

**Environmental Site Assessment
Transaction Screen
for the
Old Shooting Range Site
on the
Lower Brule Sioux Reservation**

Submitted to:

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EXECUTIVE SUMMARY

An Environmental Site Assessment Transaction Screen for the Old Shooting Range Site has been completed by Mary Jane Gourneau, Brownfields TRP Coordinator for the Lower Brule Sioux Tribe, Lower Brule Tribal EPA Office. Preparation of Environmental Site Assessment Transaction Screen was developed in coordination with Christina Wilson (Project Manager, U.S. Environmental Protection Agency (EPA) Region 8).

This area has been used as a shooting range since 1974 when the old BIA Jail was built. Historical resources indicate the site was vacant rangeland until about 1965. The BIA Jail structure was built in 1974. This makes the shooting range about forty three years old. It is an earthen berm. The officers and other users of the shooting range shot at targets that were placed in front of the earthen impact berm.

The Shooting Range was used by Police Officers to practice to qualify to carry a firearm. Tribal Council Member John McCauley who was a Police Officer for about eight years stated the range was used six times per year. Police Officers and Game Wardens came from other reservations, Yankton, Lower Brule, Fort Thompson, Rosebud and Flandreau to use the Lower Brule Shooting range to qualify to carry their weapons.

Mr. McCauley stated there would be between 40 to 85 shooters each session and one time there was 110 shooters.

This does not include the practice sessions before the actually shooting test to quality. If they did not quality they had to do it all over again (this also does not include the hunters that use the range for target practice or sighting in their guns (pistols, rifles, shotguns, AR Rifles).

Each Shooter would use: Handguns one (1) ounce of lead in each bullet
 AR Rifles
 Shotguns
 Sub-machine gun

Example: 10 guys 2 times a year = 60 rounds each time=120 rounds per
 year for each person

1200 per year =33 years x 1200 per year =125 grains of lead each person

125 x 1200= 150,000 grains = about 21.4 pounds of lead each year

This is just for the hand guns. The rifles, shotguns and AR Rifles use more lead. 21 Pounds times 33 years equals 693 pounds of lead per year for just ten people using a handgun.

This is really a very low estimate.

Each shooter would use 8 to 16 rounds which is 150-200 shells for each person.

There would be between 40 to 80 shooters at a time. Sometimes up to 100 shooters. This does not include the hunters that used the shooting range to site in their firearms. The firearms used at the Shooting range: shotguns, pistols, AR Rifles, Submachine guns. Each one of these weapons uses more lead then a handgun.

The main concern with lead in outdoor firing ranges is the fate and transport of heavy metals from bullets and bullet fragments accumulating in the soil. Lead is considered the top environmental threat to children. According to estimates by the Environmental Working Group, outdoor firing ranges put more lead into the environment than any other industry in the U.S., with the exception of metals mining and manufacturing. The Department of Defense, the Department of Energy and law enforcement agencies combined use tens of billions of rounds of ammunition each year, translating to hundreds of tons of lead per day.

A typical outdoor firing range is comprised of a series of targets in front of an impact berm. The bullets will likely move through the target and will strike the impact berm, penetrating fragmenting, agglomerating, smearing or ricocheting.

Lead has been the material of choice of its low cost, easy availability, versatility and excellent performance. Bullets from rifles are more likely to break apart, exposing more lead to the soil and providing a larger surface area.

Lead exposure can cause a range of health problems from nausea and fatigue to organ damage, mental impairment and death.

Lead at outdoor shooting ranges can pose a threat to the environment if best management practices, including reclamation and recycling, are not implemented in a timely manner. Implementation of best management practices will allow the range to minimize contamination of the range and potential impacts to human health and the environment, benefit economically from the recycling of lead, and enhance its role as a good member of the community and steward of the environment. Historically, the three major sources for human exposure to lead are lead-based paint, lead in dust and soil and lead in drinking water. The main human exposure to lead associated with shooting ranges is through lead-contaminated soil.

- Lead oxidizes when exposed to air and dissolves when exposed to acidic water or soil.
- Lead bullets, bullet particles, or dissolved lead can be moved by storm water runoff.
- Dissolved lead can migrate through soils to groundwater.

When lead is exposed to acidic water and/or soil, it breaks down by weathering into lead oxides, carbonates, and other soluble compounds. With each rainfall, these compounds may be dissolved, and the lead may move in solution in the storm runoff waters.

Soils (taken from the Phase II on the Old BIA Jail which is close to the shooting range)

The soil in the site vicinity is the Bullcreek Clay, 0 to 6 percent slopes. These soils are deep, moderately well drained, nearly level to gently sloping soils on foot slopes, terraces, and fans (Schumacker, 1987). The soils have very slow permeability and the available water capacity is low. The shrink-swell potential of the soil is very high.

Best Management Practices for Lead at Outdoor Shooting Ranges (EPA-902-B-01-001)

<u>Physical Characteristics</u>	<u>Potential Risk to Environment</u>	<u>Potential Benefits in Preventing/Managing Contamination</u>
Clay, acidic soils	Acidic Soils contribute to lead	

	Dissolution -increasing the potential for lead Contamination -may increase run-off	May impede percolation of water through contaminated soil Binds “free” lead ions May benefit growth of vegetative covers
<u>Flat Terrain</u>	Rainwater may “pond” in areas, Promoting lead dissolution and contamination	Expenditure easily recovered Off-site drainage minimized

This Environmental Site Assessment Transaction Screen will assist the Lower Brule Sioux Tribe in determining if there is a potential presence of contamination that needs to be addressed. It was conducted in accordance guidelines under the American Society for Testing materials (ASTM), an Excerpt of Practice E1528-06: Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process. The information from this Transaction Screen will assist the Tribe in determining if further assessment needs to be completed and eventually identify various mitigation options.

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XII. ATTACHMENTS 14

- A: Maps (road and satellite maps)
- B: Site Photographs

I. INTRODUCTION

A. Purpose

The purpose of this Environmental Site Assessment Transaction Screen is to identify potential environmental concerns with the property including any hazardous substances, petroleum products, contaminants, and pollutants that may potentially pose environmental impacts to the Old Shooting Range Site resulting from past or present uses of the subject property or surrounding properties. It was conducted in accordance with guidelines under the American Society for Testing Materials (ASTM), an Excerpt of Practice E1528-06: Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process. The information from this Transaction Screen will assist the Tribe in determining if further assessment needs to be completed and eventually identify various mitigation options.

B. Scope of Work

The scope-of-work for this assessment included an evaluation of the following:

- 1) Reviewing available public records/documents that will help identify potential environmental concerns in connection with the property and surrounding properties.
- 2) Conducting a site reconnaissance to collect data and observe environmental conditions related to the property, surrounding properties, and any structures located on the premises to the extent not obstructed by adjacent buildings, bodies of water, asphalt, other paved areas, or by limiting conditions such as snow or rain.
- 3) Interviewing site-owner or designated persons using the Transaction Screen questionnaire to review property boundaries and obtain information that may be relevant to the site or adjoining properties. Briefly interviewing knowledgeable persons (i.e. neighbors, former owners, regulatory agencies, tribal programs) to establish previous property uses and conditions.
- 4) Preparing a report containing observations relating to the apparent environmental condition of the site and surrounding properties, describing areas of impact, summarizing records/documents reviewed, maps, photographs, analysis of collected data, and the consultant's conclusions.

This Scope of work may be modified as additional information regarding the site or surrounding sites becomes available.

C. Significant Assumptions

- Assumptions are made that information derived from secondary sources is correct. Except as set forth in this report, there was no independent investigation as to the accuracy or completeness of the information derived from secondary sources or personal interviews and preparers have assumed that such information is accurate and complete.

- Conclusions and recommendations represent opinions that were arrived at in accordance with currently accepted environmental, engineering, hydrologic, and geologic practices and are subject to the inherent limitations of environmental site assessments.

D. Limitations and Exceptions

- A change in any fact or circumstance upon which this report is based may adversely affect the recommendations, findings, and conclusions expressed in this report.
- No sampling of any materials was performed for this assessment.

E. Special Terms and Conditions

- This report is for the use and benefit of the Lower Brule Sioux Tribe and third parties authorized in writing by the Lower Brule Sioux Tribe.
- The information contained herein was obtained from sources deemed reliable, but this report should not be construed to constitute an independent investigation and/or verification on the part of the preparer of this document or the Lower Brule Tribe of the Lower Brule Indian Reservation, or any entity thereof. Readers of this document are cautioned and advised to verify the information contained herein through their own investigation. The preparer of this document, the Lower Brule Tribal Brownfields Tribal Response Program under the Lower Brule Sioux Tribe of the Lower Brule Indian Reservation, and any entity thereof specifically deny and disclaim any liability resulting from any actions taken based upon the reliance of or as a result of reliance on this document and/or the information contained herein, including any and all determinations, recommendations, conclusions and requirements. No warranties either express or implied are made in the preparation or dissemination of this document or the information contained herein for the purpose of reliance by third parties.

II. SITE DESCRIPTION

A. Location and Legal Description

The Shooting Range was created about 1974. The site is located in the Lower Brule Community, in Lyman County, South Dakota on Trust Land of the Lower Brule Indian Reservation. The address is Lower Brule, South Dakota 57548. The legal description is as follows: 343-T4001 SE1/4NE1/4SW1/4SW1/4, Sec. 15, T107N, R73W, Lyman County, South Dakota containing 2.50 acres, more or less. Longitude/Latitude: 44 4'11" N, 99 34'42" W. The site is approximately about a mile west of the Missouri River.

