Appendix L

Phase I Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT

SD-44/Platte-Winner Bridge
Gregory County and Charles Mix County
South Dakota

HR GREEN, INC. PROJECT NO. 160025

February 26, 2018

PREPARED BY:

PHASE I ENVIRONMENTAL SITE ASSESSMENT

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Prepared for:

South Dakota Department of Transportation
700 East Broadway Avenue
Pierre, SD 57501

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APPENDICES

GLOSSARY OF TERMS

AAI – All Appropriate Inquiries

AST – Aboveground Storage Tank

ASTM – American Society of Testing and Materials

BGS – Below Ground Surface

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Inventory System

CESQG – Conditionally Exempt Small Quantity Generator

COR ACT – Corrective Action Site

EDR – Environmental Data Resources, Inc.

EPA – Environmental Protection Agency

ERNS – Emergency Response Notification System

ESA – Environmental Site Assessment

GEN – Generator Site

GPR – Groundwater Penetrating Radar

HR Green – HR Green, Inc.

HREC – Historical Recognized Environmental Condition

HRS – Hazard Ranking System

IC/EC – Institutional/Engineering Control

SD DENR – South Dakota Department of Environment and Natural Resources

LAST – Leaking Aboveground Storage Tank

LLP - Landowner Liability Protection

LQG – Large Quantity Generator

LRP - Land Recycling Program

LUST – Leaking Underground Storage Tank

MSL – Mean Sea Level

NAR – No Action Required

NFA – No Further Action

NFRAP – No Further Remedial Action is Planned

NPL – National Priorities List

PAH – Polycyclic Aromatic Hydrocarbon

PCB – Polychlorinated Biphenyls

PIN – Parcel Identification Number

PIISP – Phase II Sampling Plan

RCRA – Resource Conservation and Recovery Act

REC – Recognized Environmental Condition

ROW – Public Right-Of-Way

SEMS – Superfund Enterprise Management System

SMR – Site Monitoring Report

Spills – Spills - 1990 Site

SQG – Small Quantity Generator

SHWS – State Hazardous Waste Site

SWL – Solid Waste Landfills

SWS – Statewide Standard(s)

TEH – Total Extractable Hydrocarbon

TSD – Treatment, Storage, and Disposal

UST - Underground Storage Tank

VCP – Voluntary Cleanup Site

VOC - Volatile Organic Compound

1.0 EXECUTIVE SUMMARY

1.1 Investigative Findings

The South Dakota Department of Transportation (Client) retained HR Green to conduct a Phase I ESA on an approximate 195-acre area centered along South Dakota Highway 44 (SD-44) spanning across both sides of the Missouri River in Gregory and Charles Mix Counties, South Dakota (see Figure 1 in Appendix A). The land is predominately owned by the State of South Dakota while a small portion on the east side of the river is privately-owned. The 2.94-mile corridor is hereinafter referred to as the "subject property."

The subject property contains SD-44, including the Platte-Winner Bridge, as well as a boat launch located west of the Missouri River and a portion of the Snake Creek Recreation Area on the opposite site of the waterbody. Undeveloped land surrounds the subject property west of the Missouri River while the land adjoining the subject property on the east side contains undeveloped land, cow pastures, agricultural fields, rental cabins, sewage waste lagoon, and a marina.

HR Green has performed a Phase I ESA at the subject property in Gregory and Charles Mix Counties, South Dakota in conformance with the scope and limitations of ASTM Practice E 1527-13. Any exceptions to, or deletions from, this practice are described in Sections 2.4, 6.1 and 10.0 of this report. This assessment revealed evidence of two (2) RECs in connection with the subject property. The following summarizes the RECs:

On-Site REC:

1. HR Green observed staining surrounding the oil recycling operation in the main maintenance building during the site reconnaissance.

Off-Site REC:

2. The Snake Creek (SD GF&P) – Tank Removals LUST facility (96.151) is located adjacent to the north of the eastern portion of the subject property. Approximately 300 cubic yards of gasoline contaminated soil was removed from the site during tank removal activities. SD DENR issued a letter to the property owner dated June 12, 1996 that stated a majority of contamination was excavated in a lateral direction from the tanks but removal of the remaining impacted material was deemed not appropriate. The Tier 2 report did not identify any exposure pathways. SD DENR issued another letter to the property owner dated July 26, 1996 that stated it "determined that work at this site can end, and the file can be closed" in response to data collected during the tank removal and Tier 2 Assessment; however, remaining impacted material above the Tier 1 corrective action level at-depth remains.

It is the understanding of HR Green that the Client is currently considering three different roadway alignment alternatives for SD-44 on the east side of the Missouri River as part of the SD44/Platte-Winner Bridge construction project. The range of options include two paths diverging north of the current alignment and one diverging south of the current alignment (refer to Appendix G for a copy of the conceptualizations).

It is the opinion of HR Green that the identified RECs have the potential to impact the proximate area surrounding the two northern alternatives proposed for the SD44/Platte-Winner Bridge construction project. The identified RECs do not appear likely to impact the proximate area

surrounding the southern alternative.

1.2 Recommendations

The RECs identified during this assessment indicate that further investigation is warranted in order to **quantify environmental impacts** and to **evaluate human health risk concerns**. Ultimately, the User must make the decision whether or not to conduct a Phase II ESA. The purpose of a Phase II ESA is largely to arm the User with site-specific data for use in demonstrating that appropriate care was exercised with respect to environmental impacts and human health concerns for the planned use of the property. This choice is driven by at least three factors:

1) the Environmental Professional's opinion on whether or not further investigation is warranted based on the Phase I ESA results
2) the intended reuse of the site (e.g., industrial, commercial, residential, etc.)
3) the extent of the workspace that will include the disturbance of the soil surface or other media
4) the User's tolerance for risk concerning managing the User's continuing obligations in demonstrating that appropriate care was exercised under AAI in order to evaluate possible environmental risks associated with potential undocumented soil, groundwater, and vapor contamination

EPA's metrics for measuring appropriate care under AAI generally consist of evaluating:

1) whether steps were taken to stop continuing releases
2) whether steps were taken to prevent future releases
3) whether steps were taken to prevent or limit the exposure of people or the environment to previous releases

It is HR Green's opinion that the conditions identified during the Phase I ESA indicate the potential for environmental contamination, and that a Phase II ESA or additional investigation is warranted. An understanding of the intended reuse of the site and the User's tolerance for risk is necessary to provide additional recommendations, beyond what is stated here. Specific redevelopment plan components can be designed to be environmentally conservative (no building footprint alteration, no earth work, radon system installation, etc.). While these components have the potential to mitigate potential **human health risk concerns**, they do NOT **quantify environmental impacts**, a step which is necessary in order to satisfy AAI.

HR Green encourages the User to discuss the findings and recommendations of this Phase I ESA with their legal counsel. The User's legal counsel can assist the User in making a risk-based decision as to whether or not the User has enough information after the completion of a Phase I ESA only to demonstrate that appropriate care was exercised under continuing obligations. This judgement is important to make before making a decision to pursue (or not to pursue) a Phase II ESA on the subject property as this decision may impact the User's claim to federal LLPs under CERCLA.

Non-scope considerations beyond this Phase I ESA, such as the presence and location of biological agents including a sewage waste lagoon, recreational vehicle dump stations, and leachfields on the subject property, should be considered as part of the design and implementation of the SD44/Platte-Winner Bridge construction project.

2.0 INTRODUCTION

2.1 Purpose

The purpose of this Phase I ESA is to identify, to the extent feasible pursuant to the process described in the Standard Practice for Environmental Site Assessments (ASTM E 1527-13) as adopted by the American Society for Testing and Materials, RECs (See Section 2.4) in connection with the subject property. In addition, the intention of this Phase I ESA is to permit the User to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations of CERCLA liability (hereinafter referred to as the "LLPs"): that is, the practice that constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC §9601(35)(B).

2.2 Detailed Scope of Services

The approved scope of work for conducting Phase I ESAs was limited to meeting the requirements established in the ASTM E 1527-13 standard.

HR Green conducted the Phase I ESA of the subject property for the Client during the months of November-December 2017 and January-February 2018. The assessment consisted of four components including:

- Visual inspection of the subject property and adjoining properties
- Interviews with past and present owners, operators, and occupants
- Reviews of historical sources
- Reviews of federal, state, tribal, and local government records

HR Green identified data gaps during the completion of this Phase I ESA. Further details are available in Section 10.2 of this report.

2.3 Significant Assumptions

HR Green used the following assumptions in determining potential RECs at the subject property:

- The Missouri River bisects the subject property and flows to the southeast. Therefore, groundwater at the subject property and adjacent properties is assumed to flow easterly/southeasterly on the west side of the Missouri River and westerly/southwesterly on the east side of the Missouri River.

2.4 Limitations and Exceptions

Any conclusions regarding potential environmental risks or particular events and practices are limited by the quality and quantity of information provided by available historical documents; the visual site inspection; and interviews with site owners.

"*Recognized Environmental Conditions*" are defined in ASTM E 1527-13 as: "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action

if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions."

"Controlled Recognized Environmental Conditions" are defined in ASTM E 1527-13 as: "recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

"*Historical Recognized Environmental Conditions*" are defined in ASTM E 1527-13 as: "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Pursuant to Section 13.1.5 of ASTM Standard Practice, the following is a list of non-scope considerations the User may want to assess in connection with commercial real estate transactions. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list is not intended to be all-inclusive:

- Asbestos Containing Materials
- Radon
- Lead-Based Paint
- Lead in Drinking Water
- Wetlands
- Regulatory Compliance
- Cultural and Historic Resources
- Industrial Hygiene
- Health and Safety
- Ecological Resources
- Endangered Species
- Indoor Air Quality
- Biological Agents
- Mold

Any consideration of non-scope items, such as those listed previously, is included in Section 11 of this report.

The information and conclusions presented in this report are based solely on the observations made during the site assessment evaluation and on data provided by others (individuals – entities). Thus, the accuracy of the resulting reporting and conclusions drawn from this information is inherently based on the accuracy of the information obtained and provided. The conclusions and opinions stated herein do not represent or warrant the property is free from contamination, pollution, or environmental problems. In summary, there is always a possibility some contamination may be present on the property of interest which was not discovered or noted during the Phase I ESA activities (walkover inspection, records review) conducted by HR Green.

THEREFORE, NO GUARANTEES OR WARRANTIES AS TO THE CONDITION OF THE PROPERTY OF INTEREST OR SUITABILITY OF PROPERTY USE FOR ANY PARTICULAR PURPOSE ARE MADE OR IMPLIED BY HR GREEN.

2.5 Special Terms and Conditions

It should be noted Phase I ESAs do not include any testing or sampling of materials such as

soil, water, air, or building materials. Contractual terms, conditions, and liability limitations are specified in the Scope of Services Agreement and Contract between HR Green and the Client.

Information used to prepare this report was provided by a number of parties including government agencies, third party vendors, and persons familiar with the subject property. All information reviewed was not independently verified unless actual knowledge of site conditions or history indicated obvious inconsistencies or errors.

2.6 User Reliance

This report has been prepared on behalf of and for the exclusive use of the Client solely for use in evaluating the potential "RECs" and is not intended for any other purpose nor the benefit or use of any other person. This report and the findings contained herein shall not in whole or in part, be disseminated or conveyed to any other party, nor used by any other person, in whole or in part, without the prior written consent of HR Green, except the report may be conveyed to persons or groups of persons specified by the Client. **If the party seeking AAI protection is one other than the User of this report, that party should contact HR Green for a reliance letter. A User questionnaire must be also completed by this party in order to be eligible for AAI protection using this report.**

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The western portion of the subject property is predominately located within the NE ¼ of the NE ¼ of Section 20, Township 99 North, Range 70 West in Gregory County, SD while the eastern portion of the subject property is predominately located within the SW ¼, SE ¼, and NE ¼ of Section 15, Township 99 North, Range 70 West in Charles Mix County, SD. The Platte-Winner Bridge is located within Sections 16 and 21, Township 99 North, Range 70 West. The approximate center of the subject property is located by the latitude and longitude at 43.386687° North and -99.131909° West. Figure 1 in Appendix A shows the location of the subject property.

HR Green was unable to reasonably ascertain specific parcel information (e.g. PINs, addresses, brief legal descriptions) for the subject property. The referenced data was not readily available in electronic format from either county's Director of Equalization departments. Figure 2 in Appendix A provides an aerial photograph of the subject property.

3.2 Site and Vicinity General Characteristics

Surrounding land to the north, northwest, west, southwest, and south of the portion of the subject property located west of the Missouri River is undeveloped while the referenced waterbody forms its border to the northeast, east, and southeast. Land surrounding the subject property located east of the Missouri River includes undeveloped land, cow pastures, and agricultural land to the northeast, east, and southeast, and a marina with an associated sewage waste lagoon and rental cabins to the north and south, respectively. The Missouri River forms its border to the northwest, west, and southwest.

3.3 Current Uses of the Site

The subject property is a 2.94-mile corridor centered along SD-44 which includes the Platte-Winner Bridge. The portion of the subject property located west of the Missouri River includes a boat launch. Subject property lands located east of the waterbody are predominately part of the Snake Creek Recreation Area. A sewage lagoon is also located on the subject property east of the river.

3.4 Descriptions of Structures, Roads, Other Improvements on the Site

3.4.1 Descriptions of Structures. The subject property land west of the Missouri River does not contain any structures. The subject property land east of the Missouri River contains several structures associated with the Snake Creek Recreation Area including three maintenance sheds, chapel, and a residential home for the park's district supervisor to the north of SD-44 and a welcome center, guard shack, and one-bedroom rental cabins/bathrooms to the south of the referenced highway. HR Green was unable to obtain specific information related to the age of construction or construction type for any of the structures.

3.4.2 Descriptions of Roads. The subject property contains SD-44. A northwest-southeast asphalt road located on the western side of the Missouri River provides access to a boat launch. Subject property land located east of the Missouri River contains several asphalt roads that serve Snake Creek Recreation Area amenities including a boat ramp, marina, restroom facilities, and beach.

3.4.3 Descriptions of Other Improvements. HR Green noted several improvements during the site reconnaissance including chain-link fencing, ASTs, and paved parking areas; however, HR Green acknowledges this list is not exhaustive. An absence of readily-available parcel information from the Gregory County and Charles Mix County websites prevented HR Green from providing a comprehensive listing.

3.4.4 Heating/Cooling System. Liquid propane tanks serve as the power source for all heating/cooling systems for individual buildings on the subject property.

3.4.5 Sewage Disposal. Individual leach fields serve each building on the subject property.

3.4.6 Source of Potable Water. A rural water supply system provides potable water to the subject property.

3.5 Current Uses of the Adjoining Properties

Data for individual parcels (e.g. property addresses, PINs, brief legal descriptions, and deed holders) within Gregory County and Charles Mix County were not readily available. Surrounding land to the north, northwest, west, southwest, and south of the portion of the subject property located west of the Missouri River is undeveloped while the referenced waterbody forms the border to the northeast, east, and southeast. Land surrounding the subject property located east of the Missouri River includes undeveloped land, cow pastures, and agricultural land to the northeast, east, and southeast, and a marina with an associated sewage waste lagoon and rental cabins to the north and south, respectively.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

The User did not provide HR Green with a recorded land title search. This is considered a data gap and is discussed further in Section 10.2.

4.2 Environmental Liens or Activity and Use Limitations

The User did not provide HR Green with a completed User Questionnaire form. The referenced document contains language relating to the potential presence of environmental liens and/or

activity and use limitations for the subject property. This is considered a data gap and is discussed further in Section 10.2.

4.3 Specialized Knowledge

The User did not provide HR Green with a completed User Questionnaire form. This document would provide additional insight that includes language relating to specialized knowledge for the subject property and surrounding area. The absence of this document is considered a data gap and is discussed further in Section 10.2.

4.4 Commonly Known or Reasonably Ascertainable Information

The User did not provide HR Green with a completed User Questionnaire form. This document would provide additional insight relating to commonly known or reasonably ascertainable information for the subject property and surrounding area. The absence of this document is considered a data gap and is discussed further in Section 10.2.

4.5 Valuation Reduction for Environmental Issues

The User did not provide HR Green with a completed User Questionnaire form. This document would provide additional insight relating to the potential valuation reduction for environmental issues for the subject property and surrounding area. The absence of this document is considered a data gap and is discussed further in Section 10.2.

4.6 Owner, Property Manager, and Occupant Information

The State of South Dakota owns a majority of the subject property. Mr. Justin Thede, District Supervisor for the Snake Creek Recreation Area, Mr. Brandon Kemp, Assistant District Supervisor for the Snake Creek Recreation Area, and Mr. Clay Peck, South Dakota District 6 Maintenance Shop Foreman, serve as owner representatives and managers of the majority of the subject property.

A small portion of the subject property located east of the Missouri River is owned by Luvern Qualm and Sons, Inc. (see Appendix G for Charles Mix County Auditor records). HR Green was unable to identify any owner representatives or property managers for the entity.

The subject property does not have any occupants.

4.7 Reason for Performing Phase I

The Client is investigating the subject property as part of the SD44/Platte-Winner Bridge Corridor Study and Environmental Assessment.

4.8 Other

HR Green did not review any other reports during the preparation of this report.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

The purpose of the records search is to obtain and review data and information to aid in identifying RECs in connection with the subject property. Federal and State environmental record sources were reviewed by EDR to at least the minimum search distances established in ASTM E 1527-13. EDR specializes in the retrieval of such information and the EDR Report is presented in Appendix D. A search of the SD DENR databases for the project area was also completed by HR Green to verify the results of the report. Information from the federal and

state record sources search is included in Sections 5.1.1 through 5.1.15. The EDR report was generated for the subject property. For the purpose of this report, the following table summarizes the results of the EDR Report.

EDR Report Summary

SEARCH LISTS	RADIUS	SITES
Federal ASTM Standard Records		
NPL	1.00 mile	0
NPL Delisted	1.00 mile	0
SEMS - Active Sites - Archived	 0.50 mile 0.50 mile	 0 0
RCRIS - COR ACT - TSD - GEN	 1.00 mile 0.50 mile 0.25 mile	 0 0 0
Federal IC/EC	0.50 mile	0/0
Federal Brownfield	0.50 mile	0
ERNS	Target Property	0
State of South Dakota ASTM Standard Records		
State/Tribal Equivalent CERCLIS SHWS	1.00 mile	N/A
State/Tribal Spills	Target Property	0
State/Tribal SWL Facilities	0.50 mile	0
State/Tribal LUST/LAST List	0.50 mile	2/0
State/Tribal UST/AST List	0.25 mile	1/2
State/Tribal IC	0.50 mile	0
State/Tribal VCP	0.50 mile	N/A
State/Tribal Brownfields	0.50 mile	0

5.1.1 NPL. The NPL is a list of the worst hazardous waste sites identified by Superfund. Sites are put on the list after being scored using the HRS and subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money. A Superfund site is any land in the United States contaminated by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. The EDR report did not identify any NPL sites within the specified search radius.

5.1.2 SEMS. The SEMS (formerly CERCLIS) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program. The list contains data on potentially hazardous waste sites reported to the EPA pursuant to Section 103 of CERCLA. This dataset also contains sites proposed for or on the NPL and sites in the screening and assessment phase for possible inclusion on the NPL. SEMS-Archive (formerly CERCLIS-NFRAP) tracks sites that have no further interest under the Federal Superfund Program based on available information. Archived status indicates assessment has been completed at a site and the EPA has determined no further steps will be taken to list the site on the NPL. The EDR report did not identify any SEMS sites within the specified search radius.

5.1.3 RCRIS. The RCRIS lists sites that treat, store, dispose, or incinerate hazardous waste. This database tracks events and activities that fall under RCRA. The database is separated into TSD facilities, LQG facilities, SQG facilities, CESQG and COR ACT. While these facilities represent some form of hazardous waste activity, they are most significant if determined to be out of compliance or to have violations. RCRA-COR ACT is a list of facilities found to have had hazardous waste releases and require RCRA corrective action, which can range from site investigations to remediation. RCRA-NLR is a list of facilities included in the RCRA Info database, but not classified by the EPA. Reasons for the non-classification include, but are not limited to: the facility is no longer in business, or no longer generating hazardous waste. The EDR report did not identify any RCRIS sites within the specified search radius.

5.1.4 Federal IC/EC Sites. The Federal IC/EC database contains information regarding Superfund sites with either an engineering or institutional control, and maintains records of the control method and the media contaminated. The EDR report did not identify any Federal IC sites or Federal EC sites within the specified search radius.

5.1.5 Federal Brownfield. ASTM E 1527-13 requires listing all brownfields facilities within 0.5-miles of the subject property. The EPA Brownfield Management System database contains information on the major activities and accomplishments of various brownfield grant programs. This database also includes Cleanups in my Community including sites, facilities and properties that have been contaminated by hazardous materials and are being, or have been, cleaned up under EPA's brownfield program. The EDR report did not identify any Federal Brownfield sites within the specified search radius.

5.1.6 ERNS Sites. The ERNS contains information on specific notification of releases of oil and hazardous substances to the environment. The EDR report did not identify any ERNS sites within the specified search radius.

5.1.7 State/Tribal Equivalent CERCLIS SHWS. The EDR report indicates that the State of South Dakota does not maintain a SHWS list.

5.1.8 Spills. SD DENR maintains a list of spills and releases of regulated substances; however, ASTM E 1527-13 does not require a search for Spills sites. The EDR report did not identify any Spills sites within the specified search radius.

5.1.9 State/Tribal SWL Facilities. SD DENR maintains a database of SWLs within the State of South Dakota. The EDR report did not identify any State/Tribal SWL sites within the specified search radius.

5.1.10 LUST. SD DENR maintains a database of LUSTs. ASTM E-1527-13 requires listing all state registered LUST sites within 0.50 miles of the subject property. The EDR report identified two (2) LUST sites located within the specified search radius.

LUST Site Information				
Property Name	**ID No.**	**Distance/Direction**		**Status**
Snake Creek (SD GF&P) – Tank Removals	96.151	Adjacent to north	Upgradient	Closed

LUST Site Information				
Property Name	**ID No.**	**Distance/Direction**		**Status**
Snake Creek Recreation Area Park Shop	98.046	Subject Property	N/A	Closed

5.1.11 UST/AST. SD DENR maintains a database of registered USTs and ASTs. ASTM E-1527-13 requires listing all UST and AST sites on or adjoining the subject property. The EDR report identified one (1) UST site and two (2) ASTs site located within the specified search radius.

UST/AST Site Information				
Property Name	**ID No.**	**Distance/Direction**		**Status**
Snake Creek Recreation Area (Concession)	1700023	Adjacent to north	Upgradient	Removed (1 1,000-gallon AST containing gasoline and 1 2,000-gallon AST containing gasoline)
Snake Creek Rec Area	17-00025	Subject Property	N/A	Removed (2 1,000-gallon USTs containing gasoline; 1 1,000-gallon UST containing diesel; and 1 560-gallon UST containing gasoline)
Snake Creek Rec Area (Shop Area)	1700026	Subject Property	N/A	Current (1 560-gallon AST containing diesel and 1 1,000-gallon AST containing gasoline)

5.1.12 State IC Sites. The SD DENR maintains a list of sites with institutional controls in place. The EDR report did not identify any State IC sites within the specified search radius.

5.1.13 VCP – LRP. An EDR representative indicated that South Dakota does not maintain a formal voluntary cleanup program.

5.1.14 State/Tribal Brownfields Sites. ASTM E 1527-13 requires listing all brownfield facilities within 0.5-miles of the subject property. The EDR report did not identify any State/Tribal brownfield sites within the specified search radius.

5.1.15 Unmapped Sites. EDR identified four (4) sites that could not be located including the following: one (1) UST site; one (1) SWF/LF site; one (1) RCRA SQG site; and one (1) RCRA-CESQG site. Further investigation by HR Green identified the approximate locations of the sites.

Unmapped Site Information			
Property Name	**DB Type**	**Distance/Direction**	**Status**
Burke Lake Rec Area	UST	>1.0 miles SW	Removed
No Name	SWF/LF	>1.0 miles SW	Municipal Solid Waste Transfer Station

SD DOT	RCRA-SQG	Non-subject property nor adjacent to subject property	No violations identified
Frontier Motors	RCRA-CESQG	Non-subject property nor adjacent to subject property	No violations identified

5.2 Additional Environmental Record Sources

The following list contains information on additional individuals interviewed or sources consulted for this assessment.

- Platte Volunteer Fire Department

Records of all interviews and phone conversations are included in Appendix E.

5.3 Physical Setting Source(s)

Topographic gradient information related to the subject property is included in Figure 1 of Appendix A.

HR Green conducted a Natural Resources Conservation Service Web Soil Survey on November 6, 2017 to obtain a depiction of the soil at the subject property. The survey classified the subject property west of the Missouri River as having the following soil types: Labu-Sansarc silty clays found on 9 to 35 percent slopes and Okaton-Lakoma silty clays found on 15 to 40 percent slopes. The survey classified the subject property east of the Missouri River as having the following soil types: Betts-Ethan loams found on 15 to 40 percent slopes; Lowry silt loam found on 2 to 6 percent slopes; Lowry silt loam found on 6 to 9 percent slopes; Sansarc clay found on 6 to 35 percent slopes; Sansarc-Boyd complex found on 15 to 40 percent slopes; and Sully silt loam found on 9 to 25 percent slopes. Appendix G contains a copy of the report.

HR Green searched the SD NES Well Search database on November 6, 2017. The search did not identify any wells on the subject property. Appendix G contains a copy of the report.

5.4 Historical Use Information

Historical information for the subject property and surrounding area was based on review of aerial photographs and city directories provided by EDR and the site reconnaissance. The following tables summarize the past uses of the subject property.

Date(s)	Source(s)	Property Use(s)
1954-1976	Historical aerial photographs and SD44/Platte-Winner Bridge Corridor Study and Environmental Assessment RFP	Bridge
1983-present	Owner representative interview information and site reconnaissance	Bridge and Snake Creek Recreational Area

5.5 Historical Use Information on Adjoining Properties

The past uses of adjoining properties surrounding the western portion of the subject property are summarized in the following table.

Date(s)	Source(s)	Property Use(s)
North		
1976-present	Historical aerial photographs	Undeveloped land

Date(s)	Source(s)	Property Use(s)
	and site reconnaissance	
East		
1976-present	Historical aerial photographs and site reconnaissance	Missouri River
South		
1976-present	Historical aerial photographs and site reconnaissance	Undeveloped land
West		
1976-present	Historical aerial photographs and site reconnaissance	Undeveloped land

The past uses of adjoining properties surrounding the eastern portion of the subject property are summarized in the following table.

Date(s)	Source(s)	Property Use(s)
North		
1976-1983	Historical aerial photograph	Undeveloped land
1983-present	Owner representative interview information and site reconnaissance	Snake Creek Recreation Area
West		
1976-present	Historical aerial photographs and site reconnaissance	Missouri River
South		
1976-1983	Historical aerial photograph	Undeveloped land
1983-present	Owner representative interview information and site reconnaissance	Snake Creek Recreation Area
East		
1976-present	Historical aerial photographs and site reconnaissance	Undeveloped land/agricultural land

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

Mr. Scott Mattes of HR Green performed the site reconnaissance on November 8, 2017. This process included a conducting a windshield survey, aerial reconnaissance utilizing an unmanned aerial vehicle (drone), and physical walking inspection. Mr. Peck accompanied HR Green during the site walk at Snake Creek Recreation Area. HR Green did not visually inspect the interior spaces of any structures at Snake Creek Recreation Area beyond the three maintenance shops.

6.2 General Site Setting

The subject property is located in south central South Dakota along the Missouri River. Adjacent land uses included undeveloped lands, agricultural land, cow pastures, a sewage waste lagoon, and rental cabins.

6.3.1 Hazardous Substances or Petroleum Products In Connection With Identified Uses.

HR Green observed hazardous substances (paints, solvents, cleaners, degreasers, etc.) and petroleum products (motor oil, etc.) commonly available to consumers in connection with identified uses on the subject property. All were in small quantities, properly labeled, and stored

within a flammables cabinet in the main maintenance building at the Snake Creek Recreation Area. Refer to Observations #552 and #553 in Appendix B.

6.3.2 Storage Tanks. HR Green observed two ASTs on the exterior of the cold storage maintenance building at Snake Creek Recreation Area that included the following capacities and contents: 1 1,000-gallon AST (gasoline) and 1 500-gallon AST (off-road diesel)- see Observation #555 in Appendix B. Mr. Peck noted the former location of underground storage tanks removed approximately 15-20 years ago located about 30 feet south of the main maintenance building (Observation #140). HR Green also observed three ASTs associated with the marina operations at Snake Creek Recreation Area located immediately north of the subject property (see Observations # 142 and #557) that included the following capacities and contents: 1 1,000-gallon AST (gasoline) and 2 500-gallon ASTs (gasoline).

