1,3-Dichloropropene	25.0	ND	24.9	24.6	99.4	98.6	1	71.1-129			0.880	20
trans-1,3-Dichloropropene	25.0	ND	25.5	24.9	102	99.5	1	66.3-136			2.36	20
2,2-Dichloropropane	25.0	ND	22.3	21.1	89.4	84.4	1	54.9-142			5.77	20
Di-isopropyl ether	25.0	ND	23.6	22.8	94.5	91.1	1	59.9-140			3.59	20
Ethylbenzene	25.0	ND	24.3	24.6	97.0	98.5	1	62.7-136			1.54	20
Hexachloro-1,3-butadiene	25.0	ND	23.8	24.6	95.2	98.4	1	61.1-144			3.29	20.1
Isopropylbenzene	25.0	ND	24.3	24.4	97.0	97.4	1	67.4-136			0.430	20
p-Isopropyltoluene	25.0	ND	25.1	25.7	101	103	1	62.8-143			2.25	20
2-Butanone (MEK)	125	ND	92.3	90.0	73.9	72.0	1	45.0-156			2.59	20.8
Methylene Chloride	25.0	ND	23.9	22.8	95.4	91.3	1	61.5-125			4.40	20
4-Methyl-2-pentanone (MIBK)	125	ND	130	127	104	102	1	60.7-150			1.80	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc





L847716-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847716-01 07/25/16 10:54 • (MS) R3152034-4 07/25/16 11:15 • (MSD) R3152034-5 07/25/16 11:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methyl tert-butyl ether	25.0	ND	25.9	24.9	104	99.6	1	61.4-136			4.03	20
Naphthalene	25.0	ND	25.0	25.6	100	102	1	61.8-143			2.13	20
n-Propylbenzene	25.0	ND	24.0	24.6	95.9	98.4	1	63.2-139			2.59	20
Styrene	25.0	ND	25.9	25.8	103	103	1	68.2-133			0.240	20
1,1,1,2-Tetrachloroethane	25.0	ND	25.8	25.8	103	103	1	70.5-132			0.290	20
1,1,2,2-Tetrachloroethane	25.0	ND	26.8	26.3	107	105	1	64.9-145			1.76	20
Tetrachloroethene	25.0	ND	25.1	25.0	101	100	1	57.4-141			0.550	20
Toluene	25.0	ND	23.3	22.9	93.1	91.8	1	67.8-124			1.47	20
1,1,2-Trichlorotrifluoroethane	25.0	ND	26.8	25.8	107	103	1	53.7-150			3.87	20
1,2,3-Trichlorobenzene	25.0	ND	26.3	26.7	105	107	1	65.7-143			1.44	20
1,2,4-Trichlorobenzene	25.0	ND	25.3	25.7	101	103	1	67.0-146			1.32	20
1,1,1-Trichloroethane	25.0	ND	23.2	22.7	92.7	90.7	1	58.7-134			2.19	20
1,1,2-Trichloroethane	25.0	ND	26.1	25.3	104	101	1	74.1-130			2.91	20
Trichloroethene	25.0	ND	25.2	24.7	101	98.9	1	48.9-148			1.75	20
Trichlorofluoromethane	25.0	ND	24.2	23.4	97.0	93.7	1	39.9-165			3.39	20
1,2,3-Trichloropropane	25.0	ND	27.0	26.9	108	108	1	71.5-134			0.400	20
1,2,3-Trimethylbenzene	25.0	ND	23.2	23.5	92.7	94.1	1	62.7-133			1.50	20
1,2,4-Trimethylbenzene	25.0	ND	24.1	24.4	96.4	97.8	1	60.5-137			1.41	20
1,3,5-Trimethylbenzene	25.0	ND	24.2	24.6	97.0	98.3	1	67.9-134			1.38	20
Vinyl chloride	25.0	ND	23.7	22.6	95.0	90.5	1	44.3-143			4.89	20
Xylenes, Total	75.0	ND	73.6	74.1	98.2	98.8	1	65.6-133			0.710	20
(S) Toluene-d8					103	103		90.0-115				
(S) Dibromofluoromethane					103	103		79.0-121				
(S) 4-Bromofluorobenzene					99.0	99.4		80.1-120				

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3150651-1 07/18/16 14:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPH (GC/FID) High Fraction	U		24.7	100
(S) o-Terphenyl	97.7			50.0-150

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3150651-2 07/18/16 15:00 • (LCSD) R3150651-3 07/18/16 15:20

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1500	1700	1640	114	110	50.0-150			3.62	20
(S) o-Terphenyl				109	107	50.0-150				

L847716-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847716-01 07/18/16 20:57 • (MS) R3150651-4 07/18/16 21:17 • (MSD) R3150651-5 07/18/16 21:37

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPH (GC/FID) High Fraction	1500	ND	1670	1830	109	119	1	50.0-150			8.70	20
(S) o-Terphenyl					108	108		50.0-150				



## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
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J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
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<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

## Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> Accreditation not applicable

## Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**