B. Site and Vicinity General Characteristics

The Old Shooting Range is just outside the community of Lower Brule, which is in Central South Dakota adjacent to the Missouri River on the Lower Brule Indian Reservation, home to the Lower Brule Tribe. It is a mixed-use community with a population of 1308 (2007) consisting of Lower Brule Counseling Program, Lower Brule Post Office, Lower Brule Elementary School, Lower Brule High School, Indian Health Service Clinic, Dental Clinic, Friendship House, Lower Brule Community Center, Elderly Center, Boys & Girls Club, Golden Buffalo Casino, Tribal Housing,

Lower Brule Rural Water Office, Lower Brule Housing Authority, Lower Brule Ambulance Program, Brule Hills Trading Post, Lower Brule Commodity Program, Lower Brule Community College, Lower Brule Day Care Center, Lower Brule Diabetics Program, Lower Brule Construction Company, Lower Brule Head Start Program, Kul Wicasa Oyate Trading Post, Lakota Foods, Lower Brule Police/Justice/Detention Center, Lower Brule Motor Pool, Lower Brule Propane Program, Lower Brule Roads Department, Lower Brule Treaty Office, Wells Fargo Bank, Lower Brule Wildlife Program, Bureau of Indian Affairs, Domestic Violence Program, Lower Brule Environmental Program, Facilities Management Program, St Mary's Catholics Church, Bible Baptist Church, Lower Brule Fire Department, Lower Brule Health Administration Program, Lower Brule Infrastructure Office, Lower Brule Mental Health, NAHA Warehouse, Transit Program, Lower Brule Social Services and Lower Brule Planning Program.

The Reservation experienced a devastating flood in 1965 and some structures were relocated and many rebuilt on the current higher ground locations.

The following adjacent and nearby properties border the Old Shooting Range:

- **North:** Lower Brule Facilities Management Program and Lower Brule Roads Department
- **East:** Lower Brule Community College, Lower Brule High School
- **South:** Open Range
- **West:** Open Range

C. Current Uses of the Property

The site is not in use at the present time.

D. Descriptions of Structures, Roads, and Other Improvements to the Site

There are no buildings or structures on this site. The 2.5 acres is fenced. There is a bank or berm on the northwest side where targets were placed for practicing shooting. The berm is about 10 feet high.

(See Attachments for photos & maps)

III. USER PROVIDED INFORMATION

(The users of this Environmental Site Assessment Transaction Screen are the Lower Brule Tribe. They provided information from Tribal files and records, program staff, administration sources and interviews.)

A. Title Records

An abstract for the property was not available for review. The BIA Realty officer, Christy Wolf provided a map and legal description of the site. Tribal Realty could not find any information on the site. The site is located on Tribal Trust Land for the Lower Brule Tribe.

B. Environmental Liens or Activity and Use Limitations

The Tribe is not aware of any environmental liens on the site.

C. Valuation Reduction for Environmental Issues

Since the owner does not intent to sell the site, a significantly lower purchase price is not applicable.

D. Owner, Property Manager, and Occupant Information

The Lower Brule Sioux Tribe owns the property and it is within the Reservation boundary on Trust Land.

Interviews

- Lower Brule Sioux Tribal Chairman Boyd Gourneau (work) (605) 473-5561, in a personnel interview provided verbal information on the site.
- Dr. Brian Molyneaux, Cultural Resources Office provided the maps and information on the site.
- Christy Wolf, BIA Reality (605) 473-5561, provided maps but had no further information on this site.
- John McCauley Tribal Council Member who was a Police Officer from 1991 to 1999 and used the shooting range. (605) 473-5561.
- BIA Superintend Mr. James Two Bulls who was a Police Officer and Police Captain that actually used the shooting range. (605) 473-5561

F. Historical Use Information on the Property

The Lower Brule Shooting range was created for Police Officers and Game Wardens to qualify to use a firearm.

The 2.5 acres was used as an outdoor shooting range. The Old BIA Jail was built in the early 70's and the shooting range was built about that time.

There are no buildings or structures on this site. The 2.5 acres is fenced. There is an impact berm on the northwest side where targets were placed for practicing. Police Officers and Game Wardens came from other reservations to use the shooting range.

According to the Environmental Data Research (EDR) Report, neither fire insurance maps nor city directories were available for the site. Information gained from the interviews with Lower Brule Tribal members was used to corroborate the available historical information.

G. Historical Use Information on the Adjoining Properties

- **North:** Facilities Management Program/Lower Brule Roads Department
- **East:** Lower Brule Community College, Lower Brule High School
- **South:** Open Range
- **West:** Open Range

IV. SITE RECONNAISSANCE

A. Methodology

On May 6, 2017, Mary Jane Gourneau, Brownfields Coordinator, Lower Brule Sioux Tribe Environmental Protection Administration conducted a site reconnaissance for the Old Shooting Range.

B. General Site Setting

The general area is the town of Lower Brule. It is a mixed-use community with a population of 1308 (2007) consisting of Lower Brule Post Office, Lower Brule Elementary School, Lower Brule High School, Indian Health Service Clinic, Dental Clinic, Friendship House, Lower Brule Community Center, Elderly Center, Post Office, Boys & Girls Club, Golden Buffalo Casino, Tribal Housing, Lower Brule Rural Water Office, Lower Brule Housing Authority, Lower Brule Ambulance Program, Brule Hills Trading Post, Lower Brule Commodity Program, Lower Brule Community College, Lower Brule Day Care Center, Lower Brule Diabetics Program, Lower Brule Construction Company, Lower Brule Head Start Program, Kul Wicasa Oyate Trading Post, Lakota Foods, Lower Brule Justice/Detention Center, Lower Brule Motor Pool, Lower Brule Propane Program, Lower Brule Roads Department, Lower Brule Treaty Office, Wells Fargo Bank, Lower Brule Wildlife Program, and Wolakota Oun Skunpo Program.

The Reservation experienced a devastating flood in 1965 and some structures were relocated and many rebuilt on the current higher ground locations.

The terrain is relatively flat with the Missouri River about one mile east of the site.

C. Exterior Observations

- This site is about 2.5 acres more or less
- No soil stains were observed

D. Interior Observations

Note: NA

E. Physical Setting Sources Physical Setting Sources

The following historical, geological, topography, and hydrology information-is taken from the Phase I Environmental Site Assessment for the BIA Jail Building that was completed by GeoTek Engineering & Testing Services in North Sioux Falls, South Dakota in 2012. This site is to the southwest of the Former BIA Jail Site therefore pertinent to this Limited Phase I/Transaction Screen on the Old Shooting Range Site. The Phase I Report also conducted a review of available historical topographic maps from various sources. Topographic maps from 1947 and 1966 were available.

Topographical Map Review

- 1966-U.S.G.S. Lower Brule, South Dakota 7.5 Minute Quadrangle:
There are no objects shown on the subject property and land to the east and southeast are also vacant. There are buildings on land to the north, west and southwest. The site is located in the northwest central portion of Lower Brule. There is development of light duty roads to the west, north, east and south. The elevation of the site is approximately 1460 - 1450' above mean sea level. Contour lines indicate a gentle slope toward the east, toward Lake Sharpe. The nearest surface water is Lake Sharpe located approximately 1,100' east.
- 1947-U.S.G.S. Lower Brule Reservation, South Dakota 7.5 Minute Quadrangle:
There are no objects shown on the subject property or surrounding lands (Prior to development of Lower Brule at this location). Ephemeral drainage from the west toward the Missouri River is indicated through the property.
There are no objects shown on the subject property or surrounding lands (Prior to development of Lower Brule at this location.) Ephemeral drainage form the west toward the Missouri River is indicated through the property.

Geology, Topography and Hydrology

Geology

The Lower Brule Reservation is located in the Missouri Plateau Section of the Great Plains Physiographic Province (Cox and Beach 1980). The subject site is likely underlain by Quaternary Alluvium (clay, silt, sand, and some gravel). Alluvium may be up to 30' thick in some areas. The Quaternary Alluvium unconformably overlies bedrock-Pierre Shale. The Pierre Shale is blue-gray to dark gray, fissile to blocky shale with persistent bentonite and black organic shale up to 360' thick in this area. Ogle (1995) reports that all streams on the reservation other than the Missouri River are ephemeral and that shallow groundwater supplies are limited.

Groundwater

Shallow groundwater supplies are limited to alluvial deposits along major streams and terrace deposits along the Missouri River (Ogle, 1995). Shallow groundwater may be present in the subsurface within about 10-15' of the land surface. The shallow groundwater gradient is often in the same direction as the surface topography. If so, the shallow groundwater gradient would be to the east.

The Pierre Shale which is at or near the surface in much of the area has almost no potential as a source of potable water (Cox and Beach, 1980). As the Pierre Shale is relatively impermeable, it acts as a barrier to downward movement of groundwater, causing groundwater to move laterally to points of discharge at contact springs. The bedrock Dakota Sandstone is located at depth below the Pierre Shale and is considered as aquifer (Cox and Beach, 1980).

Soils

The soil in the site vicinity is the Bullcreek Clay, 0 to 6 percent slopes. These soils are deep, moderately well drained, nearly level to gently sloping soils on foot slopes, terraces, and fans (Schumacker, 1987). The soils have very slow permeability and the available water capacity is low. The shrink-swell potential of the soil is very high.

Climate

The Lower Brule area has warm summers and cold dry winters with an average year-round temperature of 59F. The prairie winds are rarely far away, especially in the spring, average 14 mph daily all year around. Summers are generally hot, with temperatures ranging between 80F and 110F. Most of the 18 inches of annual precipitation falls as rain and there are occasional droughts during the summer. Waves of moist and cooler air crossing the region from the south, west and north during the warmest months sometimes trigger violent thunderstorms and tornadoes. Spring and autumn are extremely beautiful and throughout the year the sunrise and sunset can be absolutely stunning. Winter temperatures range between 30F and 25F. Winters can be very harsh, with moderate to heavy snowfalls and occasional severe blizzard conditions, but winter thaws moderate the effects and spring often returns early.

Radon

Based upon the review of radon information in the South Dakota Radon Information, Lyman County is located within Zone 1 with >4.0 (pCi/L). EPA's recommends threshold level at which implementation of radon-resistant features in new construction is above 4 pCi/L.