6.3.3 Odors. HR Green did not observe any unusual odors associated with the subject property.

6.3.4 Pools of Liquid. HR Green did not observe any pools of liquid on the subject property.

6.3.5 Drums. HR Green did not observe any drums on the subject property.

6.3.6 Hazardous Substances or Petroleum Products Containers (Not Necessarily in Connection With Identified Uses). HR Green did not observe any hazardous substances or petroleum products on the subject property other than those listed in Section 6.3.1.

6.3.7 Unidentified Substance Containers. HR Green did not observe any unidentified substance containers on the subject property.

6.3.8 PCBs. HR Green noted several pad-mounted transformers throughout the Snake Creek Recreation Area. Mr. Peck noted they had all been replaced within the past 5-10 years due to flooding.

6.3.9 Pits, Ponds, or Lagoons. HR Green observed an oil-water separation pit in the main maintenance building. Further, HR Green observed a primary and secondary sewage lagoon associated with marina activities located on and adjacent to the eastern portion of the subject property.

6.3.10 Stained Soil or Pavement. HR Green observed de-minimis staining surrounding the oil recycling operation within the main maintenance building at Snake Creek Recreation Center (see Observation #556 in Appendix B).

6.3.11 Stressed Vegetation. HR Green did not observe any stressed vegetation on the subject property; however, it must be noted that the subject property had already experienced a hard freeze limiting any growth.

6.3.12 Solid Waste. HR Green observed a solid waste staging area located south of the two sewage lagoons on and adjacent to the eastern portion of the subject property. Noted items included tree debris, air conditioners, burn barrels, concrete blocks, park benches, etc. (refer to Observation #034 in Appendix B). Mr. Peck stated the items were stored there until taken to the local landfill.

6.3.13 Waste Water. All buildings on the subject property are served by individual leach fields.

6.3.14 Wells. HR Green did not observe any wells on the subject property. Mr. Peck indicated that Snake Creek Recreation Area was previously served by a private drinking water well; however, the connection has since been severed and the park is now served by rural drinking water.

6.3.15 Septic Systems. All buildings on the subject property are served by individual leach fields.

6.3.16 Stains and Corrosion. HR Green did not observe any staining or corrosion on the subject property other than those noted in Section 6.3.10.

6.3.17 Drains and Sumps. HR Green observed a floor drain within the main maintenance building (see Observation #553 in Appendix B). HR Green noted de-minimis staining surrounding the drain.

7.0 INTERVIEWS

7.1 Interviews with Owners

HR Green interviewed Mr. Thede, Mr. Kemp[1], and Mr. Peck as owner representatives for the Snake Creek Recreation Area. Mr. Thede has been familiar with the subject property for approximately 13 years as owner, operator, and resident. Mr. Peck has been familiar with the subject property for approximately 21 years as an employee. Mr. Kemp did not provide a date of familiarity. These individuals indicated there are lagoons on the subject property associated with waste disposal and there are/were storage tanks (above and below ground) on the subject property. Mr. Thede stated that employees formerly burned approximately 6 tires annually each winter in the solid waste staging area located south of the two sewage lagoons on and adjacent to the eastern portion of the subject property. A copy of the interview documentation is included in Appendix E.

HR Green was unable to interview an owner representative for the SD DOT.

7.2 Interviews with Site Managers

Mr. Thede, Mr. Kemp, and Mr. Peck also serve as site managers.

7.3 Interviews with Occupants

The subject property does not have any occupants other than the temporary users of the Snake Creek Recreation Area.

7.4 Interviews with State and Local Government Officials

HR Green contacted the Platte Fire Department to obtain information regarding any spills, storage tanks, hazardous substances storage, or emergency responses at the subject property via e-mail and a voicemail on November 13, 2017. Mr. Rick Gustad, Fire Chief for the Platte Volunteer Fire Department, stated the department is unaware of any spills or hazardous materials storage or records of storage tanks at the Snake Creek Recreation Area dating back to 2000. They also had no record of SARA Tier II Reporting from the State for anything at the park.

[1] Mr. Kemp completed the Owner Interview Form in conjunction with Mr. Thede but did not sign the document.

Copies of interview documentation are included in Appendix E.

7.5 Interviews with Others

HR Green did not interview anyone else associated with the subject property.

8.0 FINDINGS

This section identifies the findings from Sections 4.0, 5.0, 6.0, and 7.0 of this report. Findings include known or suspect recognized environmental conditions, controlled recognized environmental conditions, historical recognized environmental conditions, and de minimis conditions. HR Green's opinion of each finding's impact on the subject property is also discussed, including the rationale as to why each finding is or is not considered a REC.

8.1 User Provided Information

The User did not provide HR Green with a recorded land title search. This absence of information prevents HR Green from providing an opinion on title records as it relates to the potential presence of RECs on the subject property. This finding is a data gap and is discussed further in Section 10.2.

8.2 Records Review

8.2.1 EDR Report Summary

LUST– The EDR report identified two (2) LUST sites within the specified search radius. HR Green requested additional records from the SD DENR for each facility.

- The Snake Creek Recreation Area Park Shop facility is located on the eastern portion of the subject property. No identified contaminants were detected above statewide standards. SD DENR issued a letter to the property owner dated January 28, 2000 that stated it "determined that work at this site can end, and the file can be closed" based on a review of soil laboratory results submitted as part of the removal of two USTs (see Appendix G for documentation). It is the opinion of HR Green that the facility is unlikely to impact the subject property.
- The Snake Creek (SD GF&P) – Tank Removals facility is located adjacent to the north of the eastern portion of the subject property. Approximately 300 cubic yards of gasoline contaminated soil was removed from the site during tank removal activities. Soil contamination was identified about Tier 1 Corrective Action levels. SD DENR issued a letter to the property owner dated June 12, 1996 that stated a majority of contamination was excavated in a lateral direction from the tanks but removal of the remaining impacted material was deemed not appropriate. The Tier 2 report did not identify any exposure pathways. SD DENR issued another letter to the property owner dated July 26, 1996 that stated it "determined that work at this site can end, and the file can be closed" in response to data collected during the tank removal and Tier 2 Assessment (see Appendix G for documentation). It is the opinion of HR Green that this facility has the potential to impact the subject property based on the residual impacted material.

UST/AST – The EDR report identified one (1) UST site and two (2) AST sites on or adjacent to the subject property.

- The Snake Creek Recreation Area (Concession) facility is located adjacent to the north of the eastern portion of the subject property. SD DENR does not list the facility as a point spill in its environmental databases. It is the opinion of HR Green that the facility is

unlikely to impact the subject property.

- The Snake Creek Rec Area facility is located on the eastern portion of the subject property. It is discussed further in the LUST section above as the "Snake Creek Recreation Area Park Shop."
- The Snake Creek Rec Area (Shop Area) facility is located on the eastern portion of the subject property. HR Green did not note any staining surrounding the ASTs during the site reconnaissance. Further, SD DENR does not list the facility as a point spill in its environmental databases. It is the opinion of HR Green that the facility is unlikely to impact the subject property.

Unmapped Sites – The EDR report identified four (4) sites that could not be located including one (1) UST site, one (1) SWF/LF site, one (1) RCRA SQG site, and one (1) RCRA-CESQG site.

- It is the opinion of HR Green that these four (4) facilities are unlikely to impact the subject property due to their respective distance from the subject property.

8.2.2 Historical Use Information

Subject Property – It is the opinion of HR Green that no historical uses of the subject property constitute a finding.

Adjacent Properties – It is the opinion of HR Green that no current or historical uses of properties adjacent to the subject property constitute a finding with respect to the subject property.

Additional Proximate Properties – It is the opinion of HR Green that no current or historical uses of proximate properties to the subject property constitute a finding with respect to the subject property.

8.3 Site Reconnaissance

HR Green noted the following during the site reconnaissance of the subject property:

- HR Green observed the presence of hazardous substances (paints, solvents, cleaners, degreasers, etc.) and petroleum products (motor oil, etc.) located in the main maintenance building on the subject property; however, the products were in small quantities, properly labeled, and predominately stored within a flammables cabinet. It is the opinion of HR Green that this finding does not constitute a REC.
- HR Green observed two ASTs on the exterior of the cold storage maintenance building on the subject property and three ASTs associated with the marina operations at Snake Creek Recreation Area located immediately north of the subject property. HR Green did not identify any staining surrounding the tanks. It is the opinion of HR Green that these findings do not constitute a REC.
- HR Green observed staining surrounding the oil recycling operation in the main maintenance building on the subject property. It is the opinion of HR Green that this finding constitutes a REC; however, it is the opinion of HR Green that it does not appear likely to impact the proximate area surrounding the SD44/Platte-Winner Bridge construction project.
- HR Green observed a solid waste staging area located south of the two sewage lagoons on and adjacent to the eastern portion of the subject property that included temporary storage of tree debris, air conditioners, burn barrels, concrete blocks, park benches, etc. It is the opinion of HR Green that this finding does not constitute a REC.

8.4 Interviews

HR Green conducted interviews with owner representatives of the subject property and a local official familiar with the subject property. Mr. Peck and Mr. Kemp affirmed the presence of the sewage waste lagoon and the current/former presence of the ASTs/USTs. These individuals did not provide any new information that constituted a finding with respect to the subject property. Mr. Thede stated that employees formerly burned approximately 6 tires annually each winter in the solid waste staging area at Snake Creek Recreation Area. It is the opinion of HR Green that this is de minimis condition and does not constitute a REC.

9.0 CONCLUSIONS

HR Green has performed a Phase I ESA at the subject property in Gregory County and Charles Mix County, South Dakota in conformance with the scope and limitations of ASTM Practice E 1527-13. Any exceptions to, or deletions from, this practice are described in Sections 2.4, 6.1 and 10.0 of this report. This assessment has revealed no evidence of RECs in connection with the subject property except for the following:

On-Site REC:

1. HR Green observed staining surrounding the oil recycling operation in the main maintenance building during the site reconnaissance.

Off-Site REC:

2. The Snake Creek (SD GF&P) – Tank Removals LUST facility (96.151) is located adjacent to the north of the eastern portion of the subject property. Approximately 300 cubic yards of gasoline contaminated soil was removed from the site during tank removal activities. SD DENR issued a letter to the property owner dated June 12, 1996 that stated a majority of contamination was excavated in a lateral direction from the tanks but removal of the remaining impacted material was deemed not appropriate. The Tier 2 report did not identify any exposure pathways. SD DENR issued another letter to the property owner dated July 26, 1996 that stated it "determined that work at this site can end, and the file can be closed" in response to data collected during the tank removal and Tier 2 Assessment; however, remaining impacted material above the Tier 1 corrective action level at-depth remains.

It is the understanding of HR Green that the Client is currently considering three different roadway alignment alternatives for SD-44 on the east side of the Missouri River as part of the SD44/Platte-Winner Bridge construction project. The range of options include two paths diverging north of the current alignment and one diverging south of the current alignment (refer to Appendix G for a copy of the conceptualizations).

It is the opinion of HR Green that the identified RECs have the potential to impact the proximate area surrounding the two northern alternatives proposed for the SD44/Platte-Winner Bridge construction project. The identified RECs do not appear likely to impact the proximate area surrounding the southern alternative.

The RECs identified during this assessment indicate that further investigation is warranted in order to **quantify environmental impacts** and to **evaluate human health risk concerns**. Ultimately, the User must make the decision whether or not to conduct a Phase II ESA. The purpose of a Phase II ESA is largely to arm the User with site-specific data for use in

demonstrating that appropriate care was exercised with respect to environmental impacts and human health concerns for the planned use of the property. This choice is driven by at least three factors:

1) the Environmental Professional's opinion on whether or not further investigation is warranted based on the Phase I ESA results
2) the intended reuse of the site (e.g., industrial, commercial, residential, etc.)
3) the extent of the workspace that will include the disturbance of the soil surface or other media
4) the User's tolerance for risk concerning managing the User's continuing obligations in demonstrating that appropriate care was exercised under AAI in order to evaluate possible environmental risks associated with potential undocumented soil, groundwater, and vapor contamination

EPA's metrics for measuring appropriate care under AAI generally consist of evaluating:

1) whether steps were taken to stop continuing releases
2) whether steps were taken to prevent future releases
3) whether steps were taken to prevent or limit the exposure of people or the environment to previous releases

It is HR Green's opinion that the conditions identified during the Phase I ESA indicate the potential for environmental contamination, and that a Phase II ESA or additional investigation is warranted. An understanding of the intended reuse of the site and the User's tolerance for risk is necessary to provide additional recommendations, beyond what is stated here. Specific redevelopment plan components can be designed to be environmentally conservative (no building footprint alteration, no earth work, radon system installation, etc.). While these components have the potential to mitigate potential **human health risk concerns**, they do NOT **quantify environmental impacts**, a step which is necessary in order to satisfy AAI.

HR Green encourages the User to discuss the findings and recommendations of this Phase I ESA with their legal counsel. The User's legal counsel can assist the User in making a risk-based decision as to whether or not the User has enough information after the completion of a Phase I ESA only to demonstrate that appropriate care was exercised under continuing obligations. This judgement is important to make before making a decision to pursue (or not to pursue) a Phase II ESA on the subject property as this decision may impact the User's claim to federal LLPs under CERCLA.

Non-scope considerations beyond this Phase I ESA, such as the presence and location of biological agents including a sewage waste lagoon, recreational vehicle dump stations, and leachfields on the subject property, should be considered as part of the design and implementation of the SD44/Platte-Winner Bridge construction project.

10.0 DEVIATIONS

10.1 Data Failure

HR Green did not experience any data failures during the preparation of this report.

10.2 Data Gaps

HR Green experienced the following data gaps during the preparation of this report:

- HR Green was unable to obtain specific information related to the age of construction or construction type for any of the structures on the subject property.
- HR Green did not inspect the interior of any structures on the subject property other than the three maintenance buildings associated with Snake Creek Recreation Area.
- HR Green was unable to interview any owner representatives from SD DOT. As such, information typically obtained from a User Questionnaire form such as language relating to the potential presence of environmental liens and/or activity and use limitations for the subject property, specialized knowledge for the subject property and surrounding area, commonly known or reasonably ascertainable information for the subject property and surrounding area, and potential valuation reduction for environmental issues for the subject property and surrounding area was unavailable.
- HR Green was unable to determine specific uses of the subject property or any adjoining parcel prior to 1976.
- HR Green did not receive a recorded land title search from the User or identify any pertinent title documents. In the absence of an abstract or recorded title search document containing pertinent information, HR Green considers this a data gap which may have affected the environmental professional's ability to identify on-site REC(s).

HR Green considers these to be significant data gaps that affect the ability to identify RECs.

11.0 ADDITIONAL SERVICES

Pursuant to Section 13.1.5 of ASTM Standard Practice, the following is a list of non-scope considerations the User may want to assess in connection with commercial real estate transactions. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list is not intended to be all-inclusive:

- Asbestos Containing Materials
- Radon
- Lead-Based Paint
- Lead in Drinking Water
- Wetlands
- Regulatory Compliance
- Cultural and Historic Resources
- Industrial Hygiene
- Health and Safety
- Ecological Resources
- Endangered Species
- Indoor Air Quality
- Biological Agents
- Mold

12.0 REFERENCES

ASTM E 1527-13. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. ASTM International. 100 Barr Harbor Drive. P.O. Box C700. West Conshohocken, PA.

40 CFR Part 312 – Standards and Practices for AAI; Final Rule. Federal Register Vol. 70, No. 210. Tuesday, November 1, 2005.

Aerial Photographs. Environmental Data Resources, Inc., 1976 and 1984.

City Directories. Environmental Data Resources, Inc., 2005, 2010, and 2014.

EDR DataMap Area Study, Environmental Data Resources, Inc., SD-44/Platte-Winner Bridge Corridor, Burke, SD 57523. Inquiry Number: 5095643.11s, November 3, 2017.

SE DENR Spill Reports Search. Performed November 13, 2017. http://arcgis.sd.gov/server/denr/spillsviewer/.

SE DENR Tanks Database Viewer. Performed November 14, 2017. http://arcgis.sd.gov/server/denr/tanksdb/default.html.

SD DENR Well Search. Performed November 6, 2017, http://arcgis.sd.gov/server/denr/wellLogs/default.aspx.

Topographical Maps. Environmental Data Resources, Inc., 1971 and 2012.

Web Soil Survey, Natural Resources Conservation Service. November 6, 2017. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

13.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

We declare, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the *subject property*. We have developed and performed the AAI in conformance with the standards and practices set forth in 40 CFR Part 312.

Signatures of the environmental professionals responsible for this report:

Steve Prideaux

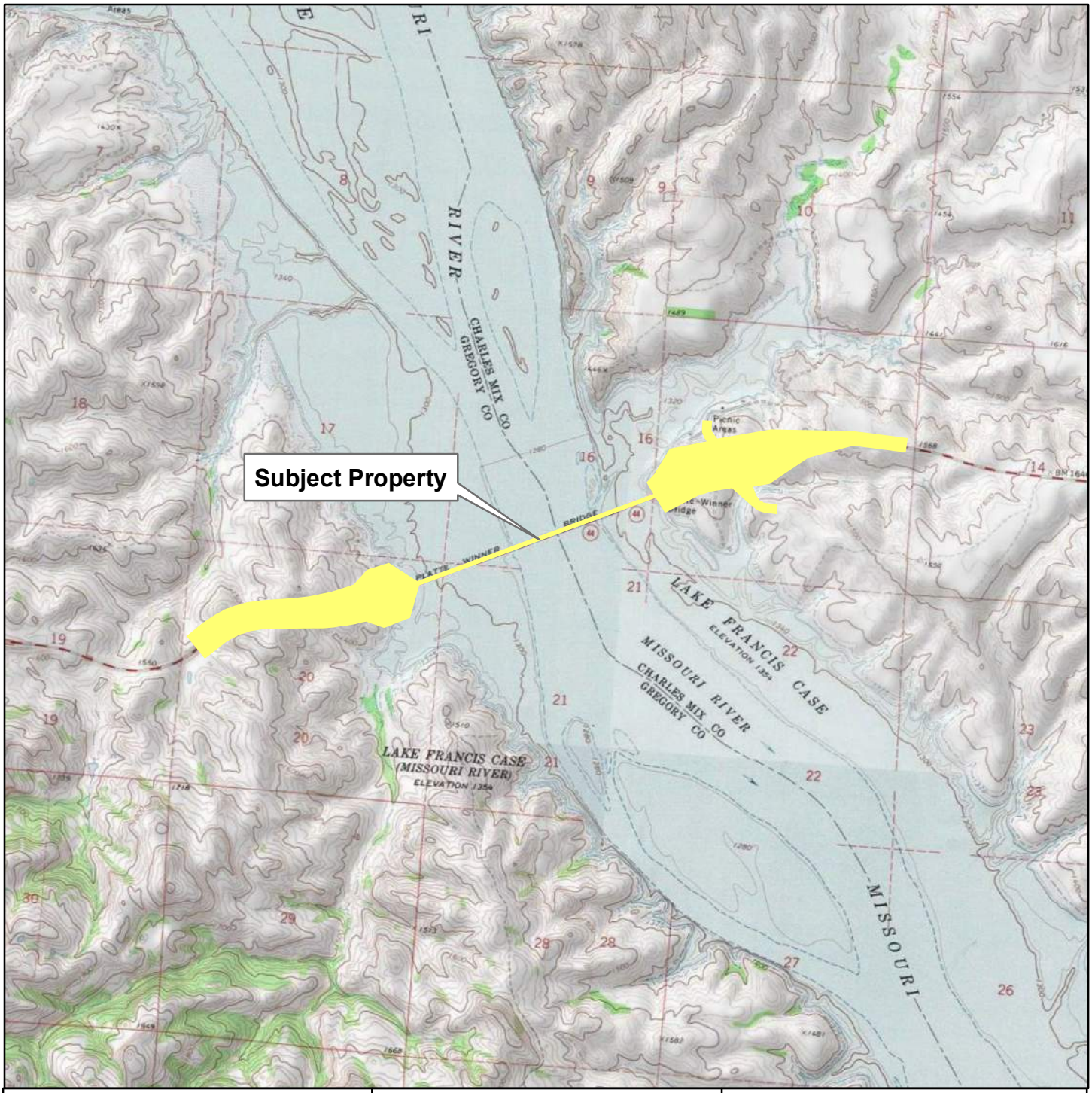
Steve Prideaux, Project Planner I, Report Preparer

Rose Amundson, Project Scientist I, Quality Control and Assurance/Technical Review

APPENDIX A

FIGURES

Figure 1 – Site Vicinity Map
Figure 2 – Site Location Map
Figure 3 – REC Map



Legend

Subject Property

FIGURE 1

Site Vicinity Map

SD44
Platte-Winner Bridge

South Dakota DOT

N
W
E
S

0 3,000 Feet

1 inch = 3,000 feet

HRGreen

Legend

Subject Property

FIGURE 2

Site Location Map

SD44
Platte-Winner Bridge

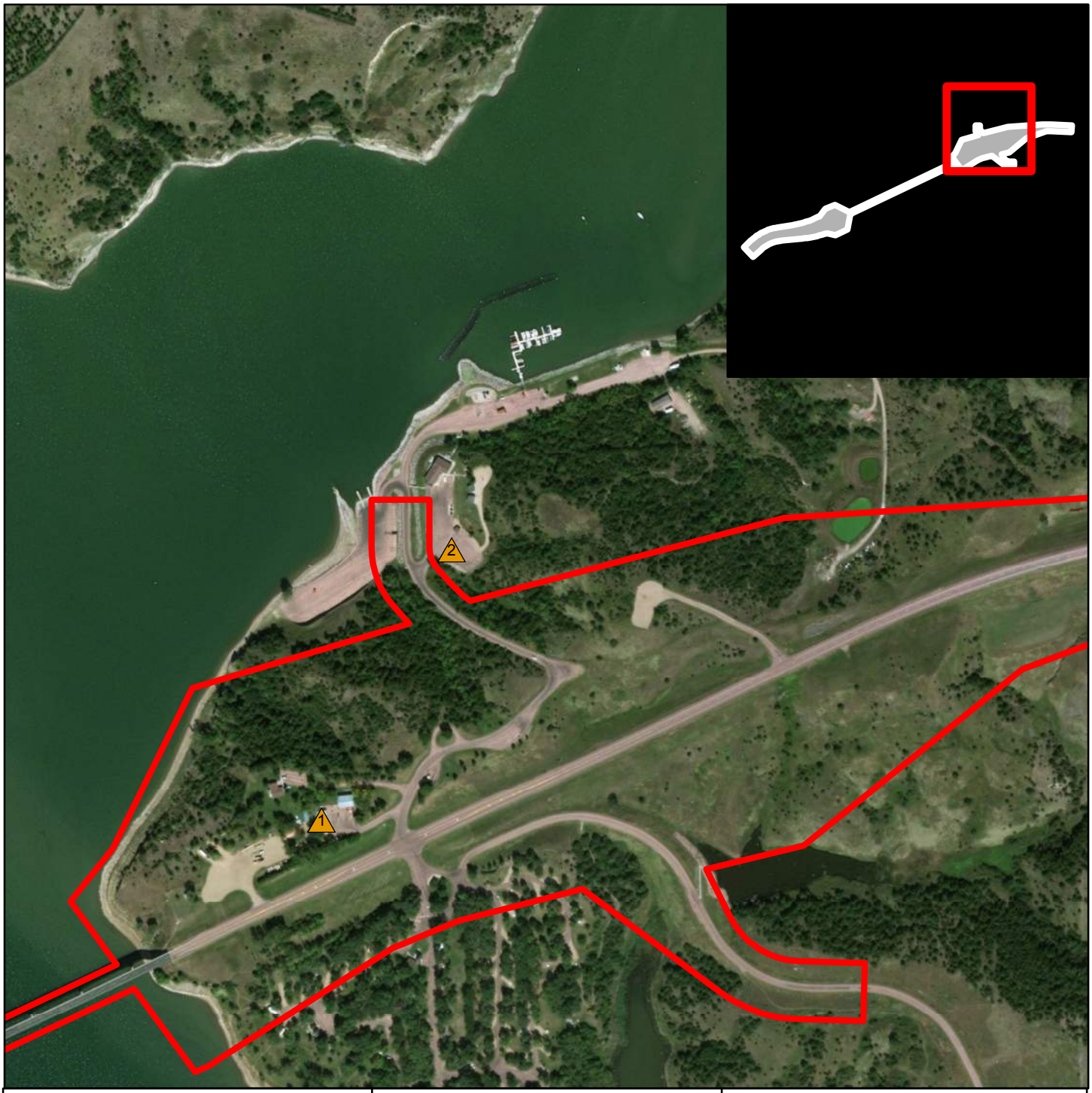
South Dakota DOT

N
W E
S

0 3,000 Feet

1 inch = 3,000 feet

HRGreen



Legend

RECs

Subject Property

FIGURE 3

REC Map

SD44
Platte-Winner Bridge

South Dakota DOT

N
W E
S

0 500 Feet

1 inch = 500 feet

HRGreen

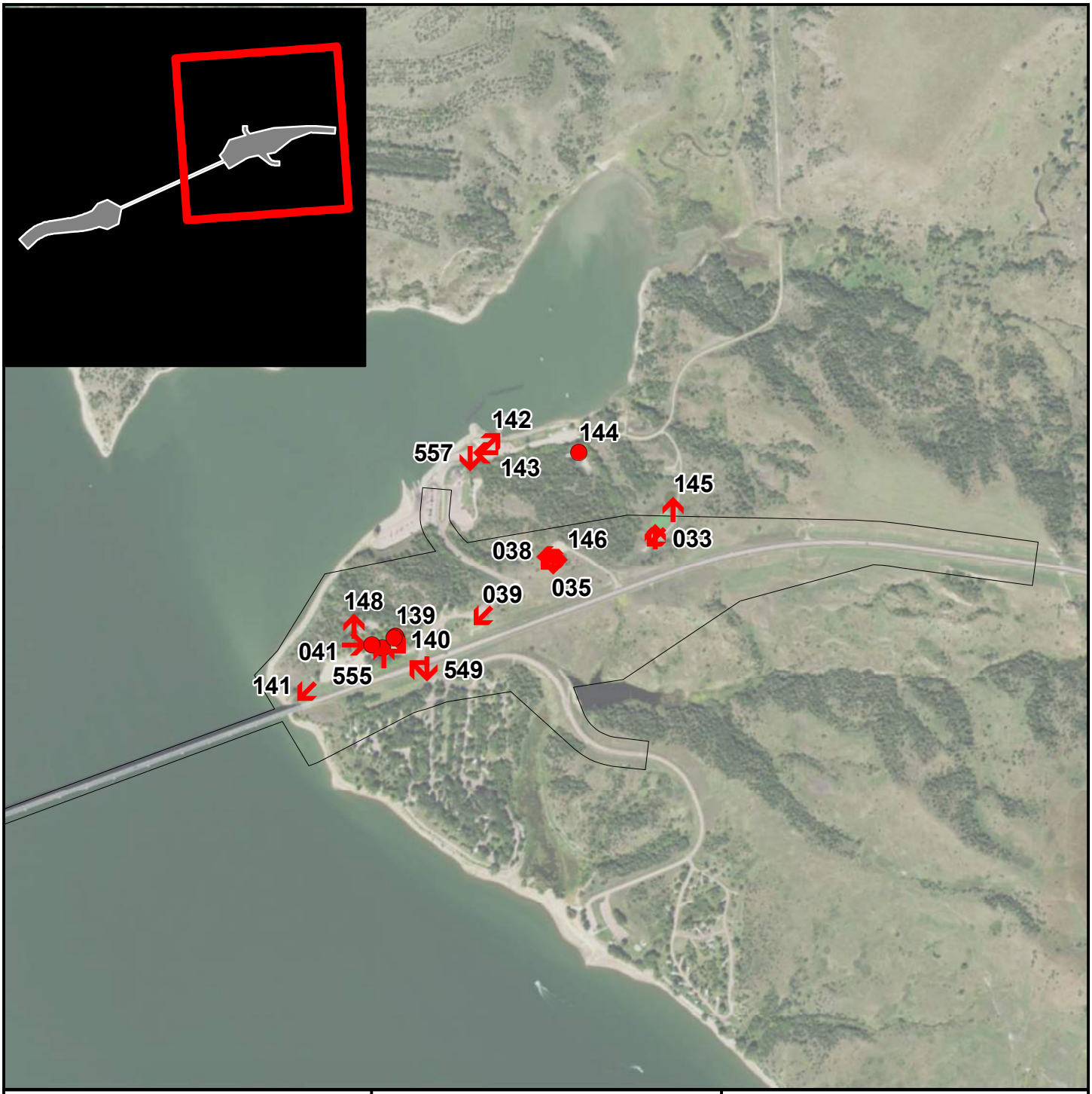
APPENDIX B

PROPERTY PHOTOGRAPHS

SD-44/Platte-Winner Bridge

Phase I Field Observations

11/08/17
Gregory and Charles Mix Counties, SD



Legend

Observations

Arrows point in the direction of the location of the observed hazard from the location of the investigator at the time of observation.

- Observation in Direction of Arrow
- Observation at Point
- Subject Property

FIGURE 1A

Site Observations Map

SD-44/Platte-Winner Bridge

Gregory County and
Charles Mix County
South Dakota

N
W
E
S

0 1,000 Feet

1 inch = 1,000 feet

HRGreen

Legend

Observations

Arrows point in the direction of the location of the observed hazard from the location of the investigator at the time of observation.