V. RECORDS REVIEW

Due to poor or inadequate address information, the following sites were not listed or mapped by EDR. Even though they were not identified in the EDR, the Tribe is aware of their locations and they do not pose an impact to the Thompson Site/Fort Hale Bottom:

1. ATP-Contaminated Soils-Education, Leaking Underground Storage Tank (LUST) list
2. EPA LUST Trust Property, Lower Brule (LUST)
3. Lower Brule Sioux Tribes-Resource Conservation & Recovery Act (RCRA)-Conditionally Exempt Small Quantity Generator (CESQG), Facility Index System/Facility Registry System (FINDS) lists.
4. BIA Route 5 and Crazy Horse St.-Emergency Response Notification System (ERNS)
5. Tribal Commodity Store (abandoned)-Underground Storage Tanks on Indian Land (INDIAN UST)
6. Lower Brule Retail Center-INDIAN UST
7. BIA Roads Department- INDIAN UST
8. Tribal Commodity Store (abandoned)-INDIAN LUST
9. BIA Roads Department-INDIAN LUST

Site name	Database(s)
BIA Ed. Admin. Bldg.	UST
Tony Moran Ranch	UST
Tony Moran Ranch	UST
Old Tribal Farm Shop	UST
LBST Tribal Farm Corp.	UST
LB Community College	UST
LB Employment Enterprise	UST
LB Employment Enterprise	UST
LB Old Headstart	UST

- **Envirofacts Search, May, 2018** – Mary Jane Gourneau, the Tribal Brownfields Coordinator, searched the online Envirofacts Database and identified the following listings for Lower Brule, SD 57548.

FACILITIES IN ENVIROFACTS

Facility	Reporting System
Durkin Dump Property 26 miles NW of Lower Brule Lower Brule , SD 57548	ACRES
Former BIA Administration Building 90001 Red Cloud St Lower Brule, SD 57548	ACRES
Former BIA Jail Tribal Hwy 10 Lower Brule, SD 57548	ACRES
Kids Pond Dump 0.8 Miles West of Lower Brule Community Hwy 10 Lower Brule, SD 57548	ACRES

- **Flood Zone Data** – HTTP-Status 404-/data/Q3?C46085.Eoo.zip Lyman County.
Data requested is not available
- FEMA Designated Areas: Disaster 1984
- **GeoTek Physical Setting Source Map Findings- Radon**
- **BIA Records** – No sources identified.
- **IHS Records** – No sources identified.

VI. Environmental Site Assessment Transaction Screen Questionnaire

Below is the Environmental Site Assessment Transaction Screen Questionnaire that lists answers provided by the owner in relation to the property. The Lower Brule Sioux Tribe owner, Chairman Boyd Gourneau represented himself for recording purposes on the questionnaire. Mary Jane Gourneau, Brownfields TRP Coordinator, conducted the site reconnaissance answers on the questionnaire

process, including, in particular, the *site visit* and the government records/historical sources inquiry. If the *user* decides no further inquiry is warranted after receiving no response, an answer of unknown, or an affirmative answer, the *user* must document the reasons for any such conclusion.

5.6.1 Upon obtaining an affirmative answer, an answer of unknown or no response, the *user* should first refer to the guide. The guide may provide sufficient explanation to allow a *user* to conclude that no further inquiry is appropriate with respect to the particular question.

5.6.2 If the guide to a particular question does not, in itself, permit a *user* to conclude that no further inquiry is appropriate, then the *user* should consider other information obtained from the *transaction screen process* relating to this question. For example, while on the site performing a *site visit*, a person may find a storage tank on the *property* and therefore answer Question 10 of the *transaction screen questionnaire* in the affirmative. However, during or subsequent to the *owner/occupant* inquiry, the *owner* may establish that substances now or historically contained in the tank (for example, water) are not likely to cause contamination.

5.6.3 If either the guide to the question or other information obtained during the *transaction screen process* does not permit a *user* to conclude no further inquiry is appropriate with respect to such question, then the *user* must determine, in the exercise of the *user's* reasonable business judgment, based upon the totality of unresolved affirmative answers or answers of unknown received during the *transaction screen process*, whether further inquiry may be limited to those specific issues identified as of concern.

5.7 *Presumption*—A presumption exists that further inquiry is necessary if an affirmative answer is given to a question or because the answer was unknown or no response was given. In rebutting this presumption, the *user* should evaluate information obtained from each component of the *transaction screen process* and consider whether sufficient information has been obtained to conclude that no further inquiry is necessary. The *user* must determine, in the exercise of the *user's* reasonable business judgment, the scope of such further inquiry.

5.8 *Further Inquiry*—Upon completing the *transaction screen questionnaire*, if the *user* concludes that further inquiry or action is needed (for example, consult with an environmental consultant, contractor, governmental authority, or perform additional governmental and/or historical records review), the *user* should proceed with such inquiry. (Note that if the *user* determines to proceed with a Phase I Environment Site Assessment, the *user* may apply the current Practice E1527, Practice E2247, or alternatively the provisions of EPA's regulation "Standards and Practices for All Appropriate Inquiries," 40 C.F.R. Part 312.)

5.9 *Signature*—The *user* and the preparer of the *transaction screen questionnaire* must complete and sign the questionnaire as provided at the end of the questionnaire.

6. Transaction Screen Questionnaire

6.1 *Persons to Be Questioned*—The following questions should be asked of (1) the current *owner* of the *property*, (2) any major *occupant* of the *property* or, if the *property* does not have any major *occupants*, at least 10 % of the *occupants* of the *property*, and (3) in addition to the current *owner* and the *occupants* identified in (2), any *occupant* likely to be using, treating, generating, storing, or disposing of hazardous substances or petroleum products on or from the *property*. A major *occupant* is any *occupant* using at least 40 % of the leasable area of the *property* or any anchor tenant when the *property* is a shopping center. In a multifamily *property* containing both residential and commercial uses, the preparer does not need to ask questions of the residential *occupants*. The preparer should ask each person to answer all questions to the best of the respondent's actual knowledge and in good faith. When completing the *site visit* column, the preparer should be sure to observe the *property* and any buildings and other structures on the *property*. The guide to this *transaction screen questionnaire* (see Sections 7 – 10) provides further details on the appropriate use of this questionnaire. (See Note 1.)

NOTE 1—Unk = "unknown" or "no response."

Description of Site/Address:

Old Shooting Range

Lower Brule, SD 57548

Question	Owner			Occupants (if applicable)			Observed During Site Visit	If yes, provide description
1a. Is the property used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No
1b. Is any adjoining property used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No
2a. Did you observe evidence or do you have any prior knowledge that the property has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No

Question	Owner	Occupants (if applicable)			Observed During Site Visit If yes, provide description	
2b. Did you observe evidence or do you have any prior knowledge that any <i>adjoining property</i> has been used for an industrial use in the past?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Unk	Yes	No	Unk	Yes <input type="radio"/> No <input checked="" type="radio"/>
3a. Is the <i>property</i> used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Unk	Yes	No	Unk	Yes <input type="radio"/> No <input checked="" type="radio"/>
3b. Is any <i>adjoining property</i> used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Unk	Yes	No	Unk	Yes <input checked="" type="radio"/> No <input type="radio"/> Facilities Management Program Road Shop Maint.
4a. Did you observe evidence or do you have any prior knowledge that the <i>property</i> has 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 (if applicable, identify which)?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Unk	Yes	No	Unk	Yes <input type="radio"/> No <input checked="" type="radio"/>
4b. Did you observe evidence or do you have any prior knowledge that any <i>adjoining property</i> has 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 (if applicable, identify which)?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Unk	Yes	No	Unk	Yes <input type="radio"/> No <input checked="" type="radio"/>
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the <i>property</i> or at the facility?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Unk	Yes	No	Unk	Yes <input type="radio"/> No <input checked="" type="radio"/>
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the <i>property</i> or at the facility?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Unk	Yes	No	Unk	Yes <input type="radio"/> No <input checked="" type="radio"/>
6a. Are there currently any industrial drums (typically 55 gal (208 L)) or sacks of chemicals located on the <i>property</i> or at the facility?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Unk	Yes	No	Unk	Yes <input type="radio"/> No <input checked="" type="radio"/>



Question		Owner	Occupants (if applicable)			Observed During Site Visit	If yes, provide description
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial drums (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes No
7a. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?	Yes	No	Unk	Yes	No	Unk	Yes No
7b. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that is of an unknown origin?	Yes	No	Unk	Yes	No	Unk	Yes No
8a. Are there currently any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes No
8b. Did you observe evidence or do you have any prior knowledge that there have been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes No
9a. Is there currently any stained soil on the property?	Yes	No	Unk	Yes	No	Unk	Yes No
9b. Did you observe evidence or do you have any prior knowledge that there has been previously, any stained soil on the property?	Yes	No	Unk	Yes	No	Unk	Yes No
10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the property?	Yes	No	Unk	Yes	No	Unk	Yes No
10b. Did you observe evidence or do you have any prior knowledge that there have been previously, any registered or unregistered storage tanks (above or underground) located on the property?	Yes	No	Unk	Yes	No	Unk	Yes No
11a. Are there currently 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?	Yes	No	Unk	Yes	No	Unk	Yes No
11b. Did you observe evidence or do you have any prior knowledge that there have 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?	Yes	No	Unk	Yes	No	Unk	Yes No
12a. Is there currently evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes No



Question		Owner	Occupants (if applicable)			Observed During Site Visit	If yes, provide description
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring drains, walls, ceilings or exposed grounds on the <i>property</i> ?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes <input checked="" type="radio"/> No
13a. If the <i>property</i> is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes <input checked="" type="radio"/> No
13b. If the <i>property</i> is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes <input checked="" type="radio"/> No
14. Does the <i>owner</i> or <i>occupant</i> of the <i>property</i> have any knowledge of <i>environmental liens</i> or governmental notification relating to past or recurrent violations of environmental laws with respect to the <i>property</i> or any facility located on the <i>property</i> ?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	
15a. Has the <i>owner</i> or <i>occupant</i> of the <i>property</i> been informed of the past existence of <i>hazardous substances</i> or <i>petroleum products</i> with respect to the <i>property</i> or any facility located on the <i>property</i> ?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	
15b. Has the <i>owner</i> or <i>occupant</i> of the <i>property</i> been informed of the current existence of <i>hazardous substances</i> or <i>petroleum products</i> with respect to the <i>property</i> or any facility located on the <i>property</i> ?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	
15c. Has the <i>owner</i> or <i>occupant</i> of the <i>property</i> been informed of the past existence of environmental violations with respect to the <i>property</i> or any facility located on the <i>property</i> ?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	
15d. Has the <i>owner</i> or <i>occupant</i> of the <i>property</i> been informed of the current existence of environmental violations with respect to the <i>property</i> or any facility located on the <i>property</i> ?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	
16. Does the <i>owner</i> or <i>occupant</i> of the <i>property</i> have any knowledge of any <i>environmental site assessment</i> of the <i>property</i> or facility that indicated the presence of <i>hazardous substances</i> or <i>petroleum products</i> on, or contamination of, the <i>property</i> or recommended further assessment of the <i>property</i> ?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	