- Observation in Direction of Arrow
- Observation at Point
- Subject Property

FIGURE 1B

Site Observations Map

SD-44/Platte-Winner Bridge

Gregory County and
Charles Mix County
South Dakota

N
W E
S

0 1,000 Feet

1 inch = 1,000 feet

HRGreen

Observation: 137

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View across the Platte-Winner Bridge.**

74103

Observation: 138

Observation Details...

Suspected Hazard Type: **Adjacent Property**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View of Missouri River.**

74503

Observation: 139

Observation Details...

Suspected Hazard Type: **Hazardous Substance**
Building: **Main maintenance building**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Flammables cabinent with de-minimis chemicals.**

74104

Observation: 140

Observation Details...

Suspected Hazard Type: **Storage Tank**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Location of former LUST incident.**

74512

Observation: 141

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View across the Missouri River.**

74107

Observation: 142

Observation Details...

Suspected Hazard Type: **Adjacent Property**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Adjacent parcel to N on eastern portion of subject property.**

74514

74515

Observation: 143

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Former pumping island.**

74108

Observation: 144

Observation Details...

Suspected Hazard Type: **Adjacent Property**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Home and pad-mounted transformer.**

74109

74110

Observation: 145

Observation Details...

Suspected Hazard Type: **Wastewater**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Lagoon located on adjacent area to N of eastern portion of the subject property.**

74111

Observation: 146

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View looking E across subject property.**

74112

Observation: 147

Observation Details...

Suspected Hazard Type: **Adjacent Property**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View looking NW at adjacent area to N of eastern portion of the subject property.**

74907

Observation: 148

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Rear of home for District Park Supervisor.**

74114

Observation: 549

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Entrance to Snake Creek Recreation Area.**

74506

Observation: 551

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View looking NW across eastern portion of subject property.**

74507

Observation: 552

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Storage area of main maintenance building.**

74508

Observation: 553

Observation Details...

Suspected Hazard Type: **Hazardous Substance**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **De-minimis chemicals and floor drain.**

Building: **Main maintenance building**

74510

74511

Observation: 555

Observation Details...

Suspected Hazard Type: **Storage Tank**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Two ASTs outside of the cold storage building.**

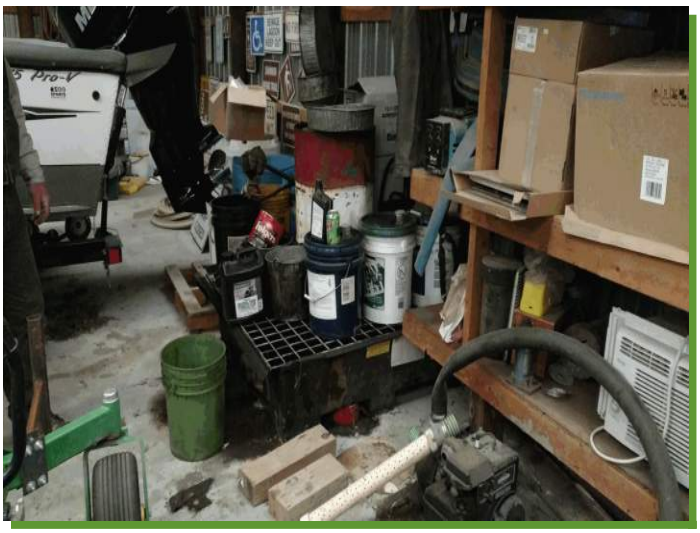
74513

Observation: 556

Observation Details...

Suspected Hazard Type: **Stained Soil / Pavement**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Oil recycling operation.**

Building: **Cold Storage Building**



74105

74106

Observation: 557

Observation Details...

Suspected Hazard Type: **Storage Tank**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **ASTs on adjacent marina to N of western portion of subject property.**

74516

74517

Observation: 033

Observation Details...

Suspected Hazard Type: **Wastewater**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Waste treatment lagoon located on the subject property.**

74903

74904

Observation: 034

Observation Details...

Suspected Hazard Type: **Solid Waste**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Solid waste staging area prior to taking to dump.**

74905

74906

Observation: 035

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View looking S across the subject property.**

74908

Observation: 037

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View looking SW across the subject property.**

74113

Observation: 038

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View looking W across the subject property.**

74909

74910

Observation: 039

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **View looking SW across the western portion of the subject property.**

74911

Observation: 041

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Rear of maintenance buildings.**

74912

Observation: 042

Observation Details...

Suspected Hazard Type: **General Observation**
Observation Date: **2017-11-08**
Investigator: **Scott Mattes**
General Notes: **Equipment storage in storage building.**

74913

APPENDIX C

HISTORICAL RESEARCH DOCUMENTATION

SD44/Platte-Winner Bridge Corridor

None Assigned

Burke, SD 57523

Inquiry Number: 5095643.9

November 07, 2017

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

11/07/17

Site Name:

SD44/Platte-Winner Bridge Co
None Assigned
Burke, SD 57523
EDR Inquiry # 5095643.9

Client Name:

Howard R. Green Company
8710 Earhart Lane SW
Cedar Rapids, IA 52404-8947
Contact: Steve Prideaux

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:

Year	*Scale*	*Details*	*Source*
1984	1"=1000'	Flight Date: June 02, 1984	USGS
1976	1"=500'	Flight Date: September 21, 1976	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.

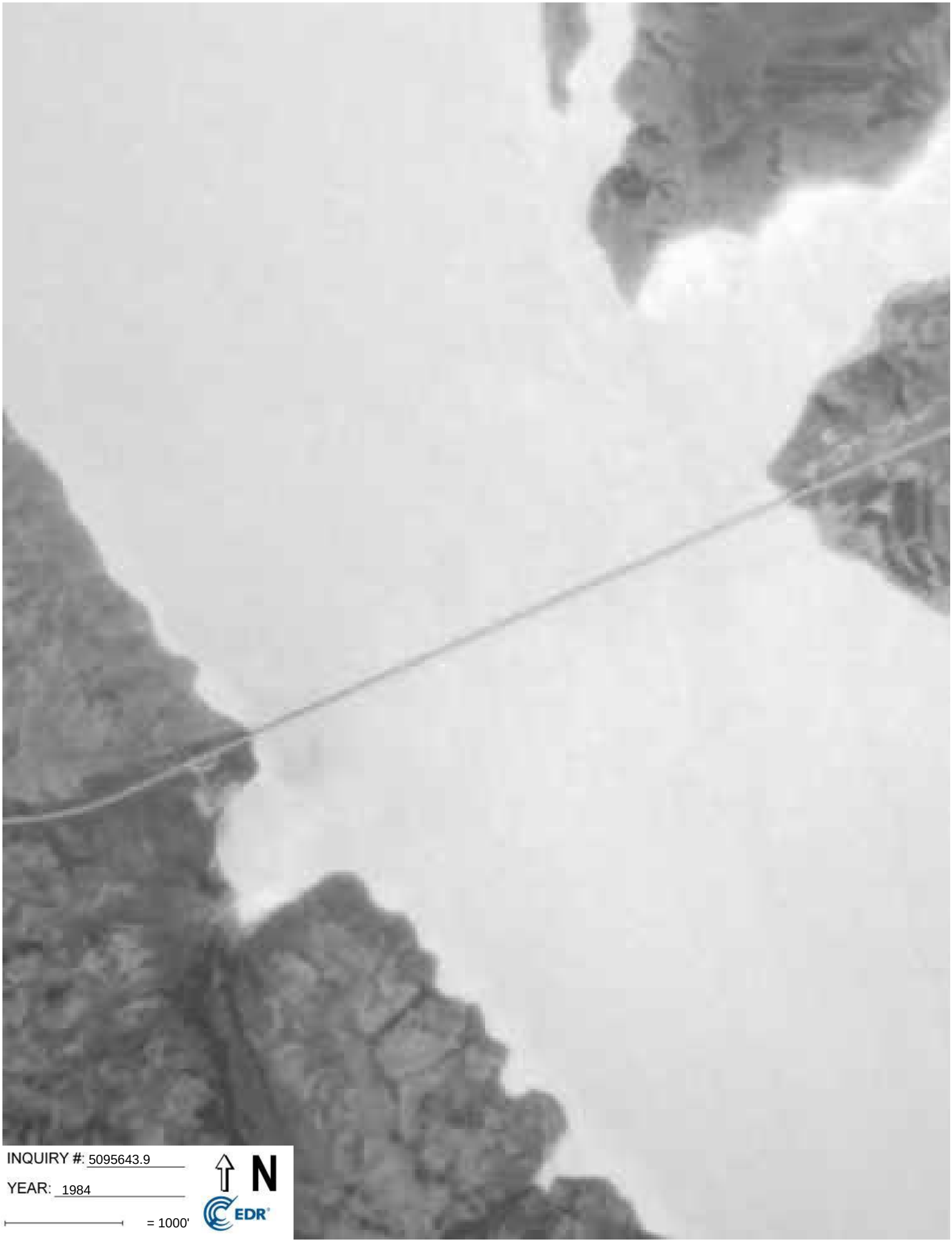
INQUIRY #: 5095643.9

YEAR: 1984

= 1000'

N

EDR



INQUIRY #: 5095643.9

YEAR: 1984

= 1000'

N

EDR

INQUIRY #: 5095643.9

YEAR: 1984

= 1000'

N

EDR

INQUIRY #: 5095643.9

YEAR: 1976

= 500'

N

EDR

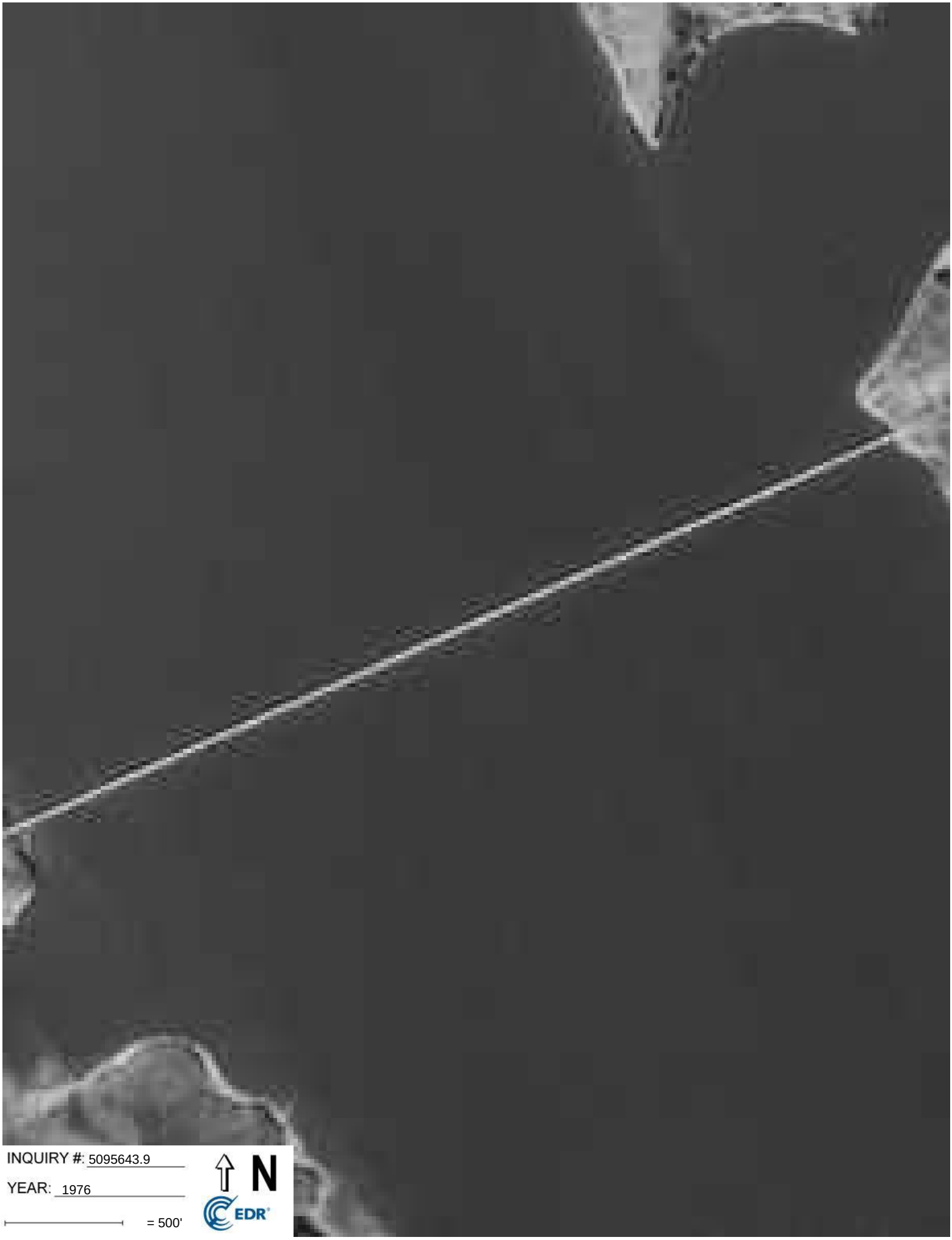
INQUIRY #: 5095643.9

YEAR: 1976

= 500'

N

EDR



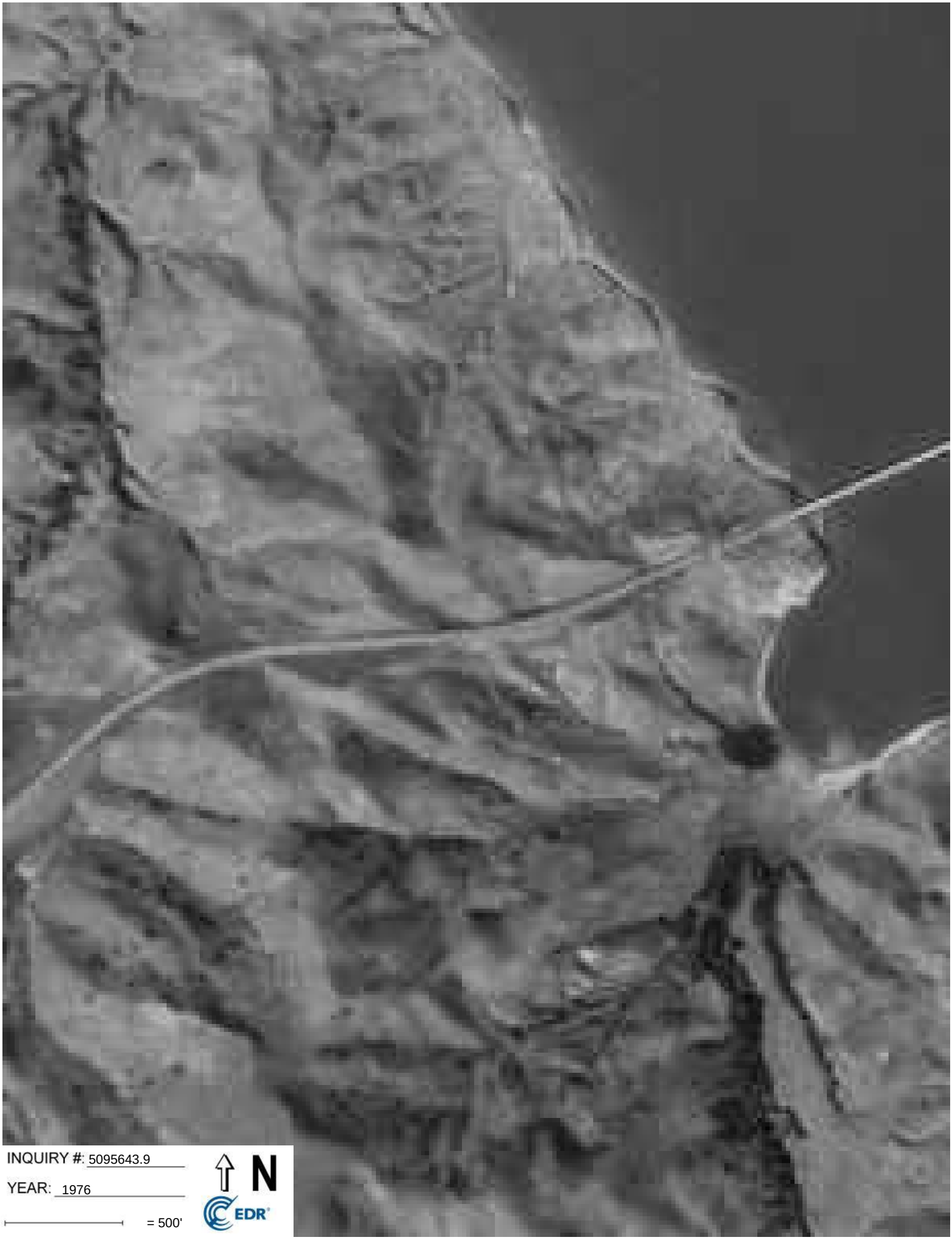
INQUIRY #: 5095643.9

YEAR: 1976

= 500'

N

EDR



INQUIRY #: 5095643.9

YEAR: 1976

= 500'

N

EDR

Certified Sanborn® Map Report

11/03/17

Site Name:	Client Name:
SD44/Platte-Winner Bridge Cor	Howard R. Green Company
None Assigned	8710 Earhart Lane SW
Burke, SD 57523	Cedar Rapids, IA 52404-8947
EDR Inquiry # 5095643.3	Contact: Steve Prideaux

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Howard R. Green Company 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.

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 # 3A57-4A0B-AB94

PO # 160025

Project SD44/Platte-Winner Bridge

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 #: 3A57-4A0B-AB94

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™

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SD44/Platte-Winner Bridge Corridor
None Assigned
Burke, SD 57523

Inquiry Number: 5095643.5
November 07, 2017

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

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

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by
infoUSA®

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2014	☐	☑	EDR Digital Archive
2010	☐	☑	EDR Digital Archive
2005	☐	☑	EDR Digital Archive
2000	☐	☐	EDR Digital Archive
1995	☐	☐	EDR Digital Archive
1992	☐	☐	EDR Digital Archive

FINDINGS

TARGET PROPERTY STREET

None Assigned
Burke, SD 57523

No Addresses Found

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
SD HIGHWAY 44			
2014	pg. A1	EDR Digital Archive	
2010	pg. A2	EDR Digital Archive	
2005	pg. A3	EDR Digital Archive	
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

SD HIGHWAY 44 2014

34614 TUFFS, VANCE
34733 DAY, STEVE
34928 STUKEL, DON J
STUKELS EAGLE RANCH LLC

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

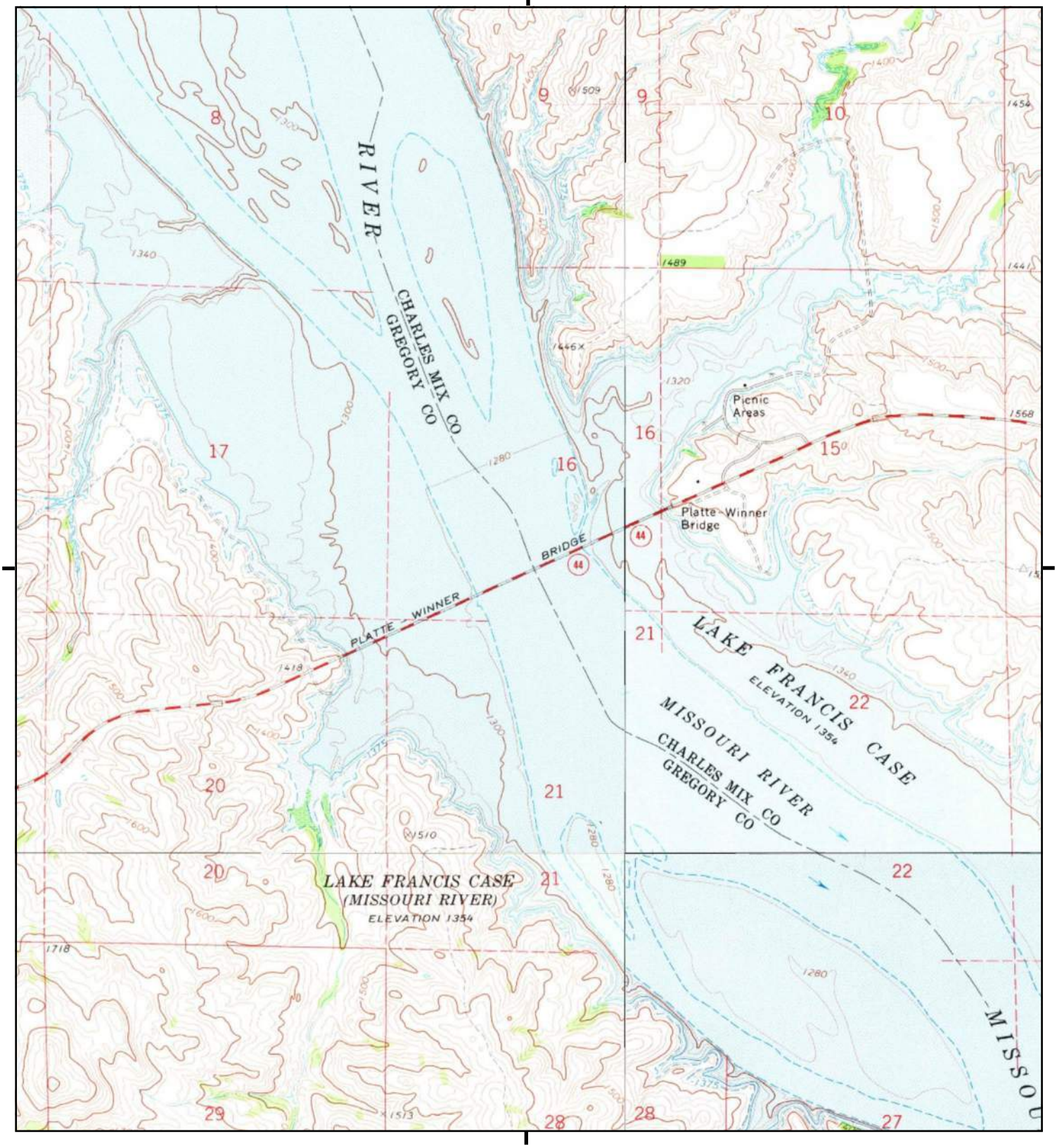
SD HIGHWAY 44 2010

34614 PHEDE, JUSTIN
34733 DAY, STEVE
34928 STUKEL, DON J
STUKELS EAGLE RANCH LLC

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

SD HIGHWAY 44 2005

34928 OCCUPANT UNKNOWN,



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

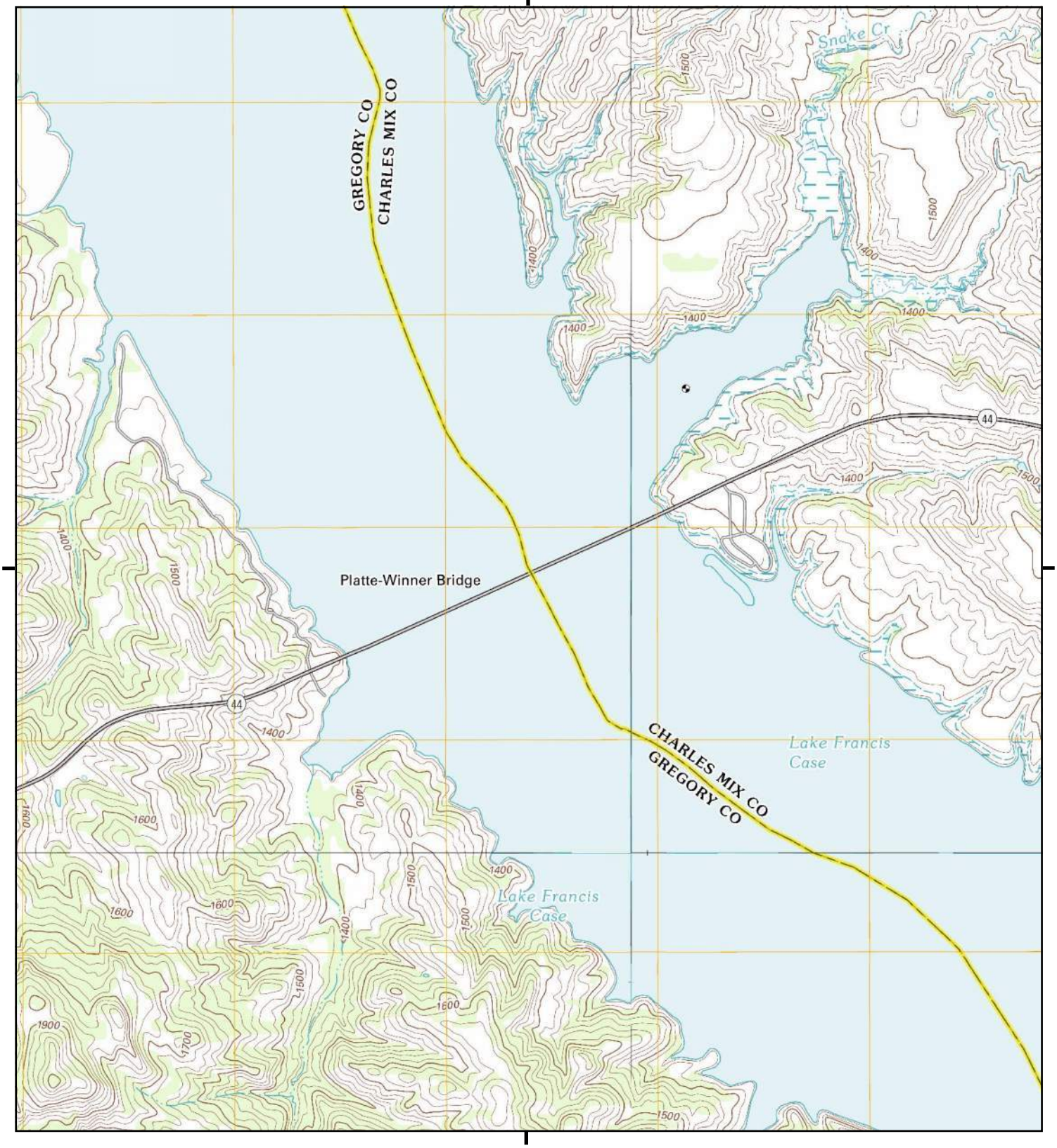
TP, Lucas NW, 1971, 7.5-minute
NE, Academy, 1971, 7.5-minute
SE, Lucas SE, 1971, 7.5-minute
S, Lucas, 1971, 7.5-minute

SITE NAME: SD44/Platte-Winner Bridge Corridor
ADDRESS: None Assigned
Burke, SD 57523
CLIENT: Howard R. Green Company

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lucas NW, 2012, 7.5-minute
NE, Academy, 2012, 7.5-minute
SE, Lucas SE, 2012, 7.5-minute
S, Lucas, 2012, 7.5-minute

SITE NAME: SD44/Platte-Winner Bridge Corridor
ADDRESS: None Assigned
Burke, SD 57523
CLIENT: Howard R. Green Company

N

APPENDIX D

REGULATORY RECORDS DOCUMENTATION

SD44/Platte-Winner Bridge Corridor
Burke, SD 57523

Inquiry Number: 5095643.11s
November 03, 2017

EDR DataMap™ Area Study

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

BURKE, SD 57523
BURKE, SD 57523

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
SEMS	Superfund Enterprise Management System
SEMS-ARCHIVE	Superfund Enterprise Management System Archive
LIENS 2	CERCLA Lien Information
CORRACTS	Corrective Action Report
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator
RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
DOT OPS	Incident and Accident Data
US CDL	National Clandestine Laboratory Register
US BROWNFIELDS	A Listing of Brownfields Sites
FUDS	Formerly Used Defense Sites
LUCIS	Land Use Control Information System
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System

PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
US AIRS	Aerometric Information Retrieval System Facility Subsystem
LEAD SMELTERS	Lead Smelter Sites
FEDERAL FACILITY	Federal Facility Site Information listing
FEMA UST	Underground Storage Tank Listing
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUSRAP	Formerly Utilized Sites Remedial Action Program
COAL ASH DOE	Steam-Electric Plant Operation Data
2020 COR ACTION	2020 Corrective Action Program List
PRP	Potentially Responsible Parties
EPA WATCH LIST	EPA WATCH LIST
US FIN ASSUR	Financial Assurance Information
PCB TRANSFORMER	PCB Transformer Registration Database
US HIST CDL	Delisted National Clandestine Laboratory Register
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
IHS OPEN DUMPS	Open Dumps on Indian Land
ABANDONED MINES	Abandoned Mines

STATE AND LOCAL RECORDS

SHWS	This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.
SWF/LF	Solid Waste Facilities
UIC	Underground Injection Wells Listing
SWRCY	Businesses that Accept Recyclables
LAST	Leaking Aboveground Storage Tanks
SPILLS	Spills
INST CONTROL	List of Brownfields Sites
DRYCLEANERS	Listing of Registered Drycleaners
BROWNFIELDS	List of Brownfields Sites
CDL	Clandestine Drug Labs
NPDES	Wastewater Permit Listing
AIRS	Air Emissions Listing
COAL ASH	Coal Ash Disposal Site Listing

TRIBAL RECORDS

INDIAN RESERV	Indian Reservations
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
INDIAN UST	Underground Storage Tanks on Indian Land
INDIAN VCP	Voluntary Cleanup Priority Listing

EDR PROPRIETARY RECORDS

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto ---------- EDR Exclusive Historic Auto Stations
EDR Hist Cleaner ---------- EDR Exclusive Historic Cleaners
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank
RGA LF ---------- Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

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.