Question	Owner	Occupants (If applicable)	Observed During Site Visit	If yes, provide description
17. Does the <i>owner</i> or <i>occupant</i> of the <i>property</i> know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any <i>hazardous substance</i> or <i>petroleum products</i> involving the <i>property</i> by any <i>owner</i> or <i>occupant</i> of the <i>property</i> ?	Yes <input checked="" type="radio"/> No	Unk	Yes No Unk	
18a. Does the <i>property</i> discharge <i>waste-water</i> (not including sanitary waste or storm water) onto or adjacent to the <i>property</i> and/or into a storm water system?	Yes <input checked="" type="radio"/> No	Unk	Yes No Unk	Yes No
18b. Does the <i>property</i> discharge <i>waste water</i> (not including sanitary waste or storm water) onto or adjacent to the <i>property</i> and/or into a sanitary sewer system?	Yes <input checked="" type="radio"/> No	Unk	Yes No Unk	Yes No
19. Did you observe evidence or do you have any prior knowledge that any <i>hazardous substances</i> or <i>petroleum products</i> , unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the <i>property</i> ?	Yes <input checked="" type="radio"/> No	Unk	Yes No Unk	Yes No
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of <i>PCBs</i> ?	Yes <input checked="" type="radio"/> No	Unk	Yes No Unk	Yes No

Government Records/Historical Sources Inquiry

(See guide, Section 10, and Practice E1527)

21. Do any of the following federal, state, or tribal government record systems list the *property* or any *property* within the search distance noted below (where available):

	Approximate Minimum Search Distance, miles (kilometres)		
Federal <i>NPL</i> site list	1.0 (1.6)	Yes	<input checked="" type="radio"/> No
Federal <i>Delisted NPL</i> site list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
Federal <i>CERCLIS</i> list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
Federal <i>CERCLIS NFRAP</i> site list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
Federal <i>RCRA CORRACTS</i> facilities list	1.0 (1.6)	Yes	<input checked="" type="radio"/> No
Federal <i>RCRA non-CORRACTS TSD</i> Facilities list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
Federal <i>RCRA generators</i> list			
Federal institutional control/engineering control registries	<i>property and adjoining properties</i>	Yes	<input checked="" type="radio"/> No
Federal <i>ERNS</i> list	<i>property only</i>		
State and tribal lists of <i>hazardous waste sites</i> identified for investigation or remediation:	<i>property only</i>	Yes	<input checked="" type="radio"/> No
State-and tribal-equivalent <i>NPL</i>	1.0 (1.6)	Yes	<input checked="" type="radio"/> No
State-and tribal-equivalent <i>CERCLIS</i>	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
State-and tribal- <i>landfill</i> and/or <i>solid waste disposal site lists</i>	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
State-and tribal-leaking storage tank lists	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
State and tribal registered storage tank lists	<i>property and adjoining properties</i>	Yes	<input checked="" type="radio"/> No
State and tribal <i>institutional control/engineering control</i> registries	<i>property only</i>	Yes	<input checked="" type="radio"/> No
State and tribal voluntary cleanup sites	0.5 (0.8)	Yes	<input checked="" type="radio"/> No
State and tribal <i>Brownfield</i> sites	0.5 (0.8)	Yes	<input checked="" type="radio"/> No

22. Based upon a review of *fire Insurance maps*, *local street directories*, or *aerial photographs*, all as specified in the guide (10.2.1), are any buildings or other improvements on the *property* or on an *adjoining property* identified as having been used for an industrial use or that could possibly lead to contamination of the *property*?

Yes ☒ No Unavailable

Result: _____

The *Owner* questionnaire answers were provided was completed by:

Name



Title
Firm
Address

Phone number
Date
Role(s) at the site
Number of years at the site
Relationship to *user* (for example, principal, employee, agent, consultant)

The *Occupant* questionnaire answers were provided by:

Name
Title
Firm
Address

Phone number
Date
Role(s) at the site
Number of years at the site
Relationship to *user* (for example, principal, employee, agent, consultant)

The *Site Visit* questionnaire was completed by:

Name Mary Jane Gourneau
Title EPO Brownfields Coordinator
Firm Lower Brule Sioux Tribe
Address 187 Oyate Circle Lower Brule, SD 57548
Phone number (605) 473-0163
Date May 30, 2018
Relationship to *site*
Relationship to *user* (for example, principal, employee, agent, consultant)

The *Government Records and Historical Sources Inquiry* questionnaire was completed by:

Name
Title
Firm
Address

Phone number
Date
Relationship to *site*
Relationship to *user* (for example, principal, employee, agent, consultant)

User's relationship to the *site* (for example, owner, prospective purchaser, lender, etc.)

If the *preparer(s)* is different from the *user*, complete the following:

Name of *User*
User's address

User's phone number

Copies of the completed questionnaires have been filed at:

Copies of the completed questionnaires have been mailed or delivered to:

Preparer represents that to the best of the *preparer's* knowledge the above statements and facts are true and correct and to the best of the *preparer's* actual knowledge no material facts have been suppressed or misstated.

Signature Mary Gourneau Date 5-30-18
Signature _____ Date _____
Signature _____ Date _____

If the *user* is different from the *preparer(s)*, the *user* shall sign below affirming that the completed questionnaire has been received. It is the *user's* responsibility to draw conclusions regarding affirmative or unknown answers.

Signature _____ Date _____

VII. FINDINGS

(Note that ASTM defines a “recognized environmental condition” 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, ground water, or surface water of the property.)

Findings under the following specific categories:

Note:

CERCLA hazardous substances –

- Lead

Pollutants –

Contaminants –

Petroleum/petroleum products – None determined.

Controlled substances – None determined or observed.

Other –

VIII. OPINION AND CONCLUSION

It is recommended that a Phase II Site Assessment be conducted for the Old Shooting Site because of potential lead contamination.

IX. DEVIATIONS

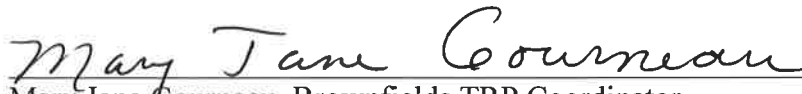
No deviations were identified.

X. REFERENCES

- American Society for Testing Materials (ASTM). (2006). *Excerpt of Practice E1528-06: Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process*. West Conshohocken, PA 2012.
- Lower Brule Sioux Tribe. Mary Jane Gourneau (Brownfields Coordinator),
- Christy Wolf (Realty Office)
- Envirofacts Website. Information on EPA environmental data. Retrieved from Internet
- <https://arcgis.sd.gov/server/denr/spillsviewer/>
- <https://cumulis.epa.gov/supercpad/cursites/srchrslt.cfm?start=1>
- <https://www.epa.gov/superfund/search-superfund-sites-where-you-live>
- Cleanups in My Community <https://ofmpub.epa.gov/apex/cimc/f?p=CIMC:LIST>
- ERNS Incidents in South Dakota
- [HTTP://OBIPUBLIC11.EPA.GOV/ANALYTICS/SAW.DLL?pPORTALpAGES&pORTALpATH=%2Fshared%2FCIMC%2F_portal](http://OBIPUBLIC11.EPA.GOV/ANALYTICS/SAW.DLL?pPORTALpAGES&pORTALpATH=%2Fshared%2FCIMC%2F_portal)
- <https://ofmpub.epa.gov/apex/cimc/f?p=CIMC:LIST>
- https://ofmpub.epa.gov/enviro/fii_map_master.fii_retrieve
- <http://arcgis.sd.gov/server/denr/tanksdb/default.html>
- <http://www.epa.gov/lead/best-management-practices-lead-outdoor-shooting-ranges>
- <http://www.asknumbers.com/ounces-to-grains.aspx>
- [https://en.wikipedia.org/wiki?Shot_\(pellet\)](https://en.wikipedia.org/wiki?Shot_(pellet))

XI. SIGNATURES

We declare that, 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 qualification based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have conducted an Environmental Site Assessment Transaction Screen in accordance with guidelines under the American Society for Testing materials (ASTM), an Excerpt of Practice E1528-06: Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process.



Mary Jane Gourneau, Brownfields TRP Coordinator,
Lower Brule Tribal EPA Office
Lower Brule Sioux Tribe, Lower Brule, SD

6-15-2018

Date

Environmental Professional's Qualifications

Mary Jane Gourneau, Brownfields TRP Coordinator, Lower Brule Tribe Environmental Protection Administration:

Mary Jane Gourneau has served as the Lower Brule Sioux tribe's Brownfields Tribal Response Program Coordinator for the last 8 years. She has received certifications in the environmental field, emergency management training courses including OSHA 40-Hour Hazwoper and ASTM Training Phase I & II.

Effects on the Human Body from Excessive Exposure to Lead

If not detected early, **children** with relatively low levels of lead (as low as 10 microgram/deciliter for children) in their bodies can suffer from:

- damage to the brain and nervous system,
- behavior and learning problems (such as hyperactivity and aggressiveness),
- slowed growth,
- hearing problems,
- headaches, and
- impairment of vision and motor skills.

Adults can suffer from:

- difficulties during pregnancy,
- reproductive problems in both men and women (such as low birth weight, birth defects and decreased fertility),
- high blood pressure,
- digestive problems,
- neurological disorders,
- memory and concentration problems,
- muscle and joint pain, and
- kidney dysfunction.