FEDERAL RECORDS

DOD: 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.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within the searched area.

Site	Address	Map ID	Page
LAKE FRANCIS CASE		0	3

STATE AND LOCAL RECORDS

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 07/11/2017 has revealed that there are 2 LUST sites within the searched area.

Site	Address	Map ID	Page
SNAKE CREEK (SD GF&P Facility Status: Closed Spill Category: Petroleum Facility Id: 96.151	18 MI W OF PLATTE ON	1	3
SNAKE CREEK RECREATI Facility Status: Closed Spill Category: Other(See Case File) Facility Id: 98046	14 MILES WEST OF PLA	3	4

EXECUTIVE SUMMARY

UST: The Underground Storage Tank database contains registered USTs. The data come from the Department of Environment & Natural Resources.

A review of the UST list, as provided by EDR, and dated 08/08/2017 has revealed that there is 1 UST site within the searched area.

Site	Address	Map ID	Page
SNAKE CREEK REC AREA Tank Status: Removed Facility ID: 17-00025	RR 2 BOX 113-1	4	5

AST: N/A.

A review of the AST list, as provided by EDR, and dated 08/08/2017 has revealed that there are 2 AST sites within the searched area.

Site	Address	Map ID	Page
SNAKE CREEK RECREATI Tank Status: Removed Facility Id: 1700023	RR 2 BOX 113-1	2	4
SNAKE CREEK REC. ARE Tank Status: Current Facility Id: 1700026	35316 SD HWY 44	5	6

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

MAP FINDINGS SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
NPL	0
Proposed NPL	0
Delisted NPL	0
NPL LIENS	0
SEMS	0
SEMS-ARCHIVE	0
LIENS 2	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	0
RCRA-CESQG	0
RCRA NonGen / NLR	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
HMIRS	0
DOT OPS	0
US CDL	0
US BROWNFIELDS	0
DOD	1
FUDS	0
LUCIS	0
CONSENT	0
ROD	0
UMTRA	0
ODI	0
DEBRIS REGION 9	0
US MINES	0
TRIS	0
TSCA	0
FTTS	0
HIST FTTS	0
SSTS	0
ICIS	0
PADS	0
MLTS	0
RADINFO	0
FINDS	0
RAATS	0
RMP	0
COAL ASH EPA	0
US AIRS	0
LEAD SMELTERS	0
FEDERAL FACILITY	0
FEMA UST	0
ECHO	0
FUELS PROGRAM	0

MAP FINDINGS SUMMARY

Database	Total Plotted
DOCKET HWC	0
UXO	0
FUSRAP	0
COAL ASH DOE	0
2020 COR ACTION	0
PRP	0
EPA WATCH LIST	0
US FIN ASSUR	0
PCB TRANSFORMER	0
US HIST CDL	0
SCRD DRYCLEANERS	0
IHS OPEN DUMPS	0
ABANDONED MINES	0

STATE AND LOCAL RECORDS

SHWS	N/A
SWF/LF	0
UIC	0
SWRCY	0
LUST	2
UST	1
LAST	0
AST	2
SPILLS	0
INST CONTROL	0
DRYCLEANERS	0
BROWNFIELDS	0
CDL	0
NPDES	0
AIRS	0
COAL ASH	0

TRIBAL RECORDS

INDIAN RESERV	0
INDIAN ODI	0
INDIAN LUST	0
INDIAN UST	0
INDIAN VCP	0

EDR PROPRIETARY RECORDS

EDR MGP	0
EDR Hist Auto	0
EDR Hist Cleaner	0
RGA LUST	0
RGA LF	0

NOTES:

Sites may be listed in more than one database

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

DOD **LAKE FRANCIS CASE** **DOD** **CUSA106166**
Region **N/A**

LAKE FRANCIS CASE (County), SD

DOD:
Feature 1: Army Corps of Engineers DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Lake Francis Case
Name 2: Not reported
Name 3: Not reported
State: SD
DOD Site: Yes
Tile name: SDGREGORY

---

1 **SNAKE CREEK (SD GF&P) - TANK REMOVALS** **LUST** **S106774870**
18 MI W OF PLATTE ON HIGHWAY 44 **N/A**
PLATTE, SD 57369

SD LUST:

Facility ID:	96.151
Facility Status:	**C**
Quantity Spilled or Released:	0
Spill Category:	Petroleum
Material:	Gasoline
Source Type:	UST
Site Type:	Other(See Case File)
Date Reported:	05/30/1996
Date Closed:	07/26/1996
Responsible Party:	SD Game, Fish, and Parks (SD GF&P)
Property Type:	Public
ATP Number:	Not reported
Lat/Long:	43.395014 / -99.1172
R1:	KH
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:	Not reported
Site ID:	4461
SD Dept of Agricultures Case Number:	Not reported
Decode For Fstatus:	Closed

2 **SNAKE CREEK RECREATION AREA (CONCESSION** **AST** **A100170262**
RR 2 BOX 113-1 **N/A**
PLATTE, SD 57369

AST:

Facility ID:	1700023
Method:	GPSN83NA
Lat/Longitude:	43.394575 / -99.118462
Year Removed:	Not reported
Reference:	North side of fuel ta
Tank Status:	Removed
Tank Capacity:	1000
Tank Chemical:	Gasoline
Tank Type:	Aboveground
Tank Age:	1996
Tank Material:	Steel
Tank Number:	1
Piping Material:	Cath. Protection
Piping Type:	Not reported
Tank Release Detection:	Secondary Containment
Piping Release Detection:	Not reported
Spill Protection:	Catchment Basin
Overfill Protection:	Other
Inspected By:	Not reported
Inspected Date:	Not reported
Tank Status:	Removed
Tank Capacity:	2000
Tank Chemical:	Gasoline
Tank Type:	Aboveground
Tank Age:	1996
Tank Material:	Steel
Tank Number:	2
Piping Material:	Fiberglass
Piping Type:	Not reported
Tank Release Detection:	Secondary Containment
Piping Release Detection:	Not reported
Spill Protection:	Catchment Basin
Overfill Protection:	Other
Inspected By:	Not reported
Inspected Date:	Not reported

---

3 **SNAKE CREEK RECREATION AREA PARK SHOP** **LUST** **S109409757**
14 MILES WEST OF PLATTE ON HIGHWAY 44 **N/A**
PLATTE, SD 57369

SD LUST:

Facility ID:	98046
Facility Status:	**C**
Quantity Spilled or Released:	0
Spill Category:	Other(See Case File)
Material:	Not reported
Source Type:	UST
Site Type:	Clean Site
Date Reported:	11/16/1998
Date Closed:	01/28/2000
Responsible Party:	South Dakota Game Fish and Parks SD GF&P
Property Type:	Public

SNAKE CREEK RECREATION AREA PARK SHOP (Continued) **S109409757**

ATP Number:	Not reported
Lat/Long:	43.393616 / -99.118964
R1:	CH
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:	Not reported
Site ID:	8709
SD Dept of Agricultures Case Number:	Not reported
Decode For Fstatus:	Closed

---

4 **SNAKE CREEK REC AREA** **UST** **U002315252**
RR 2 BOX 113-1 **N/A**
PLATTE, SD 57369

UST:

Facility ID:	17-00025
Method:	MAPN2724
Lat/Long:	43.392728 / -99.118253
Tank Status:	Removed
Tank Capacity:	1000
Tank Chemical:	Gasoline
Tank Type:	Underground
Year Removed:	1998
Reference:	Not reported
Tank Age:	1984
Tank Material:	Steel
Tank Number:	1
Piping Material:	Galvanized Steel
Piping Type:	Not reported
Tank Release Detection:	Manual Gauging
Piping Release Detection:	Not reported
Spill Protection:	Not reported
Overfill Protection:	Not reported
Inspected By:	Not reported
Inspected Date:	Not reported

Tank Status:	Removed
Tank Capacity:	1000
Tank Chemical:	Gasoline
Tank Type:	Underground
Year Removed:	1998
Reference:	Not reported
Tank Age:	1984
Tank Material:	Steel
Tank Number:	2
Piping Material:	Galvanized Steel
Piping Type:	Not reported

SNAKE CREEK REC AREA (Continued) **U002315252**

Tank Release Detection:	Manual Gauging
Piping Release Detection:	Not reported
Spill Protection:	Not reported
Overfill Protection:	Not reported
Inspected By:	Not reported
Inspected Date:	Not reported

Tank Status:	Removed
Tank Capacity:	1000
Tank Chemical:	Diesel
Tank Type:	Underground
Year Removed:	1998
Reference:	Not reported
Tank Age:	1984
Tank Material:	Steel
Tank Number:	3
Piping Material:	Galvanized Steel
Piping Type:	Not reported
Tank Release Detection:	Manual Gauging
Piping Release Detection:	Not reported
Spill Protection:	Not reported
Overfill Protection:	Not reported
Inspected By:	Not reported
Inspected Date:	Not reported

Tank Status:	Removed
Tank Capacity:	560
Tank Chemical:	Gasoline
Tank Type:	Underground
Year Removed:	1996
Reference:	Not reported
Tank Age:	1984
Tank Material:	Steel
Tank Number:	4
Piping Material:	Galvanized Steel
Piping Type:	Not reported
Tank Release Detection:	Manual Gauging
Piping Release Detection:	Not reported
Spill Protection:	Not reported
Overfill Protection:	Not reported
Inspected By:	Not reported
Inspected Date:	Not reported

---

5 **SNAKE CREEK REC. AREA (SHOP AREA)** **AST** **A100170261**
35316 SD HWY 44 **N/A**
PLATTE, SD 57369

AST:

Facility ID:	1700026
Method:	GPSN83NA
Lat/Longitude:	43.390819 / -99.120535
Year Removed:	Not reported
Reference:	East of the fuel tank

Tank Status:	Current
Tank Capacity:	560

SNAKE CREEK REC. AREA (SHOP AREA) (Continued) **A100170261**

Tank Chemical:	Diesel
Tank Type:	Aboveground
Tank Age:	1998
Tank Material:	Not reported
Tank Number:	1
Piping Material:	Galvanized Steel
Piping Type:	Not reported
Tank Release Detection:	Secondary Containment
Piping Release Detection:	Not reported
Spill Protection:	Catchment Basin
Overfill Protection:	Ball Float Valves
Inspected By:	Not reported
Inspected Date:	Not reported

Tank Status:	Current
Tank Capacity:	1000
Tank Chemical:	Gasoline
Tank Type:	Aboveground
Tank Age:	1998
Tank Material:	Not reported
Tank Number:	2
Piping Material:	Galvanized Steel
Piping Type:	Not reported
Tank Release Detection:	Secondary Containment
Piping Release Detection:	Not reported
Spill Protection:	Catchment Basin
Overfill Protection:	Ball Float Valves
Inspected By:	Not reported
Inspected Date:	Not reported

Count: 4 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BURKE	U002315772	BURKE LAKE REC AREA	RT 1		UST
BURKE	S108476371		2 MI SOUTH, 2.5 MI EAST OF BURKE		SWF/LF
PLATTE	1000187566	SD DOT	HWY 44 WEST OF PLATTE	57369	RCRA-SQG
PLATTE	1004781646	FRONTIER MOTORS	WEST HIGHWAY 44	57369	RCRA-CESQG

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.

FEDERAL RECORDS

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: 05/30/2017
Date Data Arrived at EDR: 06/08/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 99

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
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 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

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: 05/30/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 98

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

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: 05/30/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 98

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

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 know 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: 07/11/2017
Date Data Arrived at EDR: 07/21/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 77

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/20/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Quarterly

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

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: 07/11/2017
Date Data Arrived at EDR: 07/28/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 70

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/20/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Quarterly

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: 07/11/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

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: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

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: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

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: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
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: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

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: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

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: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
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: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

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: 09/18/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

DOT OPS: Incident and Accident Data

Department of Transporation, 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 Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

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: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Quarterly

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: 06/19/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/20/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Semi-Annually

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
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

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
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/25/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

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: 05/22/2017
Date Data Arrived at EDR: 06/13/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 94

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

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: 06/30/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

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: 09/27/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 8

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/08/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Annually

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
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

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

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: 10/20/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: No Update Planned

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: 07/31/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Semi-Annually

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: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

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: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

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: 08/23/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

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: 09/22/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Every 4 Years

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: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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

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.

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: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
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: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
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.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Annually

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: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

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: 10/02/2017
Date Data Arrived at EDR: 10/05/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

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: 07/23/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 9

Source: EPA
Telephone: (303) 312-6312
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

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

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: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
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: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Biennially

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/29/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

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: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
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.

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: 09/08/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

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: 10/03/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

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: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

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: 08/24/2017
Next Scheduled EDR Contact: 11/20/2017
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.

Date of Government Version: 05/10/2017
Date Data Arrived at EDR: 05/17/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 121

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 01/08/2018
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: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

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: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/02/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

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

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 24

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

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: 10/26/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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: 08/17/2017
Date Data Arrived at EDR: 08/17/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 29

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

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

Date of Government Version: 09/02/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

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: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 98
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 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

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: 08/08/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2016
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 133
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Varies

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: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92
Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/06/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

STATE AND LOCAL RECORDS

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: 09/18/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/06/2017
Date Data Arrived at EDR: 07/11/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 86

Source: Department of Environment and Natural Resources
Telephone: 605-773-3153
Last EDR Contact: 09/29/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

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: 08/11/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 63

Source: Department of Environment & Natural Resources
Telephone: 605-394-2229
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Semi-Annually

SWRCY: Businesses that Accept Recyclables

A listing of recycling facilities.

Date of Government Version: 07/06/2017
Date Data Arrived at EDR: 07/07/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 90

Source: Department of Environmental & Natural Resources
Telephone: 605-773-3153
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
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: 07/11/2017
Date Data Arrived at EDR: 07/13/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 84

Source: Department of Environment and Natural Resources
Telephone: 605-773-3296
Last EDR Contact: 10/12/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

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: 08/08/2017
Date Data Arrived at EDR: 08/10/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 56

Source: Department of Environment and Natural Resources
Telephone: 605-773-3296
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tanks

Leaking Aboveground Storage Tank Incident Reports.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/13/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 84

Source: Department of Environment and Natural Resources
Telephone: 605 773-3296
Last EDR Contact: 10/12/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 08/10/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 56

Source: Department of Environment & Natural Resources
Telephone: 605-773-3296
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

SPILLS: Spills
Spills and releases of regulated substances.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/13/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 84

Source: Department of Environment and Natural Resources
Telephone: 605-773-3296
Last EDR Contact: 10/12/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

INST CONTROL: List of Brownfields Sites
Sites that have institutional controls in place.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/13/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 84

Source: Department of Environment & Natural Resources
Telephone: 605-773-3296
Last EDR Contact: 10/12/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

DRYCLEANERS: Listing of Registered Drycleaners
A listing of registered drycleaner facility locations.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/05/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 20

Source: Department of Environmental & Natural Resources
Telephone: 605-773-3151
Last EDR Contact: 10/02/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Semi-Annually

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: 07/11/2017
Date Data Arrived at EDR: 07/13/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 84

Source: Department of Environment & Natural Resources
Telephone: 605-773-3296
Last EDR Contact: 10/12/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of clandestine drug lab site locations.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/13/2017
Date Made Active in Reports: 10/05/2017
Number of Days to Update: 84

Source: Department of Environment & Natural Resources
Telephone: 605-773-3296
Last EDR Contact: 10/12/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

NPDES: Wastewater Permit Listing
A listing of wastewater permit facility locations.

Date of Government Version: 09/19/2017
Date Data Arrived at EDR: 09/20/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 30

Source: Department of Environment & Natural Resources
Telephone: 605-773-3351
Last EDR Contact: 09/20/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Quarterly

AIRS: Air Emissions Listing
A listing of facilities with air emissions.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/05/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 20

Source: Department of Environment & Natural Resources
Telephone: 605-773-4209
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Semi-Annually

COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 01/07/2014
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 34

Source: Department of Environment & Natural Resources
Telephone: 605-773-3153
Last EDR Contact: 09/29/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

TRIBAL RECORDS

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: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
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: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

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: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Quarterly

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: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
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: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
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: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
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: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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: 05/02/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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: 04/25/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
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: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
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: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
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: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

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: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

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

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: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

EDR PROPRIETARY 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.

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 Auto 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 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	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	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	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/04/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 187	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

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	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/17/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 200	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

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: 07/31/2017	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/03/2017	Telephone: 518-402-8651
Date Made Active in Reports: 10/12/2017	Last EDR Contact: 11/01/2017
Number of Days to Update: 70	Next Scheduled EDR Contact: 02/12/2018
	Data Release Frequency: Quarterly

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: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/11/2017
Next Scheduled EDR Contact: 12/25/2017
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
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.

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

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facility List
Source: Department of Social Services
Telephone: 605-773-4766

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

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

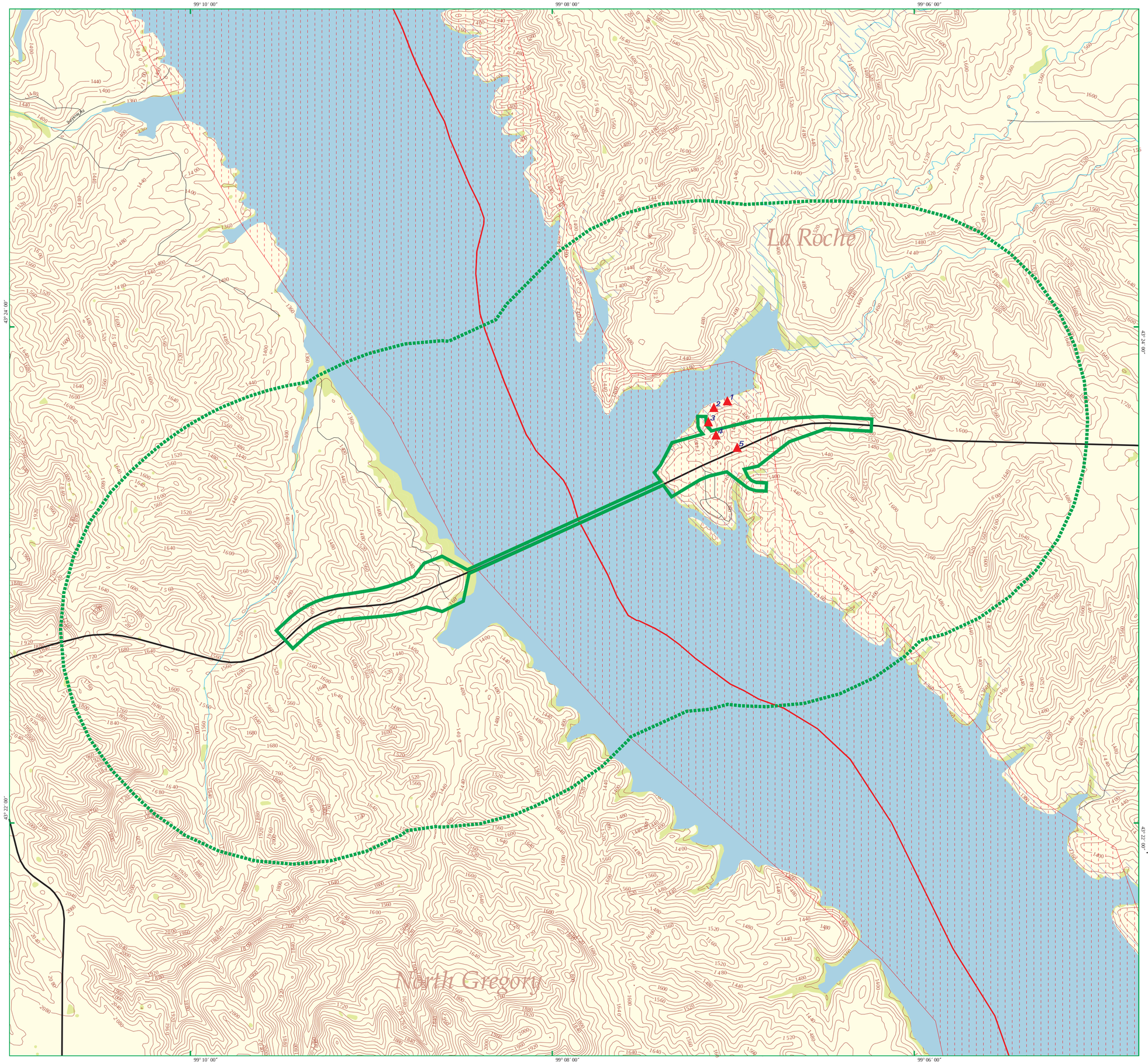
Source: Bureau of Information & Telecommunications
Telephone: 605-773-4750

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

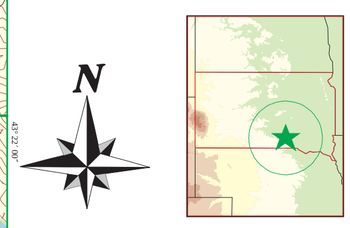
STREET AND ADDRESS INFORMATION

EDR DataMap® Area Study

SD44/Platte-Winner Bridge Corridor



- Listed Sites
- Earthquake Epicenters (Richter 5 or greater)
- Search Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Pipelines
- Powerlines
- Fault Lines
- Water
- Superfund Sites
- Federal DOD Sites
- Indian Reservations BIA
- 100-Yr Flood Zones
- National Wetland Inventory



Burke, SD

0 1/2 1

Scale in Miles

EDR® Environmental Data Resources Inc

5095643.11s - 03 Nov 17

APPENDIX E

INTERVIEW DOCUMENTATION

Prideaux, Stephen

From: Rick Gustad <chief@plattevfd.com>
Sent: Monday, November 13, 2017 3:02 PM
To: Prideaux, Stephen
Subject: RE: Information Request

Steve,

I browsed Department electronic records dating back as far as 2000, previous to that records were not electronic.

The department is unaware of any spills or hazardous materials storage or records of storage tanks at the Snake Creek Recreation Area. We also have no record of SARA Tier II Reporting from the State for anything at the Park.

As far as emergency responses go there haven't been many at the park. A few water rescue related incidents over the years, a trench rescue, a few boat fires and a few wildland fire incidents at or adjacent to the state park. I can certainly go over the incident list in more detail if you need real incident numbers, but it will take some time as the incidents in the system don't necessarily have the street address of the State Park, some are by Township and Range and some by Lat/Long depending on incident type and how long ago. It would take a manual review of the incident list to get real data. I would be confident in saying it averages less than 1 per year.

Rick Gustad
Fire Chief
Platte Volunteer Fire Department
521 South Vermont Avenue
PO Box 12
Platte, SD 57369

(605) 337-2347 (Fire Station Phone – Not Staffed lease leave message)

Like us on Facebook: www.facebook.com/PlatteFire
Visit our website @: www.plattevfd.com

From: Prideaux, Stephen [mailto:sprideaux@hrgreen.com]
Sent: Monday, November 13, 2017 11:04 AM
To: 'webmaster@plattevfd.com' <webmaster@plattevfd.com>
Subject: Information Request

Good morning,
I am attempting to locate any environmental records your department has related to the Snake Creek Recreation Area as part of a SD DOT project on the SD 44 Corridor. Specifically, we are hoping to obtain information on any spills, hazardous materials storage, tank records, emergency responses, etc. Is this something you are able to produce? I appreciate any help you can offer! Feel free to call me with any questions.

Thank you.

Steve Prideaux

Steve Prideaux, AICP
Project Planner I
HR GREEN, INC.

531 Commercial Street #306 | Waterloo, IA 50701
Main 319.841.4000 | **Fax** 319.841.4012 | **Direct** 319.841.4374 | **Cell** 319.430.5421
HRGREEN.COM

Property Address: SD-44/Platte- Winner Bridge, Gregory and Charles Mix Counties, SD

Interview with Property Owner

Question	Yes	No	Unk.
1. Is the property or any of the adjoining property used for industrial use?		X	
2. To the best of your knowledge, has the property been used for an industrial use in the past [before current use]?		X	
3. Is the property or any 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?		X	
4. To the best of your knowledge has the property or any adjoining property been 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?		X	
5. Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, or paints, or other chemicals in individual containers of greater than 5 gallons (19 Liters) in volume or 50 gallons (190 Liters) in the aggregate, stored on or used at the property or at the facility?		X	
6. Are there currently, or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallons (208 Liters)) or sacks of chemicals located on the property or at the facility?		X	
7. Has fill dirt been brought onto the property that originated from a contaminated site or that is of unknown origin?		X	
8. Are there currently, or to the best of your knowledge, have there been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	X		
9. Is there currently, or the best of your knowledge has there been previously, any stained soil on the property?		X	
10. Are there currently, or the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the property?	X		
11. Are there currently, or the best of your knowledge have there been previously, 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?		X	
12. Are there currently, or the best of your knowledge have there been previously, any flooring, drains, or walls located in the facility that are stained by substances other than water or are emitting foul odors?		X	

Property Address: SD-44/Platte- Winner Bridge, Gregory and Charles Mix Counties, SD

Interview with Property Owner			
Question	*Yes*	*No*	*Unk.*
13. If the property is served by private well on non-public water system, have contaminants been identified in the well or system that exceeded guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?		X	
14. Does the owner or occupant of the property have any knowledge of environmental liens or government notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?		X	
15. Has the owner or occupant of the property been informed of the past or current existence of hazardous substances or petroleum products or environmental violations with respect to the property or any facility located on the property?		X	
16. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property by any owner or occupant of the property?		X	
17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits, or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?		X	
18. Does the property discharge waste water on or adjacent to the property other than storm water into a sanitary sewer system?		X	
19. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the property?		X	
20. Is there a transformer, capacitor, or any hydraulic equipment on the property for which there are any records indicating the presence of PCBs?			X

Additional Questions on following Page:

Property Address: SD-44/Platte- Winner Bridge, Gregory and Charles Mix Counties, SD

Additional Interview Questions:

I. How long have you been familiar with the property? 21 years

II. How are you familiar with the property (owner, resident, occupant, etc.)
conservation foreman (employee)

III. Name and contact information Clay Peck (605)-337-2581

IV. Please provide the information on utilities to the site and utility providers (e.g. Alliant Energy provides natural gas and electric to the site)? West Central Electric
Charles mix electric

V. Do you have or do you know of any previous investigations performed on the property (Environmental, Geotechnical, Other)? If so, please provide more information on the type of assessment.
dont have knowlegde of any

Signature: Clay Peck

Date: 11-20-2017

Property Address: SD-44/Platte- Winner Bridge, Gregory and Charles Mix Counties, SD

Interview with Property Owner

Question	*Yes*	*No*	*Unk.*
1. Is the property or any of the adjoining property used for industrial use?		X	
2. To the best of your knowledge, has the property been used for an industrial use in the past [before current use]?		X	
3. Is the property or any 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?		X	
4. To the best of your knowledge has the property or any adjoining property been 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?		X	
5. Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, or paints, or other chemicals in individual containers of greater than 5 gallons (19 Liters) in volume or 50 gallons (190 Liters) in the aggregate, stored on or used at the property or at the facility?	X		
6. Are there currently, or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallons (208 Liters)) or sacks of chemicals located on the property or at the facility?			X
7. Has fill dirt been brought onto the property that originated from a contaminated site or that is of unknown origin?			X
8. Are there currently, or to the best of your knowledge, have there been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	X		
9. Is there currently, or the best of your knowledge has there been previously, any stained soil on the property?			X
10. Are there currently, or the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the property?	X		
11. Are there currently, or the best of your knowledge have there been previously, 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?			X
12. Are there currently, or the best of your knowledge have there been previously, any flooring, drains, or walls located in the facility that are stained by substances other than water or are emitting foul odors?			X

Property Address: SD-44/Platte- Winner Bridge, Gregory and Charles Mix Counties, SD

Interview with Property Owner			
Question	*Yes*	*No*	*Unk.*
13. If the property is served by private well on non-public water system, have contaminants been identified in the well or system that exceeded guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?		X	
14. Does the owner or occupant of the property have any knowledge of environmental liens or government notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?			X
15. Has the owner or occupant of the property been informed of the past or current existence of hazardous substances or petroleum products or environmental violations with respect to the property or any facility located on the property?			X
16. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property by any owner or occupant of the property?		X	
17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits, or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?			X
18. Does the property discharge waste water on or adjacent to the property other than storm water into a sanitary sewer system?		X	
19. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the property?	X		
20. Is there a transformer, capacitor, or any hydraulic equipment on the property for which there are any records indicating the presence of PCBs?			X

Additional Questions on following Page:

Property Address: SD-44/Platte- Winner Bridge, Gregory and Charles Mix Counties, SD

Additional Interview Questions:

I. How long have you been familiar with the property? I have worked at this location since January of 2004.

II. How are you familiar with the property (owner, resident, occupant, etc.) Owner, Resident and Operator.

III. Name and contact information: Justin Thede – 605-337-2587

IV. Please provide the information on utilities to the site and utility providers (e.g. Alliant Energy provides natural gas and electric to the site)?
   a. Charles Mix Electric provides electrical.
   b. Randall Community Water provides the water.
   c. Midstates Communication provides the telecommunications.

V. Do you have or do you know of any previous investigations performed on the property (Environmental, Geotechnical, Other)? If so, please provide more information on the type of assessment.
   There has some been done, but you need to contact the Pierre office to know which ones for sure.

Signature: __Justin Thede – E-signature_____

Date: _____11-22-2017___

APPENDIX F

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

HR GREEN COMPANY PROFILE

HR Green, Inc. is a professional engineering and technical consulting firm serving clients in the public and private sectors. We are a privately held, employee-owned company, and fully committed to the success of our clients and the well-being of our nearly 400 employees.

HR Green builds **business accountability into every task we perform for our clients**. This means we partner with our clients to create viable facilities and healthy enterprises that are truly sustainable **for the client**.

We have been in business without interruption since 1913. We carefully target our technical services to address the most timely needs of society, and thus to succeed as sustainable businesses.

QUALIFICATIONS OF INDIVIDUALS PREPARING THIS REPORT

Ms. Rose Amundson is a Project Scientist I with eight years of experience working in the environmental field. Rose has completed work on Federal and State regulatory compliance reporting, Phase I and Phase II Environmental Site Assessments, site remediation planning and implementation, geographic information systems (GIS) projects, and surface water and groundwater modeling. Rose holds a Master's Degree in Hydrology from the University of Arizona and is 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) certified. Rose is also an Iowa Certified Groundwater Professional (#2103).

Mr. Steve Prideaux is a Project Planner I with ten years of experience in Brownfields projects including Phase I Environmental Site Assessments, community outreach initiatives, and program administration activities. Steve holds a Master's Degree in Urban and Regional Planning from the University of Iowa and is a member of the American Institute of Certified Planners (AICP).

APPENDIX G

ADDITIONAL INFORMATION

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Site Inspection Worksheet
For Phase I: Environmental Site Assessments

(If more space is required for descriptions attach notes page and refer to by number and general area of interest – i.e. 2.5.2.2 USTs)

1 Site Location		
1.1	Site Address	N/A
1.2	Crossing & Bordering Streets	N/A
1.3	Railways	N/A
1.4	Other Boundary Structures	Undeveloped land (cow pastures/farm fields) to E, marina and sewage lagoon to N, and cabins to S of eastern portion of subject property Undeveloped land to N, NW, W, SW, and S on western portion of subject property
2 Site Description		
2.1 Physical Description of Site		
2.1.1	Estimated % of site covered by pavement & structures	>1%
2.1.2	Site layout & structure location	No structures on western side of subject property Eastern side of subject property all associated with Snake Creek Recreation Area (S of SD-44: main visitor center, guard shack, and one-bedroom rental cabins and bathrooms; N of SD-44 (chapel, residence for state park super, 3 maintenance bldgs.)
2.1.3	Topography & Slopes	
	2.1.3.1 General Site Topography	Very steep- generally to S/SE on western side of subject property and S/SW on eastern side of subject property

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Site Inspection Worksheet
For Phase I: Environmental Site Assessments

(If more space is required for descriptions attach notes page and refer to by number and general area of interest – i.e. 2.5.2.2 USTs)

	2.1.3.2 Degree of Slope	Steep
2.1.4	Surface Water	
	2.1.4.1 Ponds, Streams, Wetlands	Small ponds on eastern part of subject property to S of SD-44
	2.1.4.2 Drainage Ditches	Along SD-44 throughout subject property
2.1.5	Ditches & Storm Water Collection Systems	Drainage ditches emptying into Missouri River
2.1.6	Roads on Property	All roads on subject property are asphalt
2.2 Current Use		
2.2.1	Activities	Western portion of subject property includes a boat launch while the eastern portion includes Snake Creek Recreation Area (welcome office, marina, one-bedroom properties, sewage lagoon, and maintenance sheds)
2.2.2	Unoccupied Spaces	N/A

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Site Inspection Worksheet
For Phase I: Environmental Site Assessments

(If more space is required for descriptions attach notes page and refer to by number and general area of interest – i.e. 2.5.2.2 USTs)

2.3 Structures		
2.3.1	Number of Structures (List with type, approximate age, and construction)	All structures on eastern side of subject property (3 maintenance sheds, welcome center, guard shack, chapel, residence for state park director, and one-bedroom huts and bathrooms)
2.4 Utility Systems		
2.4.1	Potable Water Supply (public or private and name of entity)	Rural water (former well but now severed)
2.4.2	Sewage Disposal System(public or private and name of entity)	Leach fields for each building north and south of road on eastern side (no sanitary sewer on entire subject property) Primary and secondary sewage lagoon associated with the marina located on and adjacent to the subject property on the eastern side (N of SD-44)
2.4.3	Facility Source(s) of Energy for Heating and Cooling	Liquid propane
2.4.4	Non-Facility Utilities Crossing Property	Rural water line and power lines south of SD-44 on eastern side of subject property
2.5 Exterior and Interior Descriptions (note if interior or exterior and location and locate significant findings on sketch of property)		
2.5.1	Hazardous Substances and Petroleum Products (include inventory sheet for each location with type of container, size, approximate fullness, and condition)	Commercially-available products in small quantities (properly labeled, no staining) all stored within a flammables cabinet at the main maintenance building at Snake Creek Recreation Area

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Site Inspection Worksheet
For Phase I: Environmental Site Assessments

(If more space is required for descriptions attach notes page and refer to by number and general area of interest – i.e. 2.5.2.2 USTs)

2.5 Exterior and Interior Descriptions (note if interior or exterior and location and locate significant findings on sketch of property) – continued from previous page		
2.5.2	Storage Tanks	See below
	2.5.2.1 Aboveground (ASTs)	3 ASTs associated with marina fueling station 1 1,000 gallon gasoline 2 500 gallon gasoline 2 ASTs on exterior of cold storage building 1 1,000 gasoline 1 500 off-road diesel
	2.5.2.2 Underground (USTs) – identify evidence such as vent pipes, fill pipes, access ways, etc.	None remaining- all previously pulled
2.5.3	Odors	N/A
2.5.4	Pools of Liquids	N/A
	2.5.5.1 Surface Water	Two sewage lagoons associated with the marina located on and adjacent to the eastern side of subject property and (N of SD-44)
	2.5.5.2 Pools or Sumps Containing Liquids Likely to be Hazardous Substances or Petroleum Products	Primary maintenance building has an oil-water separator

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Site Inspection Worksheet
For Phase I: Environmental Site Assessments

(If more space is required for descriptions attach notes page and refer to by number and general area of interest – i.e. 2.5.2.2 USTs)

	2.5.5.3 Drains and Sumps	Drain in main maintenance building oil-water separator pumped annually
2.5.5	Drums (note if leaking, note contents)	N/A
2.5.6	Unidentified Substance Containers	N/A
2.5.7	PCBs (Electrical or Hydraulic Equipment Likely to Contain PCBs such as transformers, etc.)	No overhead electrical equipment All pad-mounted transformers replaced in previous 5-10 years (owner provided information)
2.5.8	Stains or Corrosion	Oil staining surrounding the oil recycling center in the cold storage maintenance building (de-minimis)
2.6 Exterior Observations		
2.6.1	Pits Ponds or Lagoons (especially if in connection with waste disposal or waste treatment)	Pit in main maintenance building One sewage lagoon located on the subject property and one immediately north (eastern side of the subject property)
2.6.2	Stained Soil or Pavement	N/A

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Site Inspection Worksheet
For Phase I: Environmental Site Assessments

(If more space is required for descriptions attach notes page and refer to by number and general area of interest – i.e. 2.5.2.2 USTs)

2.6.3	Stressed Vegetation	N/A (winter conditions)
2.6.4	Solid Waste (Include areas of fill of unknown origin, mounds, or depressions)	Staging area by settling ponds for various items prior to taking to dump (tree debris, air conditioners, park benches, etc.)
2.6.5	Waste Water – waste water or other liquid (including storm water) into drain, ditch, underground injection system, or stream on or adjacent to property	Leach fields
2.6.6	Wells (including dry wells, irrigation wells, injection wells, abandoned wells, and other wells)	N/A (drinking water well-severed connection)
2.6.7	Septic Systems (include septic systems or cesspools)	Leachfields for each individual building
2.6.8	Other Pertinent Observation	N/A
3 Sensitive Receptors in the Area of the Subject Site		
3.1	Bodies of Water, Wetlands, Marshes, Sloughs, Seeps, and Depressed Areas	Missouri River Snake River Pond located S of SD-44 on western side of subject property

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Site Inspection Worksheet
For Phase I: Environmental Site Assessments

(If more space is required for descriptions attach notes page and refer to by number and general area of interest – i.e. 2.5.2.2 USTs)

3.2	Wells, Cisterns, Ponds, and Other Sources of Water	Rural water
3.3	Residences	Park Superintendent (behind maintenance shed)
3.4	Schools, Playgrounds, or Child Care Facilities	N/A
3.5	Senior Citizen Centers, Homes, or Care Facilities	N/A
3.6	Other Potential Receptors	N/A
4 General Observations		
4.1	Soil Conditions	Normal- winter
4.2	Standing Water Conditions	N/A

Date: 11/8/17 Site Name/Project No.: SD-44 160025

Notes:

-Fiber glass tank pulled approximately 15 years ago about 30 feet south of main maintenance building at Snake Creek Recreation Center
-SD DENR inspects the park maintenance facilities regularly- no violations
-Walked site with District 6 Shop Maintenance Foreman

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Charles Mix County, South Dakota

Subject Property- East

November 6, 2017

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

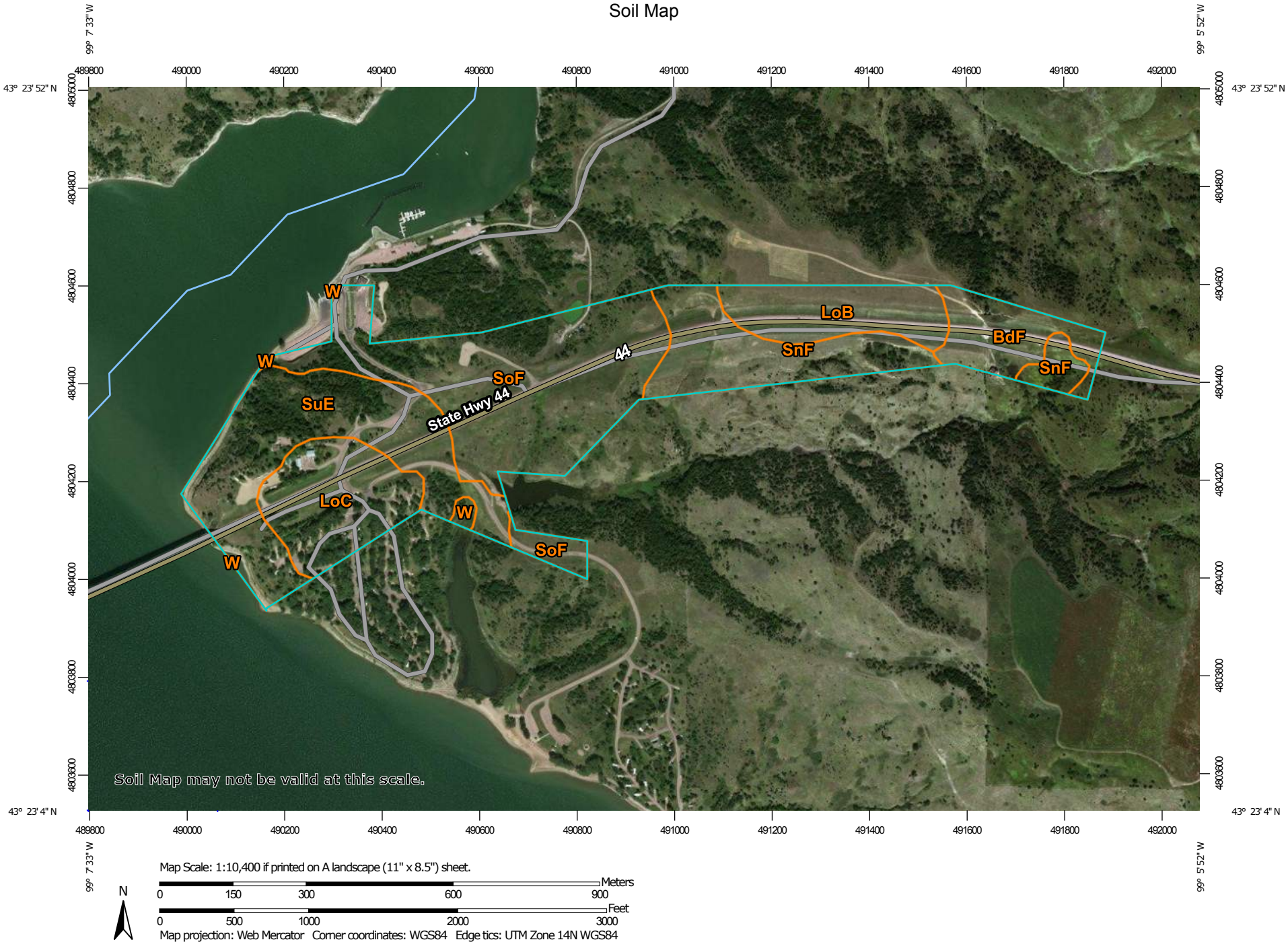
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Charles Mix County, South Dakota
Survey Area Data: Version 24, Oct 6, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 20, 2010—Sep 16, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BdF	Betts-Ethan loams, 15 to 40 percent slopes	9.5	7.3%
LoB	Lowry silt loam, 2 to 6 percent slopes	12.1	9.3%
LoC	Lowry silt loam, 6 to 9 percent slopes	15.7	12.1%
SnF	Sansarc clay, 6 to 35 percent slopes	18.7	14.4%
SoF	Sansarc-Boyd complex, 15 to 40 percent slopes	42.5	32.6%
SuE	Sully silt loam, 9 to 25 percent slopes	30.8	23.7%
W	Water	0.8	0.6%
Totals for Area of Interest		**130.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor

components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Charles Mix County, South Dakota

BdF—Betts-Ethan loams, 15 to 40 percent slopes

Map Unit Setting

National map unit symbol: 2wkq9
Elevation: 1,120 to 2,230 feet
Mean annual precipitation: 16 to 28 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 120 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Betts and similar soils: 55 percent
Ethan and similar soils: 35 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Betts

Setting

Landform: Ground moraines
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fine-loamy till

Typical profile

A - 0 to 3 inches: loam
Bk - 3 to 31 inches: clay loam
C - 31 to 79 inches: clay loam

Properties and qualities

Slope: 15 to 40 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: Thin Upland (R055CY012SD)
Other vegetative classification: Not suited (G055CY000SD)
Hydric soil rating: No

Description of Ethan

Setting

Landform: Ground moraines
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 7 inches: loam
Bk - 7 to 33 inches: clay loam
C - 33 to 79 inches: clay loam

Properties and qualities

Slope: 15 to 40 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: Thin Upland (R055CY012SD)
Other vegetative classification: Limy Upland (G055CY400SD)
Hydric soil rating: No

Minor Components

Clarno

Percent of map unit: 4 percent
Landform: Ground moraines
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Loamy (R055CY010SD)
Other vegetative classification: Loam (G055CY100SD)
Hydric soil rating: No

Davis

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (three-dimensional): Base slope, talf
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: Loamy (R055CY010SD)
Other vegetative classification: Loam (G055CY100SD)

Hydric soil rating: No

Talmo

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Very Shallow (R055CY016SD)
Other vegetative classification: Not suited (G055CY000SD)
Hydric soil rating: No

Betts, very stony

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Thin Upland (R055CY012SD)
Other vegetative classification: Not suited (G055CY000SD)
Hydric soil rating: No

Ethan, very stony

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Thin Upland (R055CY012SD)
Other vegetative classification: Not suited (G055CY000SD)
Hydric soil rating: No

LoB—Lowry silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: cxg5
Elevation: 1,310 to 1,970 feet
Mean annual precipitation: 18 to 25 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 155 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Lowry and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lowry

Setting

Landform: Plains
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 15 inches: silt loam
H3 - 15 to 60 inches: silt loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 11.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: Loamy (R055CY010SD)
Other vegetative classification: Loam (G055CY100SD)
Hydric soil rating: No

Minor Components

Agar

Percent of map unit: 7 percent
Landform: Swales
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Loamy (R055CY010SD)
Other vegetative classification: Loam (G055CY100SD)
Hydric soil rating: No

Mobridge

Percent of map unit: 7 percent
Landform: Swales
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Loamy Overflow (R055CY020SD)
Other vegetative classification: Overflow (G055CY500SD)

Hydric soil rating: No

Tetonka

Percent of map unit: 1 percent
Landform: Potholes
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: Wet Meadow (R055CY004SD)
Other vegetative classification: Wet (G055CY900SD)
Hydric soil rating: Yes

LoC—Lowry silt loam, 6 to 9 percent slopes

Map Unit Setting

National map unit symbol: cxg6
Elevation: 1,310 to 1,970 feet
Mean annual precipitation: 18 to 25 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 155 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lowry and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lowry

Setting

Landform: Plains
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 15 inches: silt loam
H3 - 15 to 60 inches: silt loam

Properties and qualities

Slope: 6 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 11.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: Loamy (R055CY010SD)
Other vegetative classification: Loam (G055CY100SD)
Hydric soil rating: No

Minor Components

Agar

Percent of map unit: 8 percent
Landform: Swales
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Loamy (R055CY010SD)
Other vegetative classification: Loam (G055CY100SD)
Hydric soil rating: No

Mobridge

Percent of map unit: 7 percent
Landform: Swales
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Loamy Overflow (R055CY020SD)
Other vegetative classification: Overflow (G055CY500SD)
Hydric soil rating: No

SnF—Sansarc clay, 6 to 35 percent slopes

Map Unit Setting

National map unit symbol: 2v675
Elevation: 1,260 to 2,490 feet
Mean annual precipitation: 16 to 21 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 100 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Sansarc and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sansarc

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Residuum weathered from shale

Typical profile

A - 0 to 4 inches: clay
AC - 4 to 10 inches: parachannery clay
C - 10 to 14 inches: very parachannery clay
Cr - 14 to 34 inches: bedrock

Properties and qualities

Slope: 6 to 35 percent
Depth to restrictive feature: 11 to 20 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 6 percent
Gypsum, maximum in profile: 2 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: Shallow Clay (R063AY017SD)
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Minor Components

Opal

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: Clayey (R063AY011SD)
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Promise

Percent of map unit: 5 percent

Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: Clayey (R063AY011SD)
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Bullcreek

Percent of map unit: 3 percent
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Dense Clay (R063AY018SD)
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Badland

Percent of map unit: 2 percent
Landform: Hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

SoF—Sansarc-Boyd complex, 15 to 40 percent slopes

Map Unit Setting

National map unit symbol: cxgv
Elevation: 1,310 to 1,640 feet
Mean annual precipitation: 17 to 25 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Sansarc and similar soils: 50 percent
Boyd and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sansarc

Setting

Landform: Hills

Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from shale

Typical profile

H1 - 0 to 4 inches: clay
H2 - 4 to 13 inches: clay
Cr - 13 to 60 inches: weathered bedrock

Properties and qualities

Slope: 25 to 40 percent
Depth to restrictive feature: 4 to 20 inches to paralithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 10 percent
Gypsum, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: Shallow Clay (R063BY017SD)
Other vegetative classification: Not suited (G063BY000SD)
Hydric soil rating: No

Description of Boyd

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey residuum weathered from shale

Typical profile

H1 - 0 to 5 inches: silty clay
H2 - 5 to 23 inches: clay
H3 - 23 to 31 inches: clay
Cr - 31 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Calcium carbonate, maximum in profile: 10 percent
Gypsum, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: Clayey (R063BY011SD)
Other vegetative classification: Not suited (G063BY000SD)
Hydric soil rating: No

Minor Components

Betts

Percent of map unit: 7 percent
Landform: Moraines
Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Thin Upland (R063BY012SD)
Other vegetative classification: Not suited (G063BY000SD)
Hydric soil rating: No

Gavins

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Thin Upland (R063BY012SD)
Other vegetative classification: Not suited (G063BY000SD)
Hydric soil rating: No

Sully

Percent of map unit: 6 percent
Landform: Plains
Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Thin Upland (R063BY012SD)
Other vegetative classification: Limy Upland (G063BY400SD)
Hydric soil rating: No

SuE—Sully silt loam, 9 to 25 percent slopes

Map Unit Setting

National map unit symbol: cxgx
Elevation: 1,310 to 1,970 feet
Mean annual precipitation: 18 to 25 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Sully and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sully

Setting

Landform: Plains
Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loess

Typical profile

H1 - 0 to 4 inches: silt loam
H2 - 4 to 60 inches: silt loam

Properties and qualities

Slope: 9 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 20 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: Thin Upland (R055CY012SD)
Other vegetative classification: Limy Upland (G055CY400SD)
Hydric soil rating: No

Minor Components

Betts

Percent of map unit: 7 percent
Landform: Moraines
Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Thin Upland (R055CY012SD)
Other vegetative classification: Limy Upland (G055CY400SD)
Hydric soil rating: No

Sansarc

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Shallow Clay (R055CY017SD)
Other vegetative classification: Not suited (G055CY000SD)
Hydric soil rating: No

Talmo

Percent of map unit: 6 percent
Landform: Outwash terraces on moraines
Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Very Shallow (R055CY016SD)
Other vegetative classification: Not suited (G055CY000SD)
Hydric soil rating: No

W—Water

Map Unit Setting

National map unit symbol: cxh5
Elevation: 1,310 to 1,970 feet
Mean annual precipitation: 18 to 25 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified

Ecological site: Non-site (R055CY999SD)
Hydric soil rating: Unranked

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Gregory County, South Dakota

Subject Property- West

November 6, 2017

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

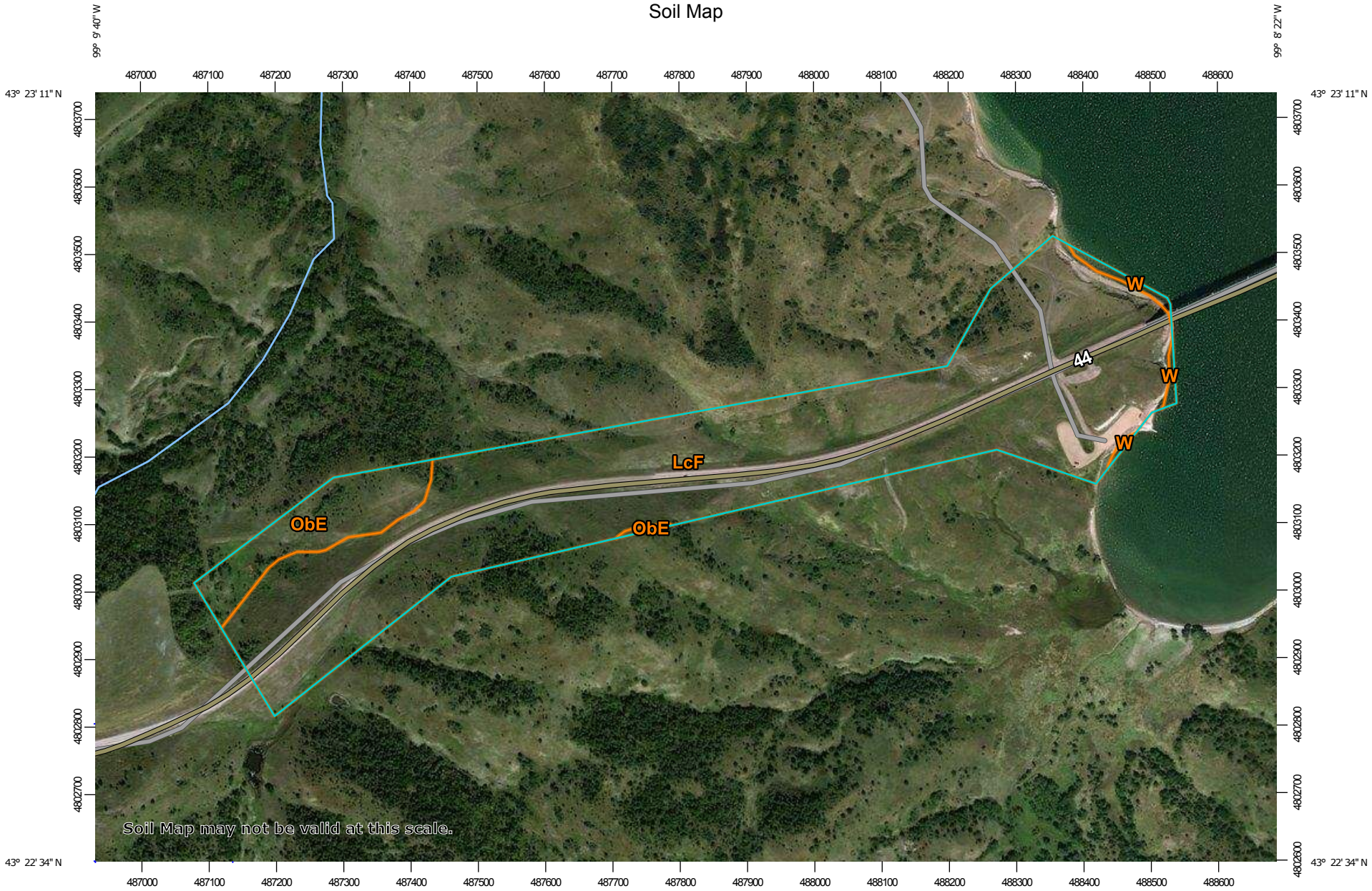
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:8,030 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Gregory County, South Dakota
Survey Area Data: Version 19, Oct 6, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 29, 2012—Feb 6, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LcF	Labu-Sansarc silty clays, 9 to 35 percent slopes	63.8	89.2%
ObE	Okaton-Lakoma silty clays, 15 to 40 percent slopes	6.9	9.6%
W	Water	0.8	1.2%
Totals for Area of Interest		**71.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Gregory County, South Dakota

LcF—Labu-Sansarc silty clays, 9 to 35 percent slopes

Map Unit Setting

National map unit symbol: 2wfq7
Elevation: 1,200 to 2,310 feet
Mean annual precipitation: 19 to 28 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 100 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Labu and similar soils: 55 percent
Sansarc and similar soils: 25 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Labu

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from shale

Typical profile

A - 0 to 5 inches: silty clay
Bw - 5 to 25 inches: silty clay
C - 25 to 33 inches: silty clay
Cr - 33 to 43 inches: bedrock

Properties and qualities

Slope: 9 to 35 percent
Depth to restrictive feature: 30 to 38 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: Clayey (R063BY011SD)
Other vegetative classification: Clayey Subsoil (G063BY210SD)

Hydric soil rating: No

Description of Sansarc

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Residuum weathered from shale

Typical profile

A - 0 to 4 inches: silty clay
AC - 4 to 10 inches: parachannery clay
C - 10 to 14 inches: very parachannery clay
Cr - 14 to 34 inches: bedrock

Properties and qualities

Slope: 9 to 35 percent
Depth to restrictive feature: 11 to 20 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 6 percent
Gypsum, maximum in profile: 2 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: Shallow Clay (R063BY017SD)
Other vegetative classification: Not suited (G063BY000SD)
Hydric soil rating: No

Minor Components

Paka

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Loamy (R063BY010SD)
Other vegetative classification: Loam (G063BY100SD)
Hydric soil rating: No

Verdel

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: Clayey (R063BY011SD)
Other vegetative classification: Clayey Subsoil (G063BY210SD)
Hydric soil rating: No

Wewela

Percent of map unit: 3 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Loamy (R063BY010SD)
Other vegetative classification: Loam (G063BY100SD)
Hydric soil rating: No

Badland

Percent of map unit: 3 percent
Landform: Hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

ObE—Okaton-Lakoma silty clays, 15 to 40 percent slopes

Map Unit Setting

National map unit symbol: 2tj7s
Elevation: 1,230 to 2,620 feet
Mean annual precipitation: 16 to 21 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 100 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Okaton and similar soils: 45 percent
Lakoma and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Okaton

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from shale

Typical profile

A - 0 to 8 inches: silty clay
C - 8 to 14 inches: silty clay
Cr - 14 to 24 inches: bedrock

Properties and qualities

Slope: 15 to 40 percent
Depth to restrictive feature: 10 to 18 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Gypsum, maximum in profile: 2 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: Shallow Clay (R063AY017SD)
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Description of Lakoma

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from shale

Typical profile

Ap - 0 to 5 inches: silty clay
Bw - 5 to 11 inches: silty clay
Bk - 11 to 22 inches: silty clay
BCk - 22 to 30 inches: silty clay
Cr - 30 to 40 inches: bedrock