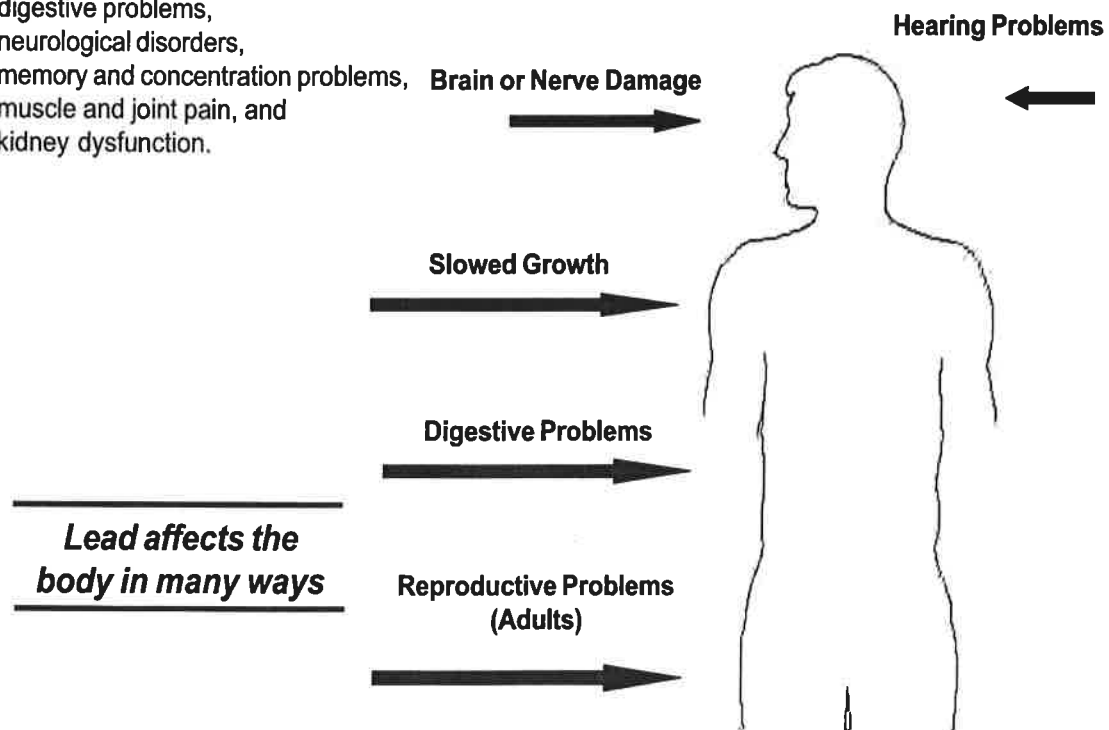


Figure 1-1: Effects on the Human Body from Excessive Exposure to Lead

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Presho	Lunchroom	1st Floor	06/03/94	06/18/94	2.8
Presho	Classroom	1st Floor	06/03/94	06/18/94	3
Presho	Office	1st Floor	06/03/94	06/18/94	3.9
Presho	Classroom	1st Floor	06/03/94	06/18/94	4
Presho	Classroom	1st Floor	06/03/94	06/18/94	4.9
Presho	Classroom	1st Floor	06/03/94	06/18/94	5
Presho	Classroom	1st Floor	06/03/94	06/18/94	5.5
Presho	Classroom	1st Floor	06/03/94	06/18/94	5.6
Presho	School Lib	1st Floor	06/03/94	06/18/94	5.9
Presho	Classroom	1st Floor	06/03/94	06/18/94	6.1
Presho	Classroom	1st Floor	06/03/94	06/18/94	6.3
Presho	Classroom	1st Floor	06/13/94	06/18/94	5
Presho	Classroom	1st Floor	06/13/94	06/18/94	5.6
Vivian	Rec. Room	Basement	02/12/95	02/16/95	1.9
Presho	Bedroom	Basement	01/16/04	01/07/04	19.4
Presho	Living Room	Basement	01/16/04	01/17/04	16.4
Presho	Utility Room	Basement	01/16/04	01/17/04	18.8
Presho	Utility room	Basement	01/16/04	01/17/04	18.8
Presho	Bath room	Basement	01/16/04	01/17/04	22.3
Reliance	Storage	Storage	06/13/08	06/17/08	1.7

Federal EPA Radon Zone for LYMAN County: 1

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

Federal Area Radon Information for Zip Code: 57548

Number of sites tested: 9

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.580 pCi/L	80%	20%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	12.178 pCi/L	56%	22%	22%

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

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

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

FEMA FLOOD ZONE

Target Property County
LYMAN, SD

FEMA Flood
Electronic Data

YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

4602780000A - FEMA Q3 Flood data

Additional Panels in search area:

Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
LOWER BRULE

NWI Electronic
Data Coverage

YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

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

AQUIFLOW®

Search Radius: 1.000 Mile.

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

MAP ID
Not Reported

LOCATION
FROM TP

GENERAL DIRECTION
GROUNDWATER FLOW

No	Status	Site Name	Street	City	Material	Source Type	Reviewer	View PDF
88.045	C	SD Wheat Growers	Road ditch, rural Lyman County	Lower Brule	Anhydrous Ammonia	Transport Trailer	JA	1988.045.PD ▼ Download
92.306	C	John Urban - Missouri River Sheen	Missouri River	Lower Brule	Petroleum	AST	KM	1992.306.PD ▼ Download
93.043	NFA	BIA- Federal Id # R4060001	Road Shop (Bldg 343)	Lower Brule	Unleaded Gasoline	UST	DR	1993.043 - E ▼ Download
94.003	C	Lower Brule Sioux Tribe - Tank Failure	1 block South Of Casino / .5 block from High School	Lower Brule	Gasoline	AST	KM	1994.003.PD ▼ Download
99.026	C	BIA - Former Lake Sharpe Service Station - Federal Id # R4060006	Crazy Horse Street	Lower Brule	gasoline	UST	DR	1999.026.PD ▼ Download
99.213	C	AST damage at Pivot	Iron Nation Irrigation Site	Lower Brule	diesel fuel	AST	LAS	1999.213.PD ▼ Download
2000.005	C	EPA LUST Trust Project - Lower Brule Commodities Store	Commodities Store	Lower Brule	gasoline	UST	JL	2000.005.PD ▼ Download
2000.044	C	Irrigation Pumps - Surface Spills	Irrigation Pumps on Corps Land	Lower Brule	petroleum	AST	BM	2000.044.PD ▼ Download
2000.206	C	Big Bend Powerhouse - Oil leak	Big Bend Dam	Lower Brule	oil	Equipment	KM	2000.206.PD ▼ Download
2000010.000	C	Lower Brule Farm Corporation - Grass Rope Unit	Grass Rope Unit, Little Bend Road, BIA 3	Lower Brule		UST	CH	2000010.PDI ▼ Download
2005.246	NFA	ATP - Lower Brule College	1 College Drive	Lower Brule	Fuel Oil	UST	KH	2005.246.PD ▼ Download
2005.247	NFA	ATP - LBST Education Admin Building	Education Admin Bldg, BIA Rt. 10	Lower Brule	Fuel Oil	UST	KH	2005.247.PD ▼ Download
2005.248	NFA	ATP - LBST Employment Enterprises	Industrial Lot 3	Lower Brule	Gasoline & Diesel	UST	KH	2005.248.PD ▼ Download

No	Status	Site Name	Street	City	Material	Source Type	Reviewer	View PDF
2005.249	NFA	ATP - Glen Allen Ranch	Glen Allen Ranch @ 15 m W of LB on Hwy 273	Lower Brule	Gasoline	UST	KH	2005.249.PD ▼ Download
2010.138	C	Transformer Spill - Storm Event	~6.5 miles Nof Lower Brule on BIA 3	Lower Brule	Transformer Oil	Transformer	RL	2010.138.PD ▼ Download
2012.149	C	Transport Tank Spill - NAHA	BIA 10, Lower Brule Rubble Site	Lower Brule	Diesel	Truck Tank	TF	2012.149.PD ▼ Download
2015.126	C	Regulator Oil Release - Storm Event	Medicine Bull Memorial Highway	Lower Brule	Coolant Oil (non PCB)	Regulator	RL	2015.126.PD ▼ Download
2017.146	O	ATP - Lower Brule High School	229 BIA Route 10	Lower Brule	Fuel Oil	UST	TF	▼ Download

source type	regulated	cause type	atp no	prcfnumbe	ag no	solidwaste	microroll	siteid
Transport 1	FALSE	Transport Accident					237	649
AST	FALSE	Line Leak						2896
UST	TRUE	Leakage		3712			#####	3058
AST	TRUE	Tank Failure						3538
UST	TRUE	Corrosion		3702			237,240	5573
AST	FALSE	Damage					203	5760
UST	TRUE	Leakage						5903
AST	FALSE	Spillage		4071			203	5942
Equipment	FALSE	Leakage					231	6104
UST	FALSE	Leakage	2908	6969			244	10413
UST	FALSE	Leakage	2900	6946			244	10414
UST	TRUE	Leakage	2738	6701			244	10415
UST	FALSE	Leakage	2901	6947			244	10416
Transformer	FALSE	Storm Event					276	11726
Truck Tank	FALSE	Damage		7730			288	12415
Regulator	FALSE	Storm Event					301	13414
UST	FALSE	Leakage	3505	8129				14084
UST	TRUE	No Release					257	8801

secq1	acreage	instctrls	material	amount	units	spill cat	site type	proptype
		0	Anhydrous	250	gallons	Agri Chem	Other(See	Other(See
SE		0	Petroleum	50	gallons	Petroleum	Other(See	Agricultura
		0	Unleaded C	0		Petroleum	Federal	Other(See
		0	Gasoline	8500	gallons	Petroleum	Other(See	Other(See
		0	gasoline	0		Petroleum	Federal	Other(See
		0	diesel fuel	500	gallons	Petroleum	Other(See	Agricultura
		0	gasoline	0		Petroleum	Lust Trust	Other(See
SE		0	petroleum	0		Petroleum	Other(See	Agricultura
		0	oil	20	gallons	Oil	Federal	Industrial
		0	Fuel Oil	0		Petroleum	ATP	Other(See
		0	Fuel Oil	0		Petroleum	ATP	Other(See
		0	Gasoline &	0		Petroleum	ATP	Other(See
		0	Gasoline	0		Petroleum	ATP	Agricultura
SE		0	Transforme	75	gallons	Oil	Non_Aquif	Other(See
		0	Diesel	300	gallons	Petroleum	Other(See	Other(See
			Coolant Oil	320	gallons	Oil	Other(See	Other(See
			Fuel Oil			Petroleum	ATP	Other(See
		0		0		Other(See	Clean Site	Agricultura