Properties and qualities

Slope: 15 to 40 percent
Depth to restrictive feature: 25 to 33 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Gypsum, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: Thin Upland (R063AY012SD)
Other vegetative classification: Clayey Subsoil (G063BY210SD)
Hydric soil rating: No

Minor Components

Promise

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope, backslope
Landform position (three-dimensional): Side slope, base slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Clayey (R063AY011SD)
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Boro

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: Clayey (R063AY011SD)
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Bullcreek

Percent of map unit: 3 percent
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave

Ecological site: Dense Clay (R063AY018SD)
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Schamber

Percent of map unit: 2 percent
Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: Very Shallow (R063AY016SD)
Other vegetative classification: Not suited (G063BY000SD)
Hydric soil rating: No

W—Water

Map Unit Setting

National map unit symbol: cxqg
Elevation: 1,310 to 1,640 feet
Mean annual precipitation: 17 to 25 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified
Ecological site: Non-site (R063BY999SD)
Hydric soil rating: Unranked

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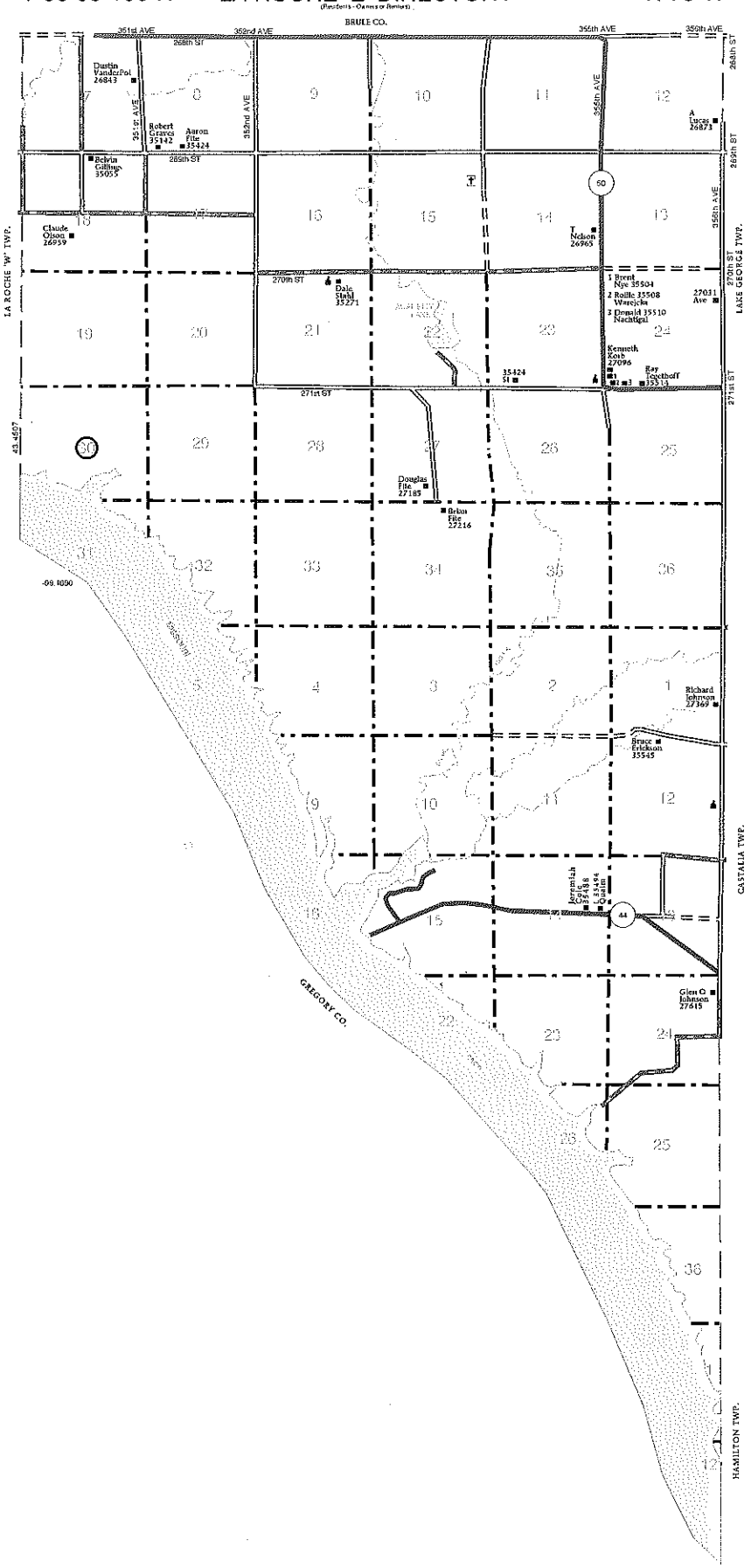
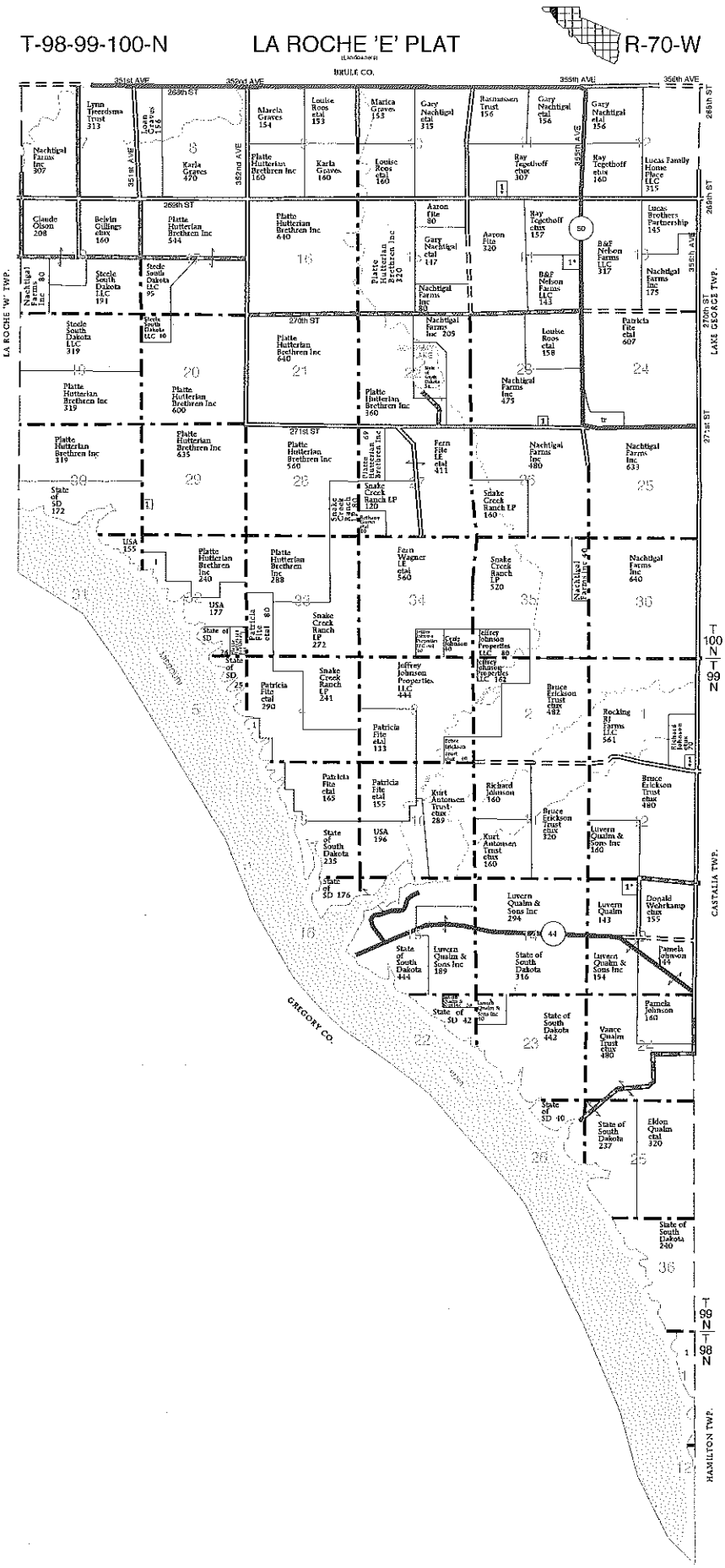
T-98-99-100-N LA ROCHE 'E' DIRECTORY R-70-W



T-98-99-100-N LA ROCHE 'E' PLAT R-70-W



LA ROCHE 'E' TOWNSHIP

SECTION 1
1. VanDonge, Eric etux 9

SECTION 1S
1. State of South Dakota 27

SECTION 4
1. State of South Dakota 19

SECTION 11N
1. Fite, Aaron etux 9

SECTION 13S
1. Qualm, Lee etux 12

SECTION 14N
1. Nelson, Tracy etux 15

SECTION 18
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SECTION 23N
1. Barber, Anthony 5

SECTION 29N
1. State of South Dakota 5

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1. State of South Dakota 23

SD SPILL REPORT FORM **DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES**

State Case No _____ 1. Case No 96.151

2 Reported (mm/dd/yr) 5-30-96 | 3 Time 11:30 am | Recorded By Kristi Honeywell

4 ☐ Through NRC | 5 NRC Case No

A. REPORTER

6 Reported By Kristi Honeywell

7 Organization Name SD DENR

8 Organization ☐ 9 discharger ☐ 10 public ☒ 11 state ☐ 12 local ☐ 13 federal

14 Address

15 City | 16 County | 17 State

18 Zip | 19 Phone ( )

B. DISCHARGER (Responsible Party)

20 ☐ As Above on A if 9 applies | 21 Name Game, Fish, & Parks (Contact = Dennis Willian SD

22 Address 523 E Capital

23 City Pierre | 24 County Hughes | 25 State SD

26 Zip 57501 | 27 Phone ( )

C. INCIDENT LOCATION

28 ☐ As Above on B | 29 Street or Approx Location Snake Creek Recreation Area

Survey Description ___ Sec ___ T ___ R ___

30 City Platte | 31 County Charles Mix | 32 State SD

D. DATE

33 Spill Date (mm/dd/yr) 4-25-96 | 34 Spill Time

E. MATERIAL

Material Type (Code/Name)	☐ Hazardous substance ☐ oil ☐ other	35 Material ☐ Unknown	CAS/DOT No	CAS No	CHRIS Code	Quantity Spilled	Q. Spilled in water	Units (Circle 1)
36 gas		37	38	39	40			lb 41 bbl gal oth
42		43	44	45	46			lb 47 bbl gal oth
48		49	50	51	52			lb 53 bbl gal oth

F. SOURCE

Source of Spill ☐ 54 highway ☐ 55 air transport ☐ 56 railroad ☐ 57 vessel ☒ 58 fixed facility ☐ 59 pipeline ☐ 60 offshore | 61 Vehicle ID or Carrier No

62 Description

G. MED

Medium Affected ☐ 63 air ☒ 64 land ☐ 65 water ☐ 66 groundwater ☐ 67 within facility only

68 Waterways Affected | Waterbody Code

H. CAUSE

Reported Cause ☐ 69 transportation accident ☒ 70 equipment failure ☐ 71 operational error ☐ 72 natural phenomenon ☐ 73 dumping ☐ 74 unknown ☐ 75 other

76 Description leaking product lines

I. DAMAGES

Damages 77 no of injuries ___ | 78 no of deaths ___ | ☐ 79 property damage > $50,000

J. ACTIONS

80 ☐ Evacuation | 81 Response Action Taken excavation, tank removal

K. NOTIFIED

Cutter Has Notified ☐ 82 state police ☐ 83 discharger ☐ 84 USCG ☐ 85 other ☐ 86 unknown

Agency Name

L. COMMENTS

87 Comments during removal of tanks (UST's) contamination was encountered. Removed approximately 300 yds. ☐ Additional Information

M. REGIONAL DATA FIELDS

Responding Agency ☐ state ☐ local ☐ discharger ☐ federal ☐ EPA ☐ unknown

Agency Name

Agencies Notified by EPA

Internal Notifications

Referral Planned? | Comments

Kristi will write letter to them

Replace pkz

Closure
96.151

7-26-96

DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

July 26, 1996

Dennis Williamns
South Dakota Department of Game, Fish, and Parks
523 East Capitol
Pierre, SD 57501

Re: Closure of Department of Environment and Natural Resources File Number 96.151 pertaining to a release at Snake Creek Recreation Area

Dear Mr. Williams:

The Department of Environment and Natural Resources has conducted a review of the data collected from the underground storage tank removal and Tier 2 assessment. As a result of this review process, the Department has determined that work at this site can end, and that the file can be closed.

Based upon the information available, it appears that soil contaminant levels are above the Tier 1 corrective action level at depth in the tank excavation. Excavation removed approximately 300 yds^3 and ground water was not encountered. A Tier 2 assessment did not identify any completed exposure pathways at this site.

Therefore, the Department of Environment and Natural Resources will not require that you conduct any additional testing or remediation. However, you should be aware that if future problems arise as a result of the remaining contamination, that the South Dakota Department of Game, Fish, and Parks may be responsible for conducting additional assessment or remediation.

Should you have any questions or concerns about any issue in this letter, please don't hesitate to contact Kristi Honeywell of my staff. Thank you for your cooperation, and for the steps you took to ensure that the water resources of the state of South Dakota were protected.

Sincerely,

Bill Markley

Bill Markley, Administrator
Ground Water Quality Program
Division of Environmental Regulation
Phone: (605) 773-3296

cc: Bill Youngstrom, Charles Mix County Emergency Management
Dennis Rounds, Petroleum Release Compensation Fund

South Dakota Department of Environment and Natural Resources
Joe Foss Building, Pierre, South Dakota 57501

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6

PROJECT NAME: Snake Creek Rec. Area

SAMPLERS (Signature): Dennis W. Williams

STAT. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	BTEX, gro	REMARKS
	4-25	1:55		✓	1 - Snake Creek	1	✓	Please send report to:
	4-25			✓	level w/ tank bottom	1	✓	Kristi Honeywell
	4-25	~~1:55~~		✓	3 - 1' below tanks	1	✓	DENR
	4-25	6:00		✓	4	1	✓	523 E. Capitol - Pierre SD
	4-25	7:00		✓	5	1	✓	
								Bill + send report to:
								Dennis Williams
								Game Fish + Parks
								523 E Capitol -
								Pierre SD 57501

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis W. Williams	4/26 5:30 pm	Kristi Honeywell			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by (Signature)
Kristi Honeywell	4-26-96 11:30				
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
		Marcia Sprague	4-30-96 9:45		

Distribution: Original Accompanies Shipment, First Copy to Coordinator Field Files, Second Copy to Representative of Inspected Facility

Seal Samples: ☐ Accepted ☐ Declined _____ Signature

South Dakota Department of Environment and Natural Resources
Joe Foss Building, Pierre, South Dakota 57501

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Snake Creek Rec. Area

SAMPLERS (Signature)

STAT. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	BTEX, TPH
	4-30-96	14:40		✓	Beneath 560 gallon tank	1	✓

REMARKS

Send results & bill to:
Dennis Williams
GF&P
Joe Foss Bldg
523 E Capitol
Pierre SD 57501

Send results to:
Kristi Honeywell
DENR
523 E Capitol
Pierre SD 57501

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	5/1/96 10:00	Kristi Honeywell
Kristi Honeywell	5/1/96 10:15	
		Received for Laboratory by: (Signature) Marcia Sprague

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	5/2/96 10:35	[signature]
Date/Time: 5-2-96 10:00		

Remarks:

Sent Samples
☐ Accepted ☐ Declined _____
Signature

Distribution: Original Accompanies Shipment, First Copy to Coordinator Field Files, Second Copy to Representative of Inspected Facility

ENERGY LABORATORIES, INC.
P.O. BOX 2470 • RAPID CITY, SD 57709 • PHONE (605) 342-1225
610 FARNWOOD STREET • RAPID CITY, SD 57701 • FAX (605) 342-1397

Kristi Honeywell
SD DENR
523 E. Capitol
Pierre, SD 57501

Snake Creek Rec. Area

Sampled: 04-25-96

May 10, 1996
96-23071-75
Submitted: 04-30-96

Site	Depth	Lab No.	Methodology	Analysis	Results	Units	Analyzed
Soil Analysis							
1-Snake Creek		96-23071	EPA 8020	Benzene	2.5	µg/g ppm	DM:05-07-96
				Toluene	1.5		
				Ethylbenzene	17		
				Xylenes	66		
			California USGS	TPH as Gasoline	950	µg/g ppm	DM:05-07-96
Level w/ tank Bottom		96-23072	EPA 8020	Benzene	0.5	µg/g ppm	DM:05-07-96
				Toluene	<0.2		
				Ethylbenzene	<0.2*		
				Xylenes	0.8		
			California USGS	TPH as Gasoline	19	µg/g ppm	DM:05-07-96
3 - 1' below tanks		96-23073	EPA 8020	Benzene	0.7	µg/g ppm	DM:05-07-96
				Toluene	0.2		
				Ethylbenzene	0.2		
				Xylenes	0.2		
			California USGS	TPH as Gasoline	<10	µg/g ppm	DM:05-07-96
4		96-23074	EPA 8020	Benzene	<0.1	µg/g ppm	DM:05-07-96
				Toluene	<0.2		
				Ethylbenzene	<0.2		
				Xylenes	<0.2		
			California USGS	TPH as Gasoline	<10	µg/g ppm	DM:05-07-96
5		96-23075	EPA 8020	Benzene	0.5	µg/g ppm	DM:05-07-96
				Toluene	<0.2		
				Ethylbenzene	1.7		
				Xylenes	1.7		
			California USGS	TPH as Gasoline	170	µg/g ppm	DM:05-07-96

* Present but less than the practical quantitation limit.

Kurt R. Slentz
Laboratory Manager

MAY 1998
RECEIVED
DENR
Ground Water
Quality Program

ENERGY LABORATORIES, INC.
RAPID CITY, SD

TPH AS GASOLINE & MBTEX
PID SURROGATE RECOVERY

LAB NUMBER	PID SURROGATE RECOVERY	
	TRIFLUOROTOLUENE	4-BROMOFLUORO-BENZENE
96 23071	115	111
96 23072	101	101
96 23073	111	120
96 23074	102	100
96 23075	115	113

CERTIFIED KNOWN DATA

Compound	Known	Lot #	True Value	Conc.	% Recovery	TFT % Rec	BFB % Rec	QC Limits
GAS	ERA	40002	510 ug/L	392 ug/L	77	121	100	60-140%

ENERGY LABORATORIES, INC.
P.O. BOX 2470 • RAPID CITY, SD 57709 • PHONE (605) 342-1225
610 FARNWOOD STREET • RAPID CITY, SD 57701 • FAX (605) 342-1397

Kristi Honeywell
SD DENR
523 E. Capitol
Rapid City, SD 57501

Snake Creek Rec. Area

Sampled: 04-30-96

May 10, 1996
96-23123
Submitted: 05-02-96

Site	Depth	Lab No	Methodology	Analysis	Results	Units	Analyzed
Soil Analysis							
Beneath 560 Gallon Tank		96-23123	EPA 8020	Benzene	<0.2	µg/g ppm	DM 05-09-96
				Toluene	<0.2		
				Ethylbenzene	<0.2		
				Xylenes	<0.2		
			California USGS	TPH as Gasoline	<10	µg/g ppm	DM 05-09-96

Kurt R. Slentz
Laboratory Manager

MAY 1996
RECEIVED
DENR
Ground Water
Quality Program

File Copy

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

May 28, 1996

Raymond Roggow
Gregory County Highway Department
P O Box 425
Burke, SD 57523

Re: Pretreatment contaminant levels at Snake Creek Recreation Area, Platte, South Dakota

Dear Mr. Roggow:

Approximately 300 yds^3 of gasoline contaminated soil was removed from the Snake Creek Recreation Area on April 25, 1996. The soil was taken to the Gregory County landfarm for treatment. Five soil samples were taken from the bottom of the excavation to document remaining contaminant levels. The contaminant level of one of these samples was 950 ppm TPH (total petroleum hydrocarbons). Therefore, since no presite assessment was performed to verify that petroleum contamination was present before excavation, this sample will be used to verify contamination at this site.

I am enclosing a copy of the laboratory results for your records.

As discussed in our phone conversation, I am also enclosing a list of tank installers in the state. Thank you for your cooperation in this matter. If you have any questions, please feel free to contact this office.

Sincerely,

Kristi Honeywell

Kristi Honeywell
Ground Water Quality Program
Phone: (605) 773-3296

cc: Val Keller, DENR

enclosure: Tank Installers List
Laboratory Results

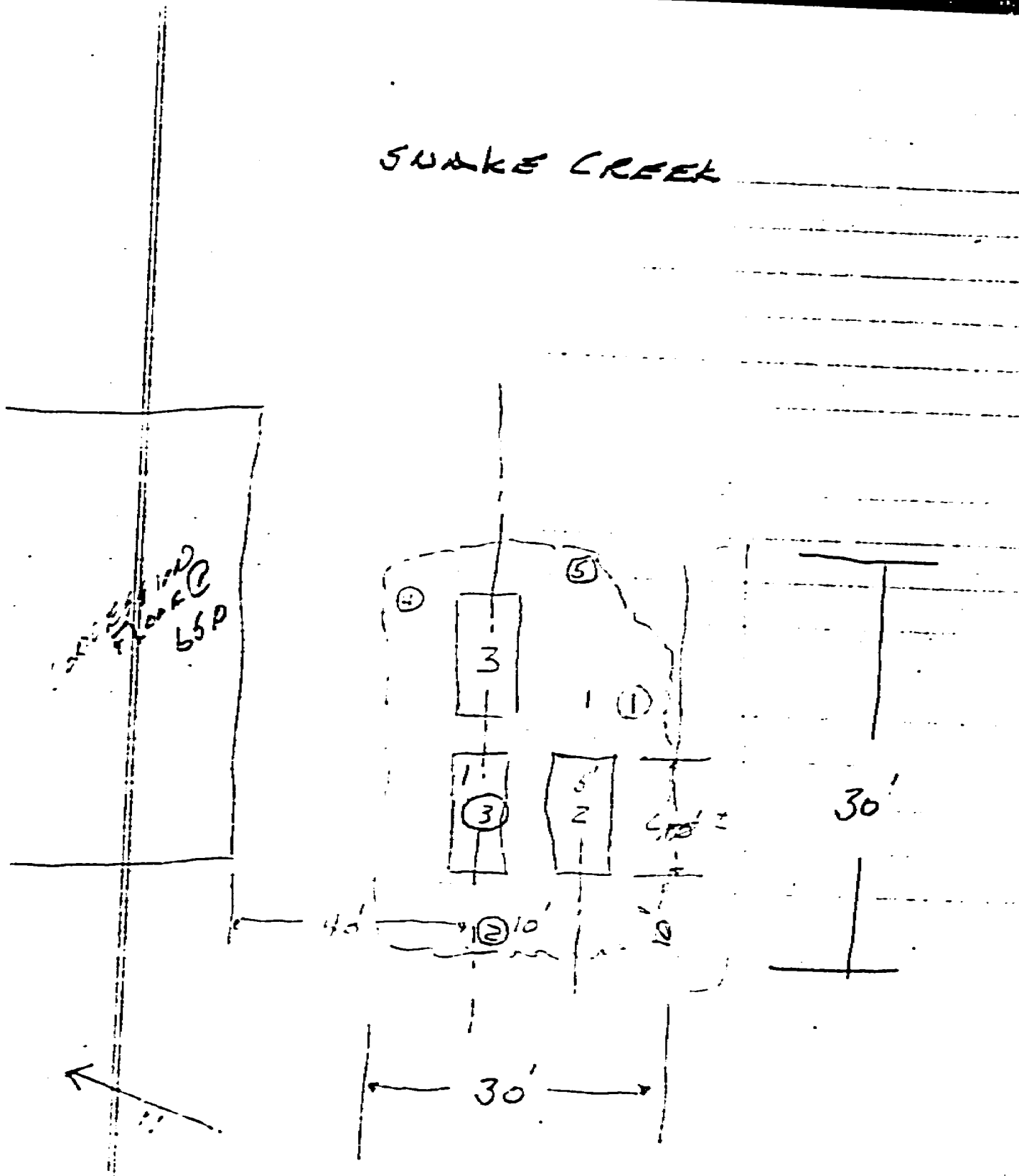
ENERGY LABORATORIES, INC.
RAPID CITY, SD

TPH AS GASOLINE & MBTEX
PID SURROGATE RECOVERY

LAB NUMBER	PID SURROGATE RECOVERY	
	TRIFLUOROTOLUENE	4-BROMOFLUORO-BENZENE
96 23123	103	102

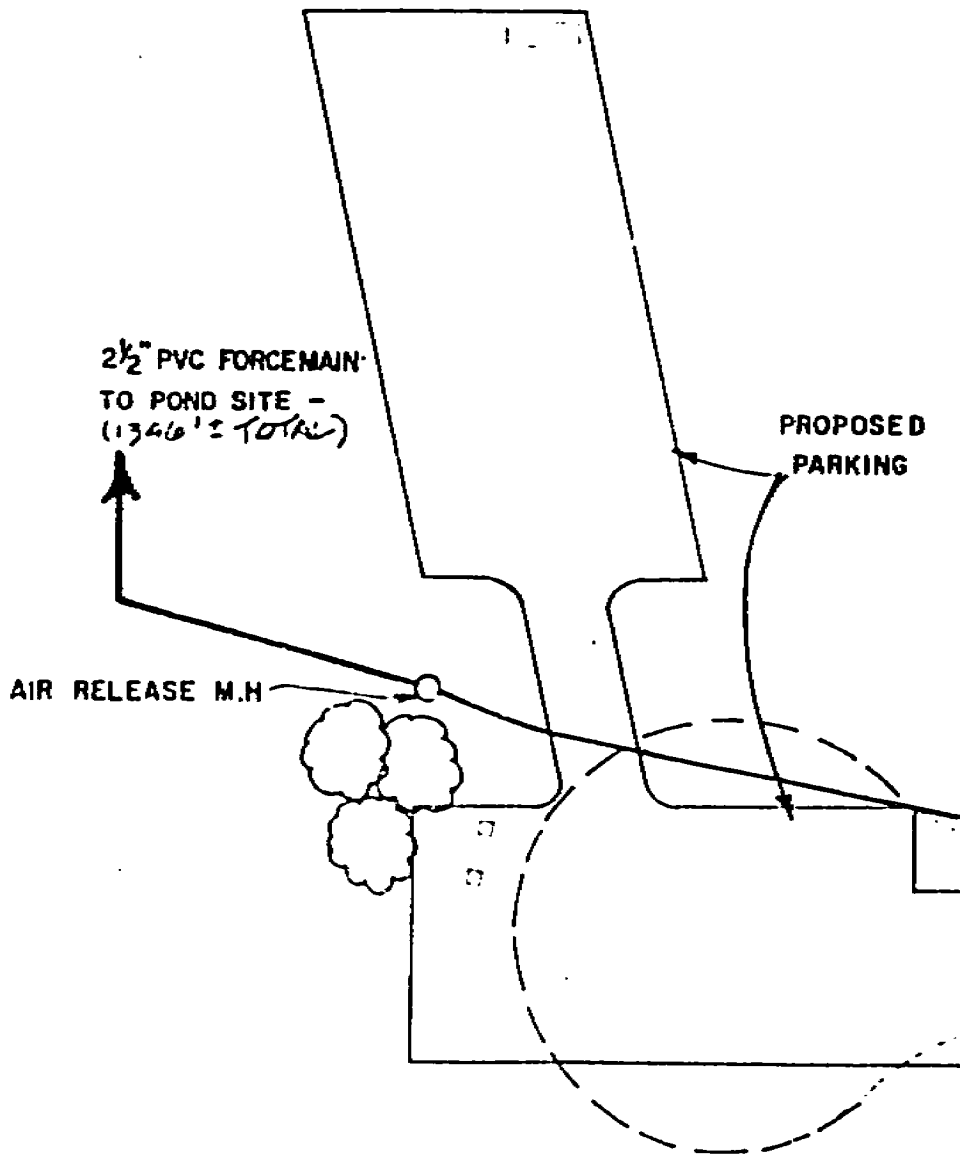
CERTIFIED KNOWN DATA

Compound	Known	Lot #	True Value	Conc.	% Recovery	TFT % Rec	BFB % Rec	QC Limits
GAS	ERA	40002	510 ug/L	392 ug/L	77	121	100	60-140%

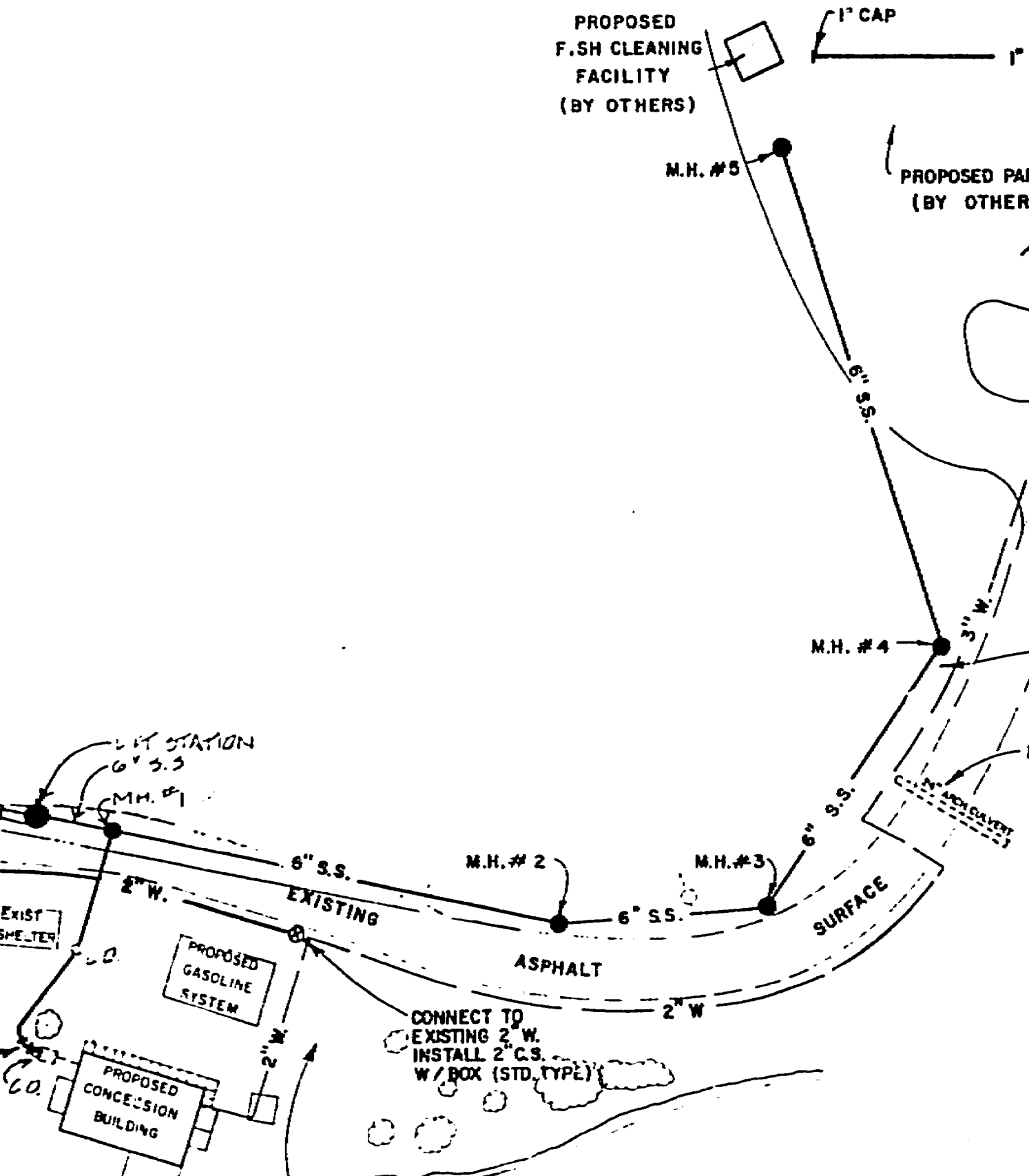


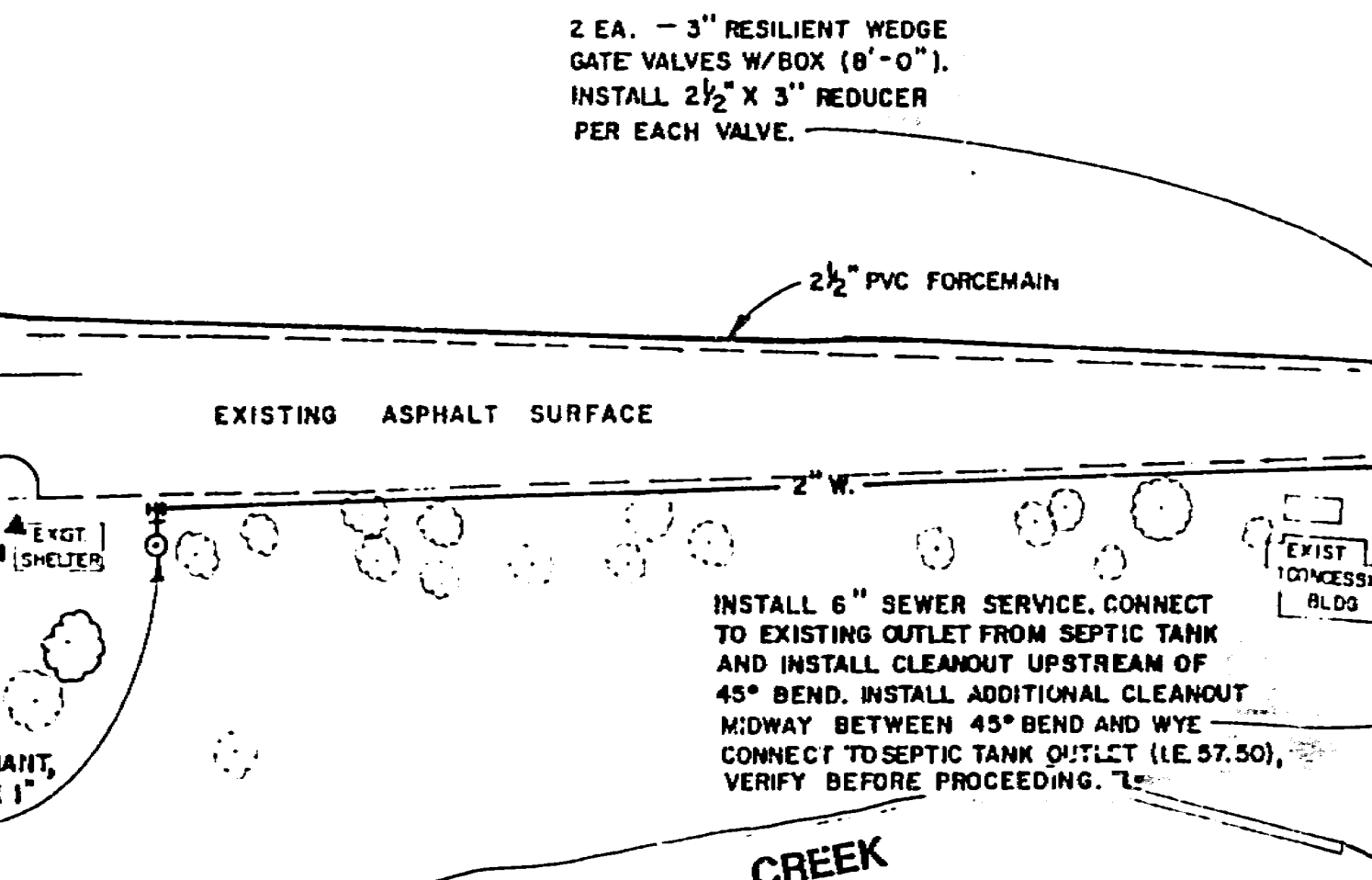
SAMPLES @ 6' DEEP. 1357 ELEVATION
LAKE LEVEL @ 1355

NOTE: GRADE FORCEMAIN TO MAINTAIN SLOPE BACK TO LIFT STATION FROM AIR RELEASE MANHOLE. KEEP CRESTS TO A MINIMUM AND INSTALL AIR RELEASE MANHOLES AT ALL CRESTS (2 ESTIMATED)



INSTALL H
2"TEE &
REDUCER


PROPOSED
F.SH CLEANING
FACILITY
(BY OTHERS)
1" CAP
1"
M.H. #5
PROPOSED PA
(BY OTHER
6" S.S.
3" W.
M.H. #4
LIFT STATION
6" S.S.
MH. #1
6" S.S.
M.H. # 2
M.H. #3
6" S.S.
2" W.
EXISTING
ASPHALT
SURFACE
2" W
EXIST
SHELTER
C.O.
PROPOSED
GASOLINE
SYSTEM
CONNECT TO
EXISTING 2" W.
INSTALL 2" C.S.
W/ BOX (STD. TYPE)
2" W
C.O.
PROPOSED
CONCESSION
BUILDING


2 EA. — 3" RESILIENT WEDGE GATE VALVES W/BOX (8'-0"). INSTALL 2½" X 3" REDUCER PER EACH VALVE.
2½" PVC FORCEMAIN
EXISTING ASPHALT SURFACE
2" W.
EXIST SHELTER
EXIST CONCESSI BLDG
INSTALL 6" SEWER SERVICE. CONNECT TO EXISTING OUTLET FROM SEPTIC TANK AND INSTALL CLEANOUT UPSTREAM OF 45° BEND. INSTALL ADDITIONAL CLEANOUT MIDWAY BETWEEN 45° BEND AND WYE CONNECT TO SEPTIC TANK OUTLET (LE 57.50), VERIFY BEFORE PROCEEDING.
CREEK

CONNECT TO EXISTING 3" WATERLINE. INSTALL 3" TEE W/ REPAIR SLEEVES. INSTALL 1" CURB STOP W/ BOX (STOP & WASTE DESIGN) AND 3" X 1" REDUCER.

NTAIN 10'
EARANCE (MIN)

EXISTING
ERT

Fed. Proj. No.

GENERAL NOTES:

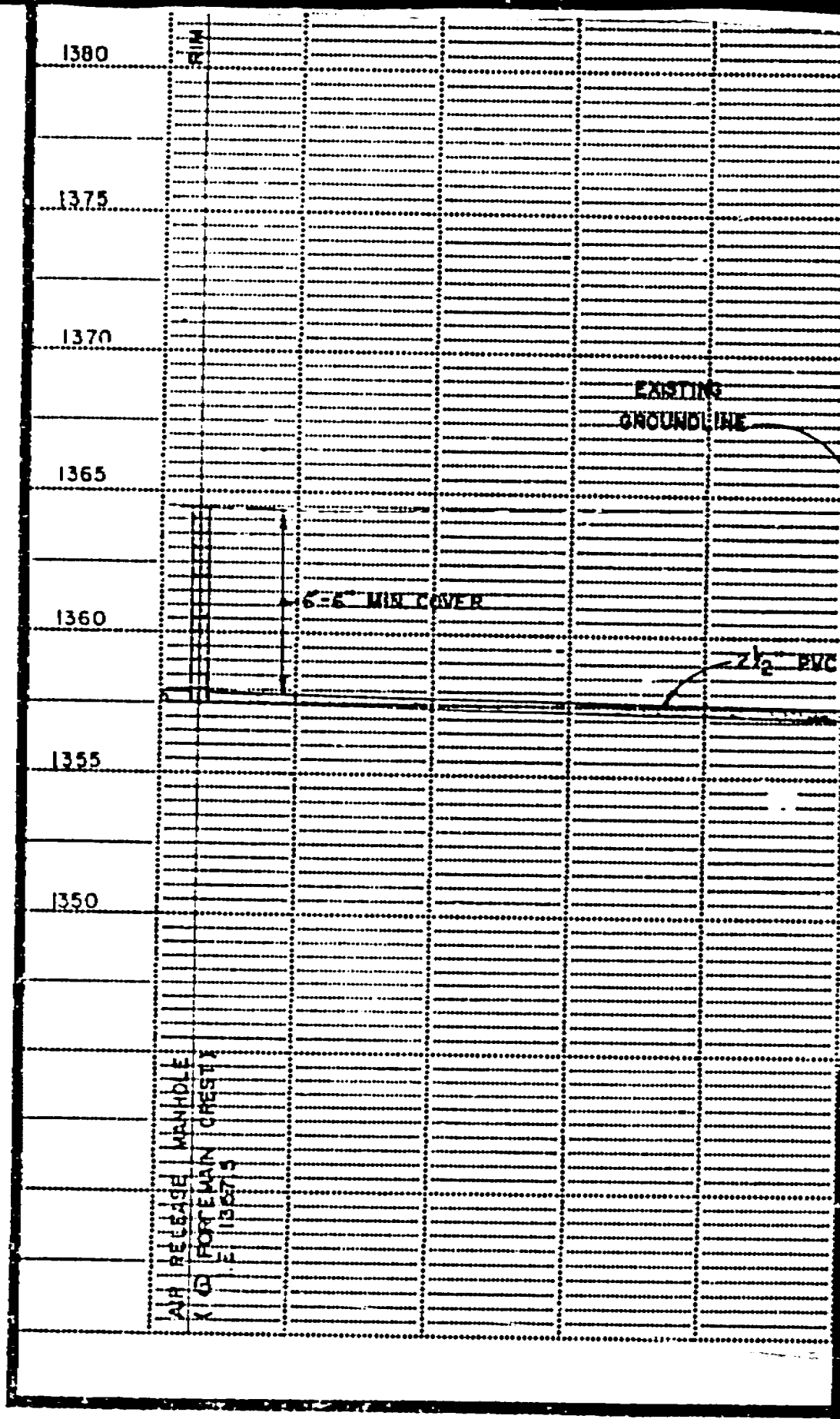
1. Underground electric, telephone, etc., exists in the area of this work. The Contractor shall have all such utilities located and protect from damage. Overhead power also exists in the concession area.

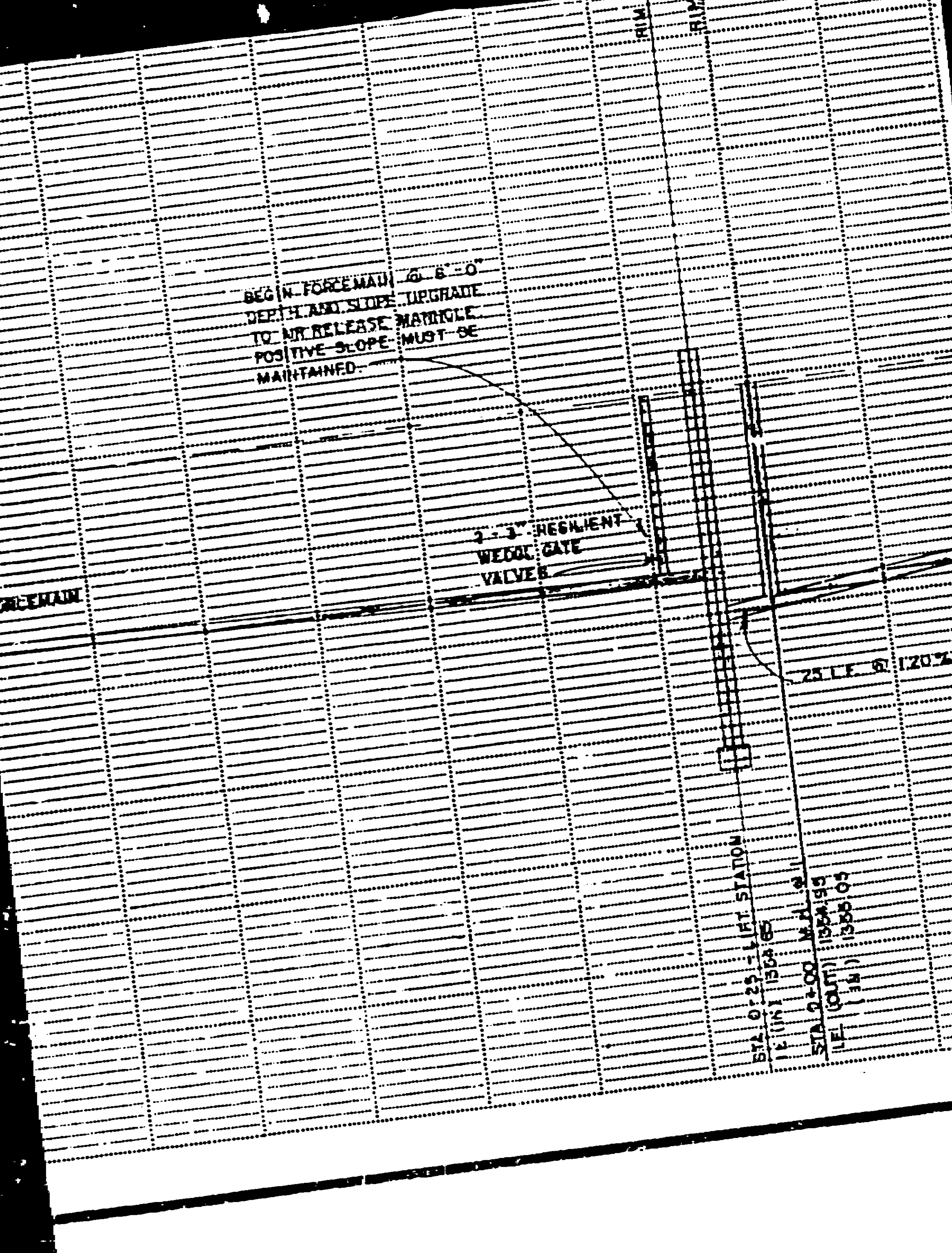
2. Work to be performed by others includes buildings, roads, electrical distribution and watermain installation. This Contractor shall work closely with other Contractors to minimize interference and maximize efficiency. Coordinate all work with one another.

3. Protect all trees, shrubs, buildings and other natural and fabricated items not specifically indicated to be disturbed. Replace all such items damaged or disturbed.

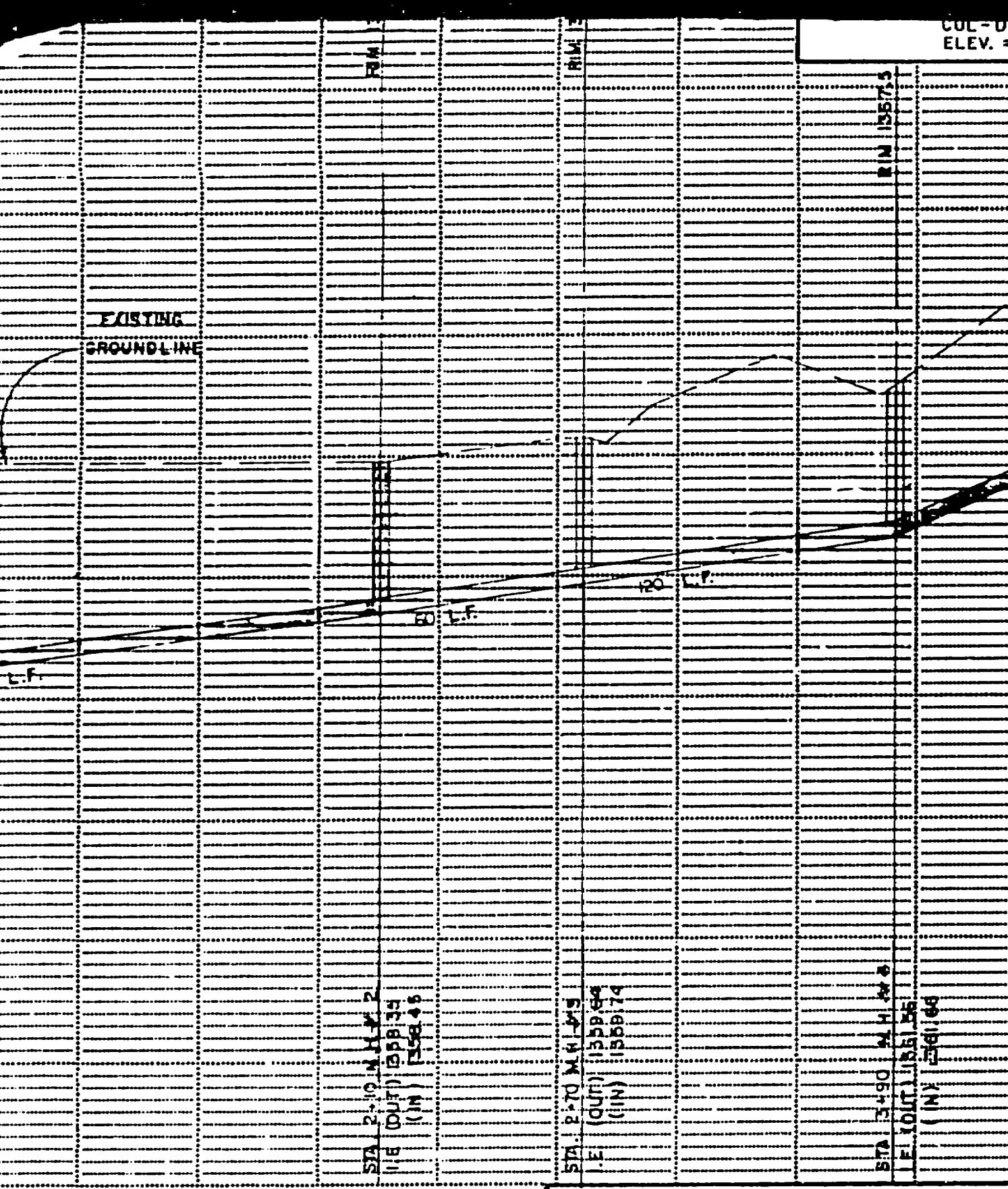
4. Compact all water and sewer trenches to 95% density.

SCALE: HORIZ. 1"=50'

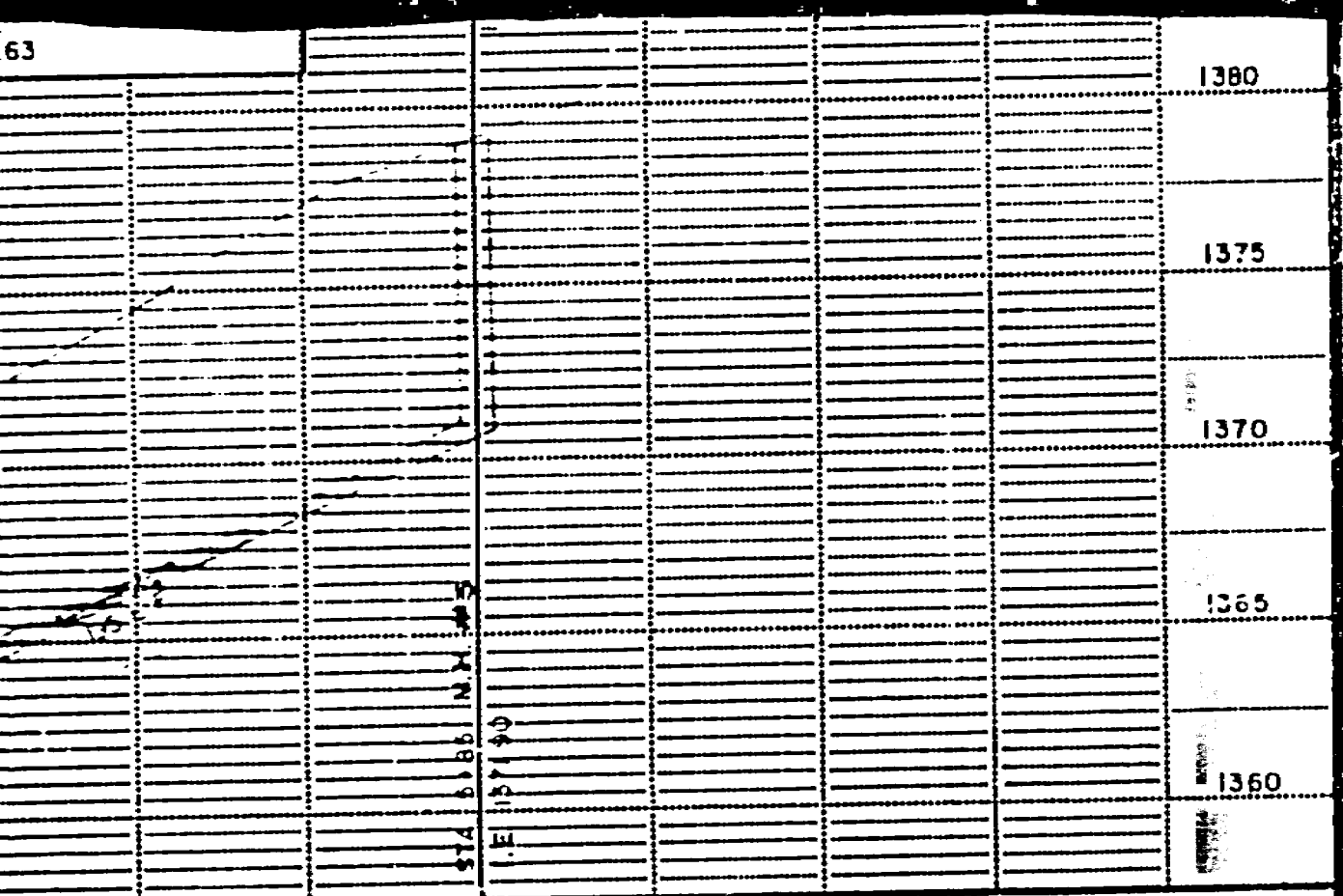

1380
1375
1370
1365
1360
1355
1350
RIM
EXISTING
GROUNDLINE
6'-6" MIN COVER
2½" PVC
AIR RELEASE MANHOLE
FOREMAIN CREST
EL 1357.5



BEGIN FORCEMAIN @ 6'-0" DEPTH AND SLOPE UPGRADE TO AIR RELEASE MANHOLE. POSITIVE SLOPE MUST BE MAINTAINED.
2 - 3" RESILIENT WEDGE GATE VALVES
RIM
STA. 0+25 - LIFT STATION
IE (IN) 1354.65
STA. 0+00 M.H. #1
IE (OUT) 1354.95
(IN) 1355.05



State Proi. No.



SEWER AND WATER LAYOUT

Naughton
Stockwell Engineers

1621 South Minnesota Avenue
Sioux Falls, South Dakota 57105
Telephone (605) 336-6632

Civil
Municipal
Environmental
Land Surveying

Project No. 8339
Drawn By KA
Checked By BWS
Date 2/14/84

Sheet No. 3 OF 5

RECORD DRAWING
9/17/84 RWS

ENERGY LABORATORIES, INC.
P.O. Box 2470 610 Farnwood Street phone 605-342-1225
Rapid City SD 57709 fax 605-342-1397

CHAIN OF CUSTODY RECORD

PLEASE PRINT OR TYPE ALL INFORMATION EXCEPT SIGNATURES

P.O. #

Project Name / Address: Snake Creek UST Removal, Platte, SD 57369

Contact Name & Phone: Dave Enke 337-3494

Sampler's signature: Dave Enke

Invoice to: SD GFP, Capital Development/Engineering, Pierre, SD 57501

Report to:

DATE	TIME	composite	grab sample	SAMPLE ID	number of containers	Sample Type A W S V U O (Air Water Soils Vegetation Urine Other)	Analysis Requested: FCLO PIR KS							Comments, Special Instructions, etc.
4/11														[illegible]

	Relinquished (signature)	Date	Time	Received by: (signature)
1.				
2.				
3.				
4.		4/14/96	10:05	Received for laboratory by (signature): Marcia Sprague

File Copy
96.151

DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

June 12, 1996

Dennis Williams
Department of Game, Fish, and Parks
Joe Foss Building
523 East Capitol
Pierre, SD 57501

Re: Excavation of Underground Storage Tanks, Snake Creek Recreation Area, Platte, South Dakota, DENR # 96.151

Dear Mr. Williams:

The South Dakota Department of Environment and Natural Resources (DENR) staff review of laboratory results collected from the underground storage tank excavation at Snake Creek Recreation Area has been completed. As a result of this review process, the following comments and concerns were noted.

It is the department's understanding that approximately 300 yds^3 of contaminated soils were removed during the tank excavation. Field observations indicated that the release may have occurred from leaking product lines. Additional excavation was performed to remove contamination in the lateral direction from the tanks. You told me that excavation was continued outward until the majority of contamination was removed. A small stringer of contamination may have remained but additional excavation was not appropriate.

The laboratory results from the bottom of the excavation indicate that the Tier I corrective action levels have been exceeded at the site. Therefore, the department will require that a Tier II assessment be performed to determine if completed exposure pathways are present. Possible transport mechanisms include ground water and underground utilities. Review of the concession building plans shows that a sewer line is present east of the building and approximately 50 feet from the excavation. Since local ground water flow direction is inferred to be north toward Snake Creek, impacts to the sewer should not be a concern at this site.

However, the plans show a water line directly south and west of the tank excavation. To ensure that the water line is not impacted, the department will require that a water sample be collected from the concessions tap. The water sample must be analyzed for (TPH) total petroleum hydrocarbons as gasoline and (BTEX) benzene, toluene, ethylbenzene, and xylene.

If laboratory analysis shows that the tap water is contaminated above state standards, the department will require additional remediation and may require additional assessment.

Thank you for your cooperation in protecting the ground water resources of South Dakota. Please contact this office within 30 days of receipt of this letter regarding your plans for this site. As always, if you have any questions or desire clarification of any item, please feel free to contact this office.