city	zip code	county	latitude	longitude	township	range	section
Lower Brule	57548	Lyman	44.08529	-99.7454	107	74	8
Lower Brule	57548	Lyman	44.12463	-99.7539	108N	74W	30
Lower Brule	57548	Lyman	44.06818	-99.5803			
Lower Brule	57548	Lyman	44.07297	-99.5804			
Lower Brule	57548	Lyman	44.07075	-99.5768			
Lower Brule	57548	Lyman	44.11857	-99.7506	108N	74W	31
Lower Brule	57548	Lyman	44.07254	-99.5781			
Lower Brule	57548	Lyman	44.12698	-99.7889	108	75	26
Lower Brule	57548	Lyman	44.03874	-99.4459	106N	72W	
Lower Brule	57548	Lyman	44.06783	-99.577			
Lower Brule	57548	Lyman	44.068	-99.575			
Lower Brule	57548	Lyman	44.07017	-99.5774			
Lower Brule	57548	Lyman	44.08735	-99.8663			
Lower Brule	57548	Lyman	44.17227	-99.5862	108N	73W	9
Lower Brule	57548	Lyman	44.06933	-99.574			
Lower Brule	57548	Lyman	44.06208	-99.5697			
Lower Brule	57548	Lyman	44.06707	-99.5765			
Lower Brule	57548	Lyman	44.17222	-99.5866	108	73	9

resp party
South Dakota Wheat Growers
John Urban
Bureau of Indian Affairs
Lower Brule Sioux Tribe
Bureau of Indian Affairs
South Dakota Wheat Growers
EPA LUST Trust Project
Jerry Christensen
Army Corps of Engineers
Lower Brule Sioux Tribe
Lower Brule Sioux Tribe
Lower Brule Sioux Tribe
Lower Brule Sioux Tribe
West Central Electric
Native American Heritage Association
West Central Electric
Lower Brule Sioux Tribe
Lower Brule Farm Corporation

street
Road ditch, rural Lyman County
Missouri River
Road Shop (Bldg 343)
1 block South Of Casino / .5 block from High School
Crazy Horse Street
Iron Nation Irrigation Site
Commodities Store
Irrigation Pumps on Corps Land
Big Bend Dam
1 College Drive
Education Admin Bldg, BIA Rt. 10
Industrial Lot 3
Glen Allen Ranch @ 15 m W of LB on Hwy 273
~6.5 miles Nof Lower Brule on BIA 3
BIA 10, Lower Brule Rubble Site
Medicine Bull Memorial Highway
229 BIA Route 10
Grass Rope Unit, Little Bend Road, BIA 3

site name

SD Wheat Growers

John Urban - Missouri River Sheen

BIA- Federal Id # R4060001

Lower Brule Sioux Tribe - Tank Failure

BIA - Former Lake Sharpe Service Station - Federal Id # R4060006

AST damage at Pivot

EPA LUST Trust Project - Lower Brule Commodities Store

Irrigation Pumps - Surface Spills

Big Bend Powerhouse - Oil leak

ATP - Lower Brule College

ATP - LBST Education Admin Building

ATP - LBST Employment Enterprises

ATP - Glen Allen Ranch

Transformer Spill - Storm Event

Transport Tank Spill - NAHA

Regulator Oil Release - Storm Event

ATP - Lower Brule High School

Lower Brule Farm Corporation - Grass Rope Unit

id	status	r1	date rep	date close	image
88.045	C	JA	#####	#####	TRUE
92.306	C	KM	#####	#####	TRUE
93.043	NFA	DR	#####	#####	TRUE
94.003	C	KM	#####	#####	TRUE
99.026	C	DR	#####	#####	TRUE
99.213	C	LAS	#####	#####	TRUE
2000.005	C	JL	#####	#####	TRUE
2000.044	C	BM	#####	#####	TRUE
2000.206	C	KM	#####	#####	TRUE
2005.246	NFA	KH	#####	#####	TRUE
2005.247	NFA	KH	#####	#####	TRUE
2005.248	NFA	KH	#####	#####	TRUE
2005.249	NFA	KH	#####	#####	TRUE
2010.138	C	RL	#####	#####	TRUE
2012.149	C	TF	#####	#####	TRUE
2015.126	C	RL	#####	#####	TRUE
2017.146	O	TF	#####		
2000010	C	CH	#####	#####	TRUE



Envirofacts Search Results

[<< Return](#)

Search Parameters: ZIP Code: 57548

Location Address: 23085 BIA Route #10, P.O. Box 313

City Name: LOWER BRULE

County Name: SD

State Abbreviation: SD

No Results found.

Total Number of Facilities Retrieved: 0

Envirofacts Links

- [EF Overview](#)
- [Search](#)
- [Model](#)
- [Data Update](#)
- [Multisystem Search User Guide](#)
- [Contact Us](#)

[Report an Error](#)



Superfund Site Search Results

Disclaimer:

The CERCLIS Public Access Database, which contained a selected set of publicly releasable Superfund program data, has been retired. The EPA is transitioning to the Superfund Enterprise Management System, or SEMS. SEMS includes the same data and content as CERCLIS. As SEMS is made operational, nightly data refresh routines will be reestablished. This webpage will be updated to reflect the status of data updates.

Search Results

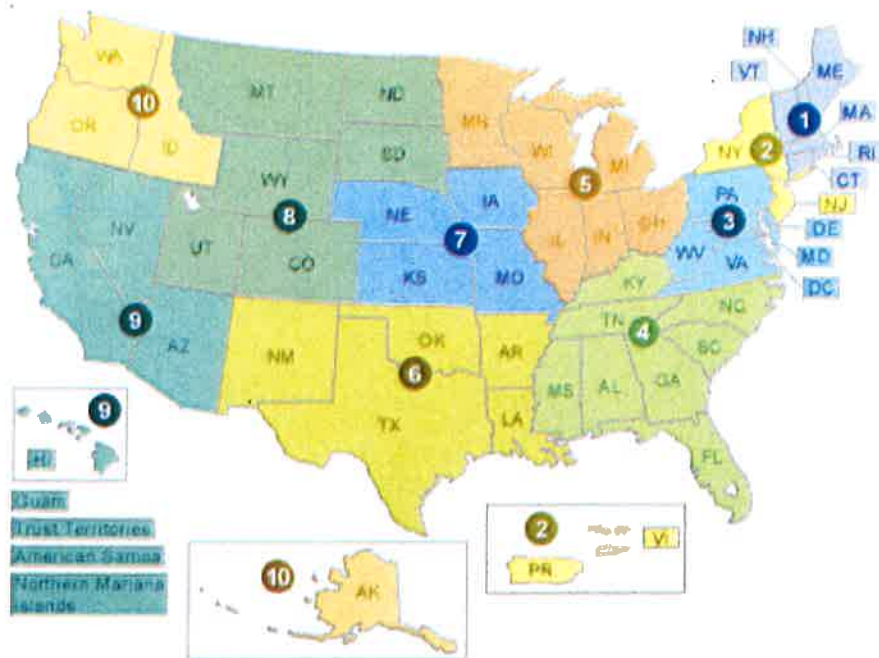
Search Criteria:

Active vs. Archived:	Active <u>What are active and archived sites?</u>
Street Address:	23085 BIA HWY 10
City:	LOWER BRULE
County:	SOUTH DAKOTA
State(s):	South Dakota
Region(s):	08
ZIP Code:	57548-0313
Indian Entity:	Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota

Found **0** site(s) that match your search criteria listed above.

To conduct another search, return to the [Search Superfund Site Information](#) page.

MARCH 20, 2018



Select a State

After you select a link, press go to jump to Superfund sites for that State.

South Dakota

Go

Region 8 Selected

Show All Regions

State of South Dakota Selected


Show All States

Show 10 ▼ entries

Search:

Region	City	County	State	Zip Code	Site Name
+ 8	ELLSWORTH AFB	[Blank County]	South Dakota	57706	<u>ELLSWORTH AIR FORCE BASE</u>
+ 8	LEAD	LAWRENCE	South Dakota	57754	<u>GILT EDGE MINE</u>
+ 8	WHITEWOOD	LAWRENCE	South Dakota	57793	<u>WHITEWOOD CREEK</u>

Results List

<u>Cleanup Name</u> 	<u>Location Address</u>	<u>City Name</u>	<u>State Code</u>	<u>Postal Code</u>	<u>County Name</u>	<u>Reports Available</u>	<u>Map Site</u>
DURKIN CURVE	31138 HIGHWAY 1806	LOWER BRULE	SD	57548	LYMAN COUNTY	Brownfields	Map It
FORMER BIA ADMINISTRATION BUILDING	90001 RED CLOUD STREET	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
FORMER BIA JAIL	TRIBAL HWY 10	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
FORMER HOUSING AUTHORITY BUILDING	633 CRAZY HORSE STREET	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
KIDS POND	0.8 MILES SW OF LOWER BRULE	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
RODEO DUMP	729 POW WOW HIGHWAY	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
RODEO GROUNDS DUMP	????	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It

row(s) 1 - 7 of 7

Close Window

**Click for More
Brownfields Info**

*** Export to CSV**

Legal Notices

* Date Last Updated: 04/19/2017

* Note: We have found that in some cases, characters such as a dash (-) might be mis-interpreted by Excel, resulting in strange "Unicoded" characters. We have corrected this problem with regards to Windows. However, to avoid the strange "Unicoded" characters,

Results List

<u>Cleanup Name</u> ↑	<u>Location Address</u>	<u>City Name</u>	<u>State Code</u>	<u>Postal Code</u>	<u>County Name</u>	<u>Reports Available</u>	<u>Map Site</u>
BOYS AND GIRLS CLUB	131 SITTING BULL STREET	LOWER BRULE	SD	57548	LYMAN	Brownfields	
DURKIN CURVE	31138 HIGHWAY 1806	LOWER BRULE	SD	57548	LYMAN COUNTY	Brownfields	Map It
FORMER BIA ADMINISTRATION BUILDING	90001 RED CLOUD STREET	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
FORMER BIA JAIL	TRIBAL HWY 10	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
FORMER HOUSING AUTHORITY BUILDING	633 CRAZY HORSE STREET	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
KIDS POND	0.8 MILES SW OF LOWER BRULE	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
OLD YELLOW SCHOOL BUILDING	212 SITTING BULL ST	LOWER BRULE	SD	57548	LYMAN	Brownfields	
RODEO DUMP	729 POW WOW HIGHWAY	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It
RODEO GROUNDS DUMP	????	LOWER BRULE	SD	57548	LYMAN	Brownfields	Map It

row(s) 1 - 9 of 9

Spill Reports Search

SOUTH DAKOTA DEPARTMENT OF
ENVIRONMENT & NATURAL RESOURCES

Spill Reports		Tier II	Zoom To	Layers	Legend																																								
		TRI																																											
Search Spills by Attributes: ID No: Status: Reported Date: (on or Reported Date: (on or Site Name/Responsible Party: County: Lyman City (nearest): Lower Brule Zip Code: 57548 Site type: Spill Category: Source Type: <input type="button" value="Search"/> BUFFER SEARCH Radius: miles <input type="button" value="Set Buffer"/>																																													
<table border="1"> <thead> <tr> <th>ID No</th> <th>Status</th> <th>Site Name</th> <th>Street</th> <th>City</th> <th>Material</th> <th>Source Type</th> <th>Revi</th> </tr> </thead> <tbody> <tr> <td>88.045</td> <td>C</td> <td>SD Wheat Growers</td> <td>Road ditch, rural Lyman County</td> <td>Lower Brule</td> <td>Fertilizer</td> <td>Transportation</td> <td>JA</td> </tr> <tr> <td>92.306</td> <td>C</td> <td>John Urban - Missouri River Sheen</td> <td>Missouri River</td> <td>Lower Brule</td> <td>Petroleum</td> <td>AST</td> <td>KM</td> </tr> <tr> <td>93.043</td> <td>NFA</td> <td>BIA- Federal Id # R4060001</td> <td>Road Shop</td> <td>Lower Brule</td> <td>Unleaded Gasoline</td> <td>UST</td> <td>DR</td> </tr> <tr> <td>94.003</td> <td>C</td> <td>Lower Brule Sioux Tribe</td> <td>1 block South Of Casino / .5 block from High School</td> <td>Lower Brule</td> <td>Gasoline</td> <td>AST</td> <td>KM</td> </tr> </tbody> </table>						ID No	Status	Site Name	Street	City	Material	Source Type	Revi	88.045	C	SD Wheat Growers	Road ditch, rural Lyman County	Lower Brule	Fertilizer	Transportation	JA	92.306	C	John Urban - Missouri River Sheen	Missouri River	Lower Brule	Petroleum	AST	KM	93.043	NFA	BIA- Federal Id # R4060001	Road Shop	Lower Brule	Unleaded Gasoline	UST	DR	94.003	C	Lower Brule Sioux Tribe	1 block South Of Casino / .5 block from High School	Lower Brule	Gasoline	AST	KM
ID No	Status	Site Name	Street	City	Material	Source Type	Revi																																						
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92.306	C	John Urban - Missouri River Sheen	Missouri River	Lower Brule	Petroleum	AST	KM																																						
93.043	NFA	BIA- Federal Id # R4060001	Road Shop	Lower Brule	Unleaded Gasoline	UST	DR																																						
94.003	C	Lower Brule Sioux Tribe	1 block South Of Casino / .5 block from High School	Lower Brule	Gasoline	AST	KM																																						

resp party	street
South Dakota Wheat Growers	Road ditch, rural Lyman County
John Urban	Missouri River
Bureau of Indian Affairs	Road Shop
Lower Brule Sioux Tribe	1 block South Of Casino / .5 block from High School
Bureau of Indian Affairs	Crazy Horse Street
South Dakota Wheat Growers	Iron Nation Irrigation Site
EPA LUST Trust Project	Commodities Store
Jerry Christensen	Irrigation Pumps on Corps Land
Army Corps of Engineers	Big Bend Dam
Lower Brule Sioux Tribe	1 College Drive
Lower Brule Sioux Tribe	Education Admin Bldg, BIA Rt. 10
Lower Brule Sioux Tribe	Industrial Lot 3
Lower Brule Sioux Tribe	Glen Allen Ranch @ 15 m W of LB on Hwy 273
West Central Electric	~6.5 miles Nof Lower Brule on BIA 3
Native American Heritage Association	BIA 10, Lower Brule Rubble Site
West Central Electric	Medicine Bull Memorial Highway
Lower Brule Farm Corporation	Grass Rope Unit, Little Bend Road, BIA 3

site name
SD Wheat Growers
John Urban - Missouri River Sheen
BIA- Federal Id # R4060001
Lower Brule Sioux Tribe
BIA - Former Lake Sharpe Service Station - Federal Id # R4060006
Line Break on Transport Truck
EPA LUST Trust Project - Lower Brule Commodities Store
Irrigation Pumps - Surface Spills
Big Bend Powerhouse - Oil leak
ATP - Lower Brule College
ATP - LBST Education Admin Building
ATP - LBST Employment Enterprises
ATP - Glen Allen Ranch
Transformer Spill - Storm Event
Transport Tank Spill - NAHA
Regulator Oil Release - Storm Event
Lower Brule Farm Corporation - Grass Rope Unit

city	zip code	county	latitude	longitude	township	range	section	secq1
Lower Brule	57548	Lyman	44.08529	-99.7454	107	74	8	
Lower Brule	57548	Lyman	44.12463	-99.7539	108N	74W	30	SE
Lower Brule	57548	Lyman	44.06818	-99.5803				
Lower Brule	57548	Lyman	44.07297	-99.5804				
Lower Brule	57548	Lyman	44.07075	-99.5768				
Lower Brule	57548	Lyman	44.11857	-99.7506	108N	74W	31	
Lower Brule	57548	Lyman	44.07254	-99.5781				
Lower Brule	57548	Lyman	44.12698	-99.7889	108	75	26	SE
Lower Brule	57548	Lyman	44.03874	-99.4459	106N	72W		
Lower Brule	57548	Lyman	44.06783	-99.577				
Lower Brule	57548	Lyman	44.068	-99.575				
Lower Brule	57548	Lyman	44.07017	-99.5774				
Lower Brule	57548	Lyman	44.08735	-99.8663				
Lower Brule	57548	Lyman	44.17227	-99.5862	108N	73W	9	SE

proptype	src type	regulated	cause type	atp no	prcfnumbe	ag no
Other(See Case File)	Transportation	FALSE				
Other(See Case File)	AST	FALSE				
Other(See Case File)	UST	TRUE			3712	
Other(See Case File)	AST	TRUE				
Other(See Case File)	UST	TRUE			3702	
Agricultural	Equipment Failure	FALSE				
Other(See Case File)	UST	TRUE				
Agricultural	Handling	FALSE			4071	
Industrial	Equipment Failure	FALSE				
Other(See Case File)	UST	FALSE		2908	6969	
Other(See Case File)	UST	FALSE		2900	6946	
Other(See Case File)	UST	TRUE		2738	6701	
Agricultural	UST	FALSE		2901	6947	
Other(See Case File)	Transformer	FALSE				
Other(See Case File)	Transportation	FALSE			7730	
Other(See Case File)	Regulator	FALSE	Storm Event			
Agricultural	UST	TRUE				

acreage	instctrls	material	amount	units	spill cat	site type
0		Fertilizer	250	gallons	Agri Chem	Other(See
0		Petroleum	50	gallons	Petroleum	Other(See
0		Unleaded Gasoline	0		Petroleum	Federal
0		Gasoline	8500	gallons	Petroleum	Other(See
0		gasoline	0		Petroleum	Federal
0		diesel fuel	500	gallons	Petroleum	Other(See
0		gasoline	0		Petroleum	Lust Trust
0		petroleum	0		Petroleum	Other(See
0		oil	20	gallons	Oil	Federal
0		Fuel Oil	0		Petroleum	ATP
0		Fuel Oil	0		Petroleum	ATP
0		Gasoline & Diesel	0		Petroleum	ATP
0		Gasoline	0		Petroleum	ATP
0		Transformer Oil	75	gallons	Oil	Non_Aquif
0		Diesel	300	gallons	Petroleum	Other(See
		Coolant Oil (non PCB)	320	gallons	Oil	Other(See
0			0		Other(See	Clean Site



United States Environmental Protection Agency

[Contact Us](#)[Cleanups](#) >> [Cleanups in My Community](#)**More Details****Brownfields Property Progress Profile**

- [Facility Information \(Facility Registry System\)](#)
- [Other Names for this Site](#)
- [Brownfields Grant Fact Sheet\(s\)](#)

DURKIN CURVE
Property ID: 219317
[Other Names for this Site](#)

This profile provides a summary of the accomplishments reported to the US EPA by a Brownfields grant recipient or Targeted Brownfields Assessment Contractor at this Brownfields property.