Sincerely,

Kristi Honeywell
Ground Water Quality Program
Phone: (605) 773-3296

Reviewed by:

Doug Miller
Certified Petroleum Release Remediator

cc: Dennis Rounds, Petroleum Release Compensation Fund

ENERGY LABORATORIES
ENERGY LABORATORIES, INC.
P.O. BOX 2470 • RAPID CITY, SD 57709 • PHONE (605) 342-1225
610 FARNWOOD STREET • RAPID CITY, SD 57701 • FAX (605) 342-1397

Dennis William, Supervisor of Engineering SD Game Fish and Parks 523 East Capitol Pierre, SD 57501	Snake Creek UST Removal Sampled: 06-17-96	July 2, 1996 96-24022 Submitted: 06-19-96

Site	Depth	Lab No	Methodology	Analysis	Results	Units	Analyzed

Water Analysis

RH 06 28 96

Snake Creek UST Removal 96 24022 8260 LONG

Talked to Kurt Stenlz 7-17-96 he looked at the chromatogram, no petroleum peaks present

	µg/L		PQL
1,1 Dichloroethene	<1.0		1.0
Methylene Chloride	<1.0		1.0
trans-1,2 Dichloroethene	<1.0		1.0
1,1 Dichloroethane	<1.0		1.0
2,2 Dichloropropane	<1.0		1.0
cis-1,2 Dichloroethene	<1.0		1.0
Bromochloromethane	<1.0		1.0
Chloroform	84	[1]	1.0
1,1,1-Trichloroethane	<1.0		1.0
Carbon Tetrachloride	<1.0		1.0
1,1 Dichloropropene	<1.0		1.0
Benzene	<1.0		1.0
1,2 Dichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
1,2 Dichloropropane	<1.0		1.0
Dibromomethane	<1.0		1.0
Bromodichloromethane	28	[1]	1.0
trans 1,3 Dichloropropene	<1.0		1.0
Toluene	<1.0		1.0
cis-1,3 Dichloropropene	<1.0		1.0
1,1,2 Trichloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
1,3 Dichloropropane	<1.0		1.0
Dibromochloromethane	4.7		1.0
1,2 Dibromoethane	<1.0		1.0
Chlorobenzene	<1.0		1.0
1,1,1,2 Tetrachloroethane	<1.0		1.0
Ethylbenzene	<1.0		1.0
M + P Xylenes	<1.0		1.0
O-Xylene	<1.0		1.0
Styrene	<1.0		1.0
Bromoform	<1.0		1.0
Isopropylbenzene	<1.0		1.0
Bromobenzene	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
n Propylbenzene	<1.0		1.0
2 Chlorotoluene	<1.0		1.0
4 Chlorotoluene	<1.0		1.0
1,3,5 Trimethylbenzene	<1.0		1.0
tert Butylbenzene	<1.0		1.0
1,2,4-Trimethylbenzene	<1.0		1.0
sec Butylbenzene	<1.0		1.0
1,3 Dichlorobenzene	<1.0		1.0
1,4 Dichlorobenzene	<1.0		1.0
p Isopropyltoluene	<1.0		1.0
1,2 Dichlorobenzene	<1.0		1.0
n Butylbenzene	<1.0		1.0
1,2 Dibromo-3 Chloropropane	<1.0		1.0
1,2,4-Trichlorobenzene	<1.0		1.0
Naphthalene	<1.0		1.0
Hexachlorobutadiene	<1.0		1.0

Site	Depth	Lab No.	Methodology	Analysis	Results	Units	Analyzed

RH 08 29 96

Snake Creek UST Removal 96-24022 8260 LOW

	ppb	PQL
1,2,3-Trichlorobenzene	<1.0	1.0
Acetone	<20	20
Methyl Ethyl Ketone	<10	10
Dichlorodifluoromethane	<1.0	1.0
Chloromethane	<1.0	1.0
Vinyl Chloride	<1.0	1.0
Bromomethane	<1.0	1.0
Chloroethane	<1.0	1.0
Trichlorofluoromethane	<1.0	1.0
2 Chloroethylvinylether	<1.0	1.0
Carbon Disulfide	<1.0	1.0
Vinyl Acetate	<1.0	1.0
Methyl Isobutyl Ketone	<10	10
2 Hexanone	<10	10
Acrolein	<10	10
Acrylonitrile	<10	10
Methyltertiary Butyl Ether	<1.0	1.0
Iodomethane	<1.0	1.0

Surrogate Recoveries		% Recovery
1,2 Dichloroethane d4	118	
Toluene d8	93	
4 Bromofluorobenzene	114	

(1) Value derived from a 10x dilution.

Kurt R. Stentz
Laboratory Manager

Site	Depth	Lab No.	Methodology	Analysis	Results	Units	Analyzed

QUALITY ASSURANCE DATA

Method Blank — **8260 LONG**

RH 06 29 94

	ug/L	PQL
1,1 Dichloroethene	<1.0	1.0
Methylene Chloride	<1.0	1.0
trans-1,2 Dichloroethene	<1.0	1.0
1,1 Dichloroethane	<1.0	1.0
2,2 Dichloropropane	<1.0	1.0
cis-1,2-Dichloroethene	<1.0	1.0
Bromochloromethane	<1.0	1.0
Chloroform	<1.0	1.0
1,1,1-Trichloroethane	<1.0	1.0
Carbon Tetrachloride	<1.0	1.0
1,1-Dichloropropene	<1.0	1.0
Benzene	<1.0	1.0
1,2 Dichloroethane	<1.0	1.0
Trichloroethene	<1.0	1.0
1,2 Dichloropropane	<1.0	1.0
Dibromomethane	<1.0	1.0
Bromodichloromethane	<1.0	1.0
Trans 1,3-Dichloropropene	<1.0	1.0
Toluene	<1.0	1.0
cis 1,3-Dichloropropene	<1.0	1.0
1,1,2 Trichloroethane	<1.0	1.0
Tetrachloroethene	<1.0	1.0
1,3 Dichloropropane	<1.0	1.0
Dibromochloromethane	<1.0	1.0
1,2 Dibromoethane	<1.0	1.0
Chlorobenzene	<1.0	1.0
1,1,1,2-Tetrachloroethane	<1.0	1.0
Ethylbenzene	<1.0	1.0
M & P Xylenes	<1.0	1.0
O-Xylene	<1.0	1.0
Styrene	<1.0	1.0
Bromoform	<1.0	1.0
Isopropylbenzene	<1.0	1.0
Bromobenzene	<1.0	1.0
1,1,2,2-Tetrachloroethane	<1.0	1.0
1,2,3-Trichloropropane	<1.0	1.0
n-Propylbenzene	<1.0	1.0
2-Chlorotoluene	<1.0	1.0
4-Chlorotoluene	<1.0	1.0
1,3,5-Trimethylbenzene	<1.0	1.0
tert-Butylbenzene	<1.0	1.0
1,2,4-Trimethylbenzene	<1.0	1.0
sec-Butylbenzene	<1.0	1.0
1,3-Dichlorobenzene	<1.0	1.0
1,4-Dichlorobenzene	<1.0	1.0
p-Isopropyltoluene	<1.0	1.0
1,2-Dichlorobenzene	<1.0	1.0
n-Butylbenzene	<1.0	1.0
1,2-Dibromo-3-Chloropropane	<1.0	1.0
1,2,4-Trichlorobenzene	<1.0	1.0
Naphthalene	<1.0	1.0
Hexachlorobutadiene	<1.0	1.0
1,2,3-Trichlorobenzene	<1.0	1.0
Acetone	<20	20
Methyl Ethyl Ketone	<10	10
Dichlorodifluoromethane	<1.0	1.0
Chloromethane	<1.0	1.0
Vinyl Chloride	<1.0	1.0
Bromomethane	<1.0	1.0
Chloroethane	<1.0	1.0
Trichlorofluoromethane	<1.0	1.0
2-Chloroethylvinylether	<1.0	1.0
Carbon Disulfide	<1.0	1.0
Vinyl Acetate	<1.0	1.0
Methyl Isobutyl Ketone	<10	10
2-Hexanone	<10	10
Acrolein	<10	10
Acrylonitrile	<10	10
Methyltertiary Butyl Ether	<1.0	1.0
Isobromethane	<1.0	1.0

Surrogate Recoveries

		% Recovery
1,2 Dichloroethane-d4	106	
Toluene-d8	101	

Site	Depth	Lab No.	Methodology	Analysis	Results	Units	Analyzed

QUALITY ASSURANCE DATA

Method Blank — **8260 LONG** — RH 06 29 94

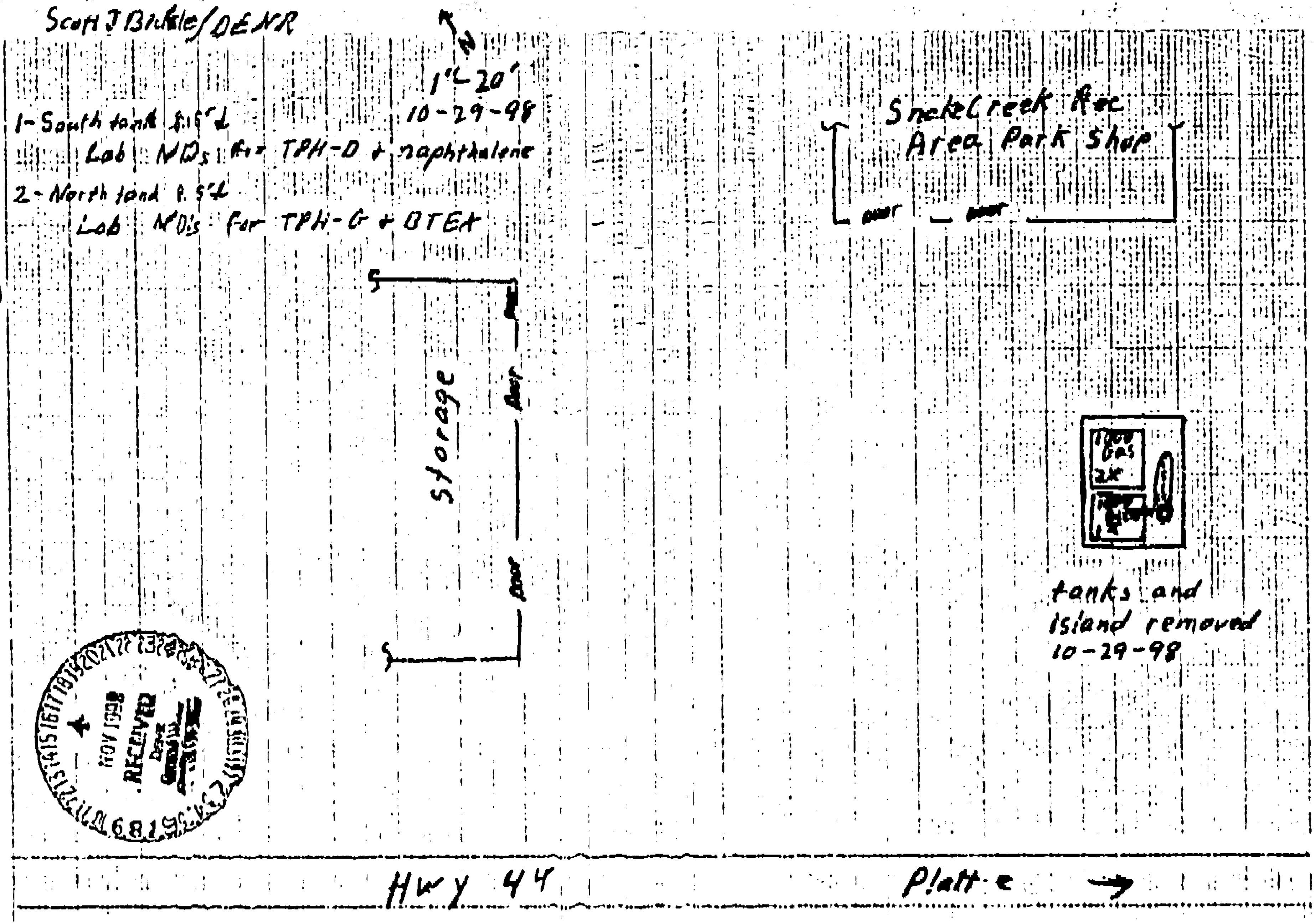
	ug/L	PQL
1,1 Dichloroethene	<1.0	1.0
Methylene Chloride	<1.0	1.0
trans-1,2 Dichloroethene	<1.0	1.0
1,1 Dichloroethane	<1.0	1.0
2,2 Dichloropropane	<1.0	1.0
cis-1,2 Dichloroethene	<1.0	1.0
Bromochloromethane	<1.0	1.0
Chloroform	<1.0	1.0
1,1,1-Trichloroethane	<1.0	1.0
Carbon Tetrachloride	<1.0	1.0
1,1 Dichloropropene	<1.0	1.0
Benzene	<1.0	1.0
1,2 Dichloroethane	<1.0	1.0
Trichloroethene	<1.0	1.0
1,2 Dichloropropane	<1.0	1.0
Dibromomethane	<1.0	1.0
Bromodichloromethane	<1.0	1.0
Trans 1,3-Dichloropropene	<1.0	1.0
Toluene	<1.0	1.0
cis 1,3-Dichloropropene	<1.0	1.0
1,1,2 Trichloroethane	<1.0	1.0
Tetrachloroethene	<1.0	1.0
1,3 Dichloropropane	<1.0	1.0
Dibromochloromethane	<1.0	1.0
1,2 Dibromoethane	<1.0	1.0
Chlorobenzene	<1.0	1.0
1,1,1,2-Tetrachloroethane	<1.0	1.0
Ethylbenzene	<1.0	1.0
M + P Xylenes	<1.0	1.0
O-Xylene	<1.0	1.0
Styrene	<1.0	1.0
Bromoform	<1.0	1.0
Isopropylbenzene	<1.0	1.0
Bromobenzene	<1.0	1.0
1,1,2,2-Tetrachloroethane	<1.0	1.0
1,2,3-Trichloropropane	<1.0	1.0
n-Propylbenzene	<1.0	1.0
2 Chlorotoluene	<1.0	1.0
4 Chlorotoluene	<1.0	1.0
1,3,5-Trimethylbenzene	<1.0	1.0
tert Butylbenzene	<1.0	1.0
1,2,4-Trimethylbenzene	<1.0	1.0
sec Butylbenzene	<1.0	1.0
1,3 Dichlorobenzene	<1.0	1.0
1,4 Dichlorobenzene	<1.0	1.0
p-Isopropyltoluene	<1.0	1.0
1,2-Dichlorobenzene	<1.0	1.0
n-Butylbenzene	<1.0	1.0
1,2 Dibromo-3-Chloropropane	<1.0	1.0
1,2,4-Trichlorobenzene	<1.0	1.0
Naphthalene	<1.0	1.0
Hexachlorobutadiene	<1.0	1.0
1,2,3-Trichlorobenzene	<1.0	1.0
Acetone	<20	20
Methyl Ethyl Ketone	<10	10
Dichlorodifluoromethane	<1.0	1.0
Chloromethane	<1.0	1.0
Vinyl Chloride	<1.0	1.0
Bromomethane	<1.0	1.0
Chloroethane	<1.0	1.0
Trichlorofluoromethane	<1.0	1.0
2 Chloroethylvinylether	<1.0	1.0
Carbon Disulfide	<1.0	1.0
Vinyl Acetate	<1.0	1.0
Methyl Isobutyl Ketone	<10	10
2 Hexanone	<10	10
Acrolein	<10	10
Acrylonitrile	<10	10
Methyltertiary Butyl Ether	<1.0	1.0
Isobromethane	<1.0	1.0

Surrogate Recoveries		% Recovery
1,2 Dichloroethane-d4	108	
Toluene-d8	101	
4 Bromofluorobenzene	111	

Patch II
10-0133

C.98.046

C98.046 SB



REPORT OF ANALYTICAL RESULTS

PROJECT # : 98-929-3

PROJECT:
SNAKE CREEK RECREATION AREA

CLIENT:
GAME, FISH & PARKS
523 E. CAPITOL
PIERRE, SD 57501
PHONE:

CHAIN OF CUSTODY # SFO-02-1998

DATE: November 05, 1998

SAMPLE MEDIUM: SOIL

DATE SAMPLED: October 30 , 1998
DATE RECEIVED: October 30, 1998
DATE ANALYZED: November 04 , 1998

SAMPLER: Scott Bickler SD DENR

Site	Lab ID#	Method	Compound Analyzed	Test Results	Units	Method Detection Limit
S TANK 1000 GAL	4664-98					
		EPA 8020	Naphthalene	<1.0	mg/kg	1 mg/kg
		California USGS	TPH As Diesel	<10.0	mg/kg	10 mg/kg
N TANK 1000 GAL	4665-98					
		EPA 8020	Benzene	<0.2	mg/kg	0.2 mg/kg
		EPA 8020	Toluene	<0.2	mg/kg	0.2 mg/kg
		EPA 8020	Ethylbenzene	<0.2	mg/kg	0.2 mg/kg
		EPA 8020	Xylenes	<0.2	mg/kg	0.2 mg/kg
		California USCS	TPH as Gasoline	<10.0	mg/kg	10 mg/kg

Analysts: Katherine Howard and Jason Cook

Respectfully submitted

Katherine Howard , Laboratory Supervisor

GEOTEK ENGINEERING
& TESTING SERVICES, INC.
909 East 50th Street North
Sioux Falls, South Dakota 57104
605-335-5512 • FAX 605-335-0773

ANALYTICAL INVOICE

PROJECT #: 98-929-3 DATE: November 05, 1998

INVOICE #: SFO-08-1998

PROJECT:
SNAKE CREEK RECREATION AREA

CLIENT:
GAME, FISH & PARKS
523 E. CAPITOL
PIERRE, SD 57501

PHONE:

Description	Quantity	Unit Price	Extention
BTEX only	0	$50.00	$0.00
TPH As Gasoline plus BTEX	1	$100.00	$100.00
TPH As Diesel/Naphthalene Screen	1	$100.00	$100.00
		Invoice Total	$200.00

South Dakota Department of Environment and Natural Resources
Joe Foss Building, Pierre, South Dakota 57501

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
	Snake Creek Recreation Area

SAMPLERS (Signature): Scott Buckles

STAT. NO.	DATE 1998	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH diesel	Naphthalene	TPH gasoline	BTEX			REMARKS
													Send bill & results to
													Dennis Williams
(1)	10-21	12:46 p		x	South Tank (500 gallon)	1	X	X					Engr Sec
													OFE
(2)	10-21	1:08 p		X	North Tank (1000 gallon)	1			X	X			523 E Capitol Ave
													Pierre SD 57501 3182
													Copy results to
													Scott Buckles
													1108 W Bailey
													Sioux Falls SD 57104

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Scott Buckles	10-21-98 9:15	Annie Butler			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	

Split Samples ☐ Accepted ☐ Declined ______ Signature

Distribution: Original Accompanies Shipment, First Copy to Coordinator Field Files, Second Copy to Representative of Inspected Facility

STD-08-1998

FILE COPY C.98.046

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

January 28, 2000

Department of Game, Fish, and Parks
ATTN: Dennis Williams
Foss Building
523 East Capitol
Pierre, SD 57501

Re: Closure of Department of Environment and Natural Resources File # C 98.046 pertaining to soil samples collected during the removal of one 1,000 gallon underground gasoline storage tank (UST) and one 1,000 gallon diesel UST , Snake Creek Recreation Area, Charles Mix County, South Dakota

Dear Mr. Williams:

The Department of Environment and Natural Resources has conducted a review of the soil laboratory results submitted to this office regarding the above referenced site. As a result of this review, the department has determined that work at this site can end, and the file can be closed.

Based on the information available, it appears that a release of petroleum has not occurred at this site. Therefore, the department will not require that you conduct any additional testing or remediation at this time. However, you should be aware that if problems should arise from contamination that may not have been detected, South Dakota Department of Game, Fish, and Parks may be held responsible for future testing or remediation.

Should you have any questions, please contact Chris Hanson of my staff. Thank you for your cooperation in protecting the ground water resources of South Dakota.

Sincerely,

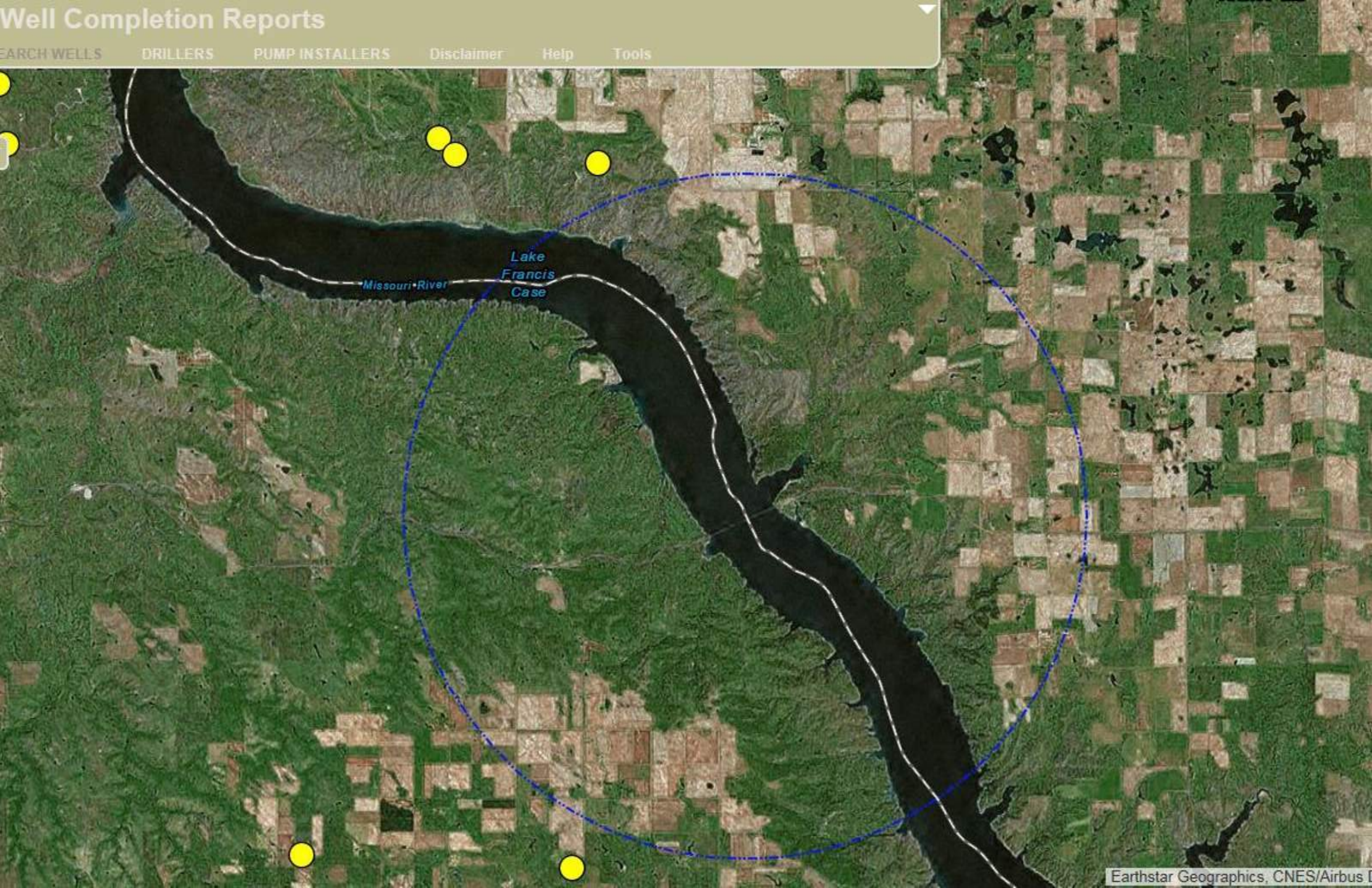
Bill Markley

Bill Markley, Administrator
Ground Water Quality Program
Phone: (605) 773-3296

cc: Dennis Rounds, Petroleum Release Compensation Fund
Bill Youngstrom, Charles Mix County Emergency Management

Well Completion Reports

EARCH WELLS DRILLERS PUMP INSTALLERS Disclaimer Help Tools



PARK/RECREATION AREA BOUNDARY

SD 44 ALIGNMENT - NORTH 125' ALTERNATIVE
(125-foot separation between bridges)

South Dakota DOT
Project HP5596(19) 3616 P; P0044()290 3014 N, PCN 05X0
SD 44/Platte-Winner Bridge Corridor Study and Environmental Assessment

Gregory and Charles Mix Counties

HRGreen

NORTH

0 600 1200
Feet

PARK/RECREATION AREA BOUNDARY

SD 44 ALIGNMENT - NORTH SKEW 400' ALTERNATIVE
(50-400 foot separation between bridges)

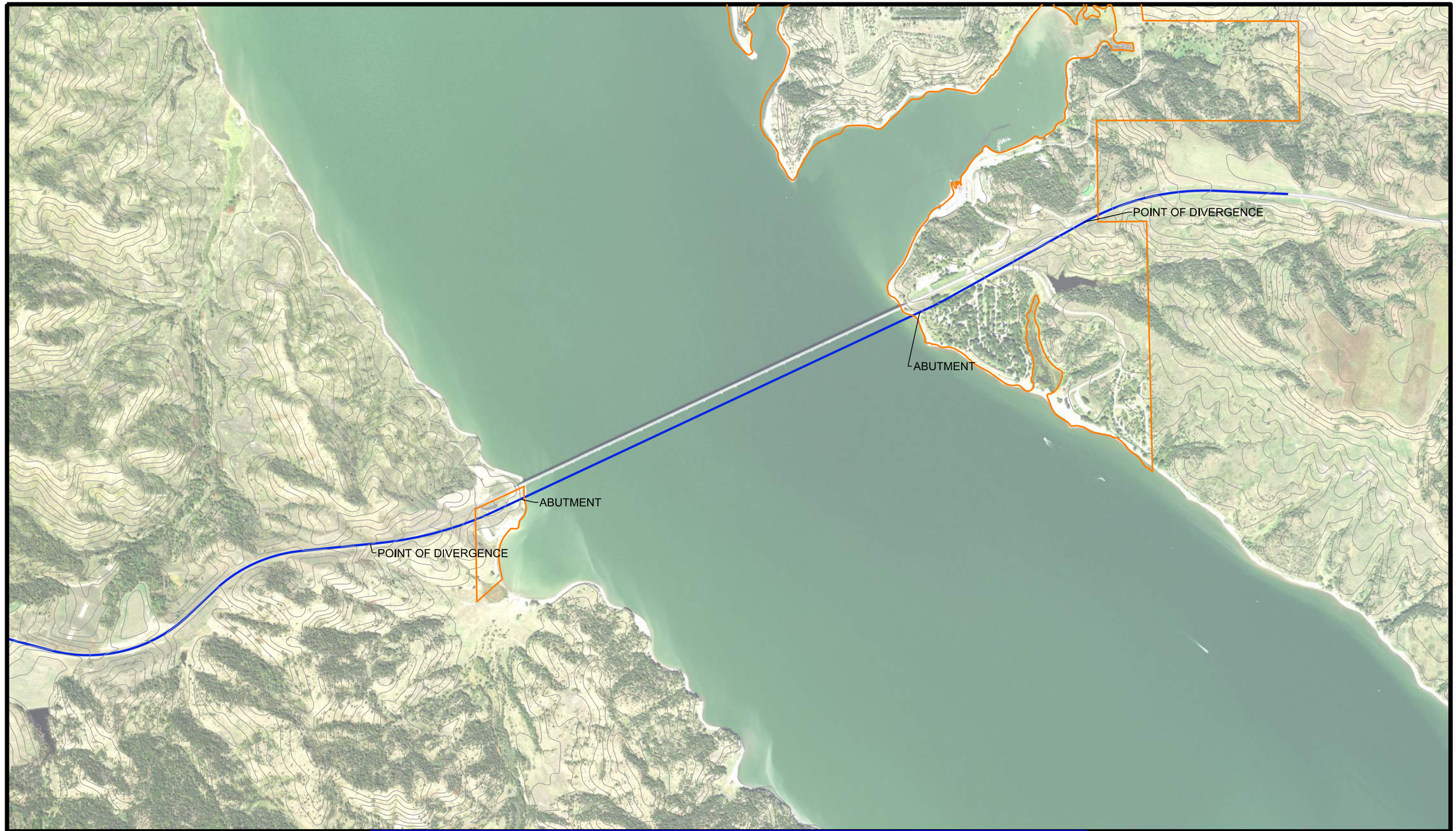
South Dakota DOT
Project HP5596(19) 3616 P; P0044()290 3014 N, PCN 05X0
SD 44/Platte-Winner Bridge Corridor Study and Environmental Assessment

Gregory and Charles Mix Counties

HRGreen

NORTH

0 600 1200
Feet



PARK/RECREATION AREA BOUNDARY

SD 44 ALIGNMENT - SOUTH 125' ALTERNATIVE
(125-foot separation between bridges)

South Dakota DOT
Project HP5596(19) 3616 P: P0044()290 3014 N, PCN 05X0
SD 44/Platte-Winner Bridge Corridor Study and Environmental Assessment

Gregory and Charles Mix Counties

HRGreen

NORTH

0 600 1200
Feet