Legal Notices**Property Location****Assessment & Cleanup Activities and Progress Summary****Assessment & Cleanup Results and Impact Summary**

Cleanups In My Community List Results

Search Criteria: Postal Code is 57548.

https://ofmpub.epa.gov/apex/cimc/f?p=CIMC:LIST:::35:P35_BF_ASSESS_IND,P35_BF_ASSESS_PILOT_IND,P35_BF_CLEANUP_IND,P35_BF_RLF_IND,P3... 1/3

Topographical Map Review

- 1. BIA Map 3-29-18
- 2. 1965 Map
- 3. 1976 USGS Vertical Cartographic Photograph
- 4. 1986 Map
- 5. 1991 Map
- 6. 2005 Map
- 7. 2008 Map
- 8. 2010 Map
- 9. 2016 Maps
- 10. 2016 Map
- 11. 2018 Map
- 12. Physical Setting Source Map

Pictures:

1. 5-3-18 Berm
2. 5-3-18 Berm is about 10 feet high
3. Berm
4. Berm
5. Looking west
6. Looking East
7. Looking North



Related Topics: Envirofacts

FRS

FRS Facility Query Results

Your selection returned 0 facilities which are listed below.
Results are sorted by State, City Name, and Facility Name

Facility Registry Service Links:

- Facility Registry Service (FRS) Overview
- FRS Facility Query
- FRS Organization Query
- EZ Query
- FRS Physical Data Model
- FRS Geospatial Model

[Report an Error](#)



Map Legend

- Denotes a facility/site location
- Denotes a facility/site location by clicking on the 'Magnify' facilities/sites displayed below
- Denotes a "Cluster" of facilities. Clicking on the cluster will expand all clusters at that location. It may take a single click on the "Turn Clustering Off" button to view individual facility/site locations
- In the tabular list of facilities, a single click on the map and zoom the map to that facility

[Go To The Facility/Site Table](#)

[Restore Original Map](#)

[Download KML File](#)

[Turn Clustering Off](#)

[Turn Clustering On](#)

[New Query](#)

ZIP Code: 57548

Location Address: 23085 BIA Hwy 10

City Name: Lower Brule

County Name: South Dakota

State Abbreviation: SD

Systems: ACRES

Total Number of Facilities Displayed: 0

EPA makes no claims regarding the accuracy or precision of data concerning Indian country locations or boundaries on the EnviroFacts website. EPA has simply attempted to collect certain readily available information relating to Indian country locations. Questions concerning data should be referred to the originating program or Agency which can be identified in the Envirofacts tribal query metadata files Lower48 Tribal Areas, Alaska Reservation, Alaska Native Villages, or Alaska Native Allotments. The Indian country locations shown here are suitable only for general spatial reference and do not necessarily reflect EPA's position on any Indian country locations or boundaries or the land status of any specific location. The inclusion of Indian country information on the EnviroFacts website does not represent any final EPA action addressing Indian country locations or boundaries. This information cannot be relied upon to create any rights, substantive or

Matching: Lower Brule

Tank Info	DEPT OF INTERIOR, BUREAU OF INDI LOWER BRULE, SD
Tank Info	B.I.A. ROADS COMPLEX BLDG 343 LOWER BRULE, SD
Tank Info	LAKE SHARPE SERVICE LOWER BRULE, SD
Tank Info	SUDS N GRUB LOWER BRULE, SD
Tank Info	LOWER BRULE FARM CORPORATION LOWER BRULE, SD
Tank Info	TRIBAL COMMODITY STORE LOWER BRULE, SD
Tank Info	LBST EMPLOYMENT ENTERPRISE LOWER BRULE, SD
Tank Info	KUL WISCASA OYATE LOWER BRULE, SD

ATTACHMENTS

ATTACHMENT A: Maps

1. BIA Map
2. 1965 USGS Map
3. 1976 USGS Aerial Photograph Map
4. 1986 Map
5. 1991 Map
6. 2005 Map
7. 2008 Map
8. 2010 Map
9. 2016 Map
10. 2016 Map
11. 2018 Map
12. 2011 Physical Setting Source Map GeoTek

ATTACHMENT B: Site Drawing

ATTACHMENT C: Site Photographs

1. Impact Berm (Northwest)
2. Impact Berm about 10 feet high
3. Impact Berm
4. Impact Berm
5. Impact Berm
6. Lower Brule High School looking east to the Missouri River
8. Lower Brule Facilities Program and Roads Maintenance Program looking north

1.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Lower Brule Agency
190 Oyate Circle
Lower Brule, South Dakota 57548
(605) 473-5904

Lower Brule Shooting Range



Created: 3/29/2018

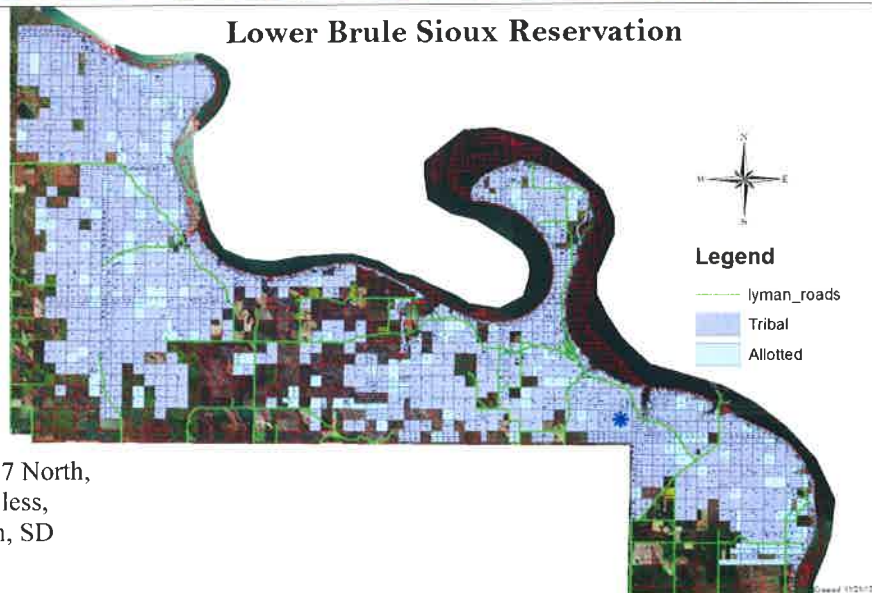
Legend

— lyman_roads

Lower Brule Shooting Range located within:

343 T4001
SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 15, Township 107 North,
Range 73 West, containing 2.50 acres, more or less,
Lyman County, Lower Brule Sioux Reservation, SD

Lower Brule Sioux Reservation



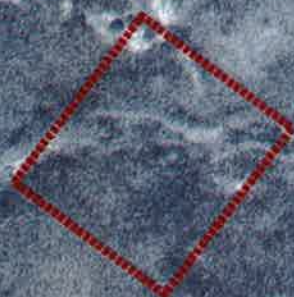
Legend

— lyman_roads
Tribal
Allotted

The creation of this map is intended to provide location only. These lines are not based on a Cadastral Survey, they are derived from GIS databases.



Lower Brule Shooting Range
1965 USGS Vertical Cartographic Photograph



Range

0 50 100 200 300 400 500 Feet

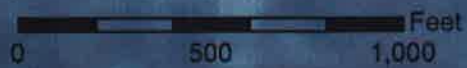


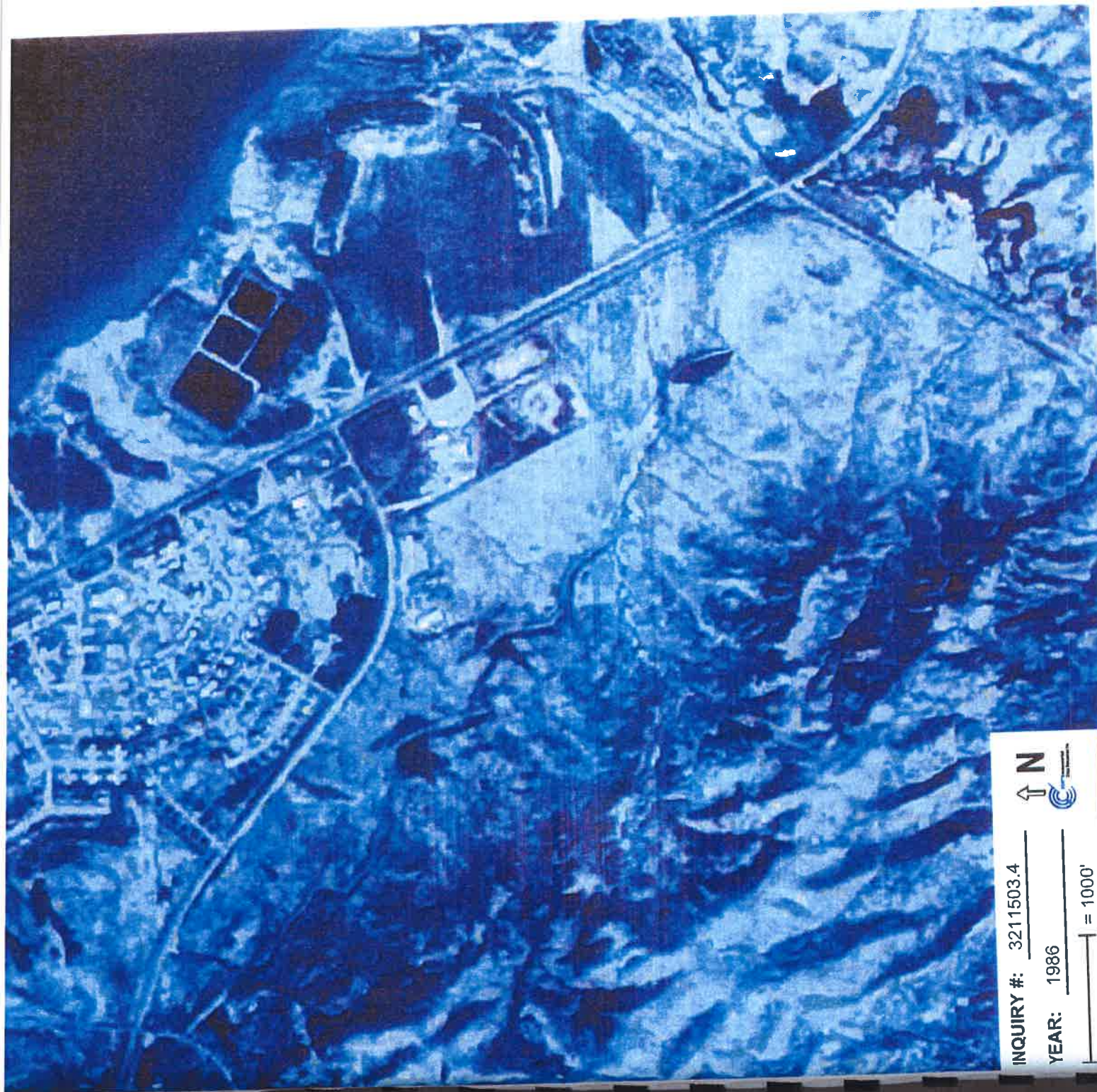
Lower Brule Gun Range
1976 USGS Vertical Cartographic Photograph

Original
Roads Building



Gun
Range
Area





INQUIRY #: 3211503.4
YEAR: 1986
= 1000'

↑ N
C



INQUIRY #: 3211503.4

YEAR: 1991



le



INQUIRY #: 3211503.4
YEAR: 2005
| = 500'

↑ N

7



INQUIRY #: 3211503.4
YEAR: 2008
| = 500'

N
↑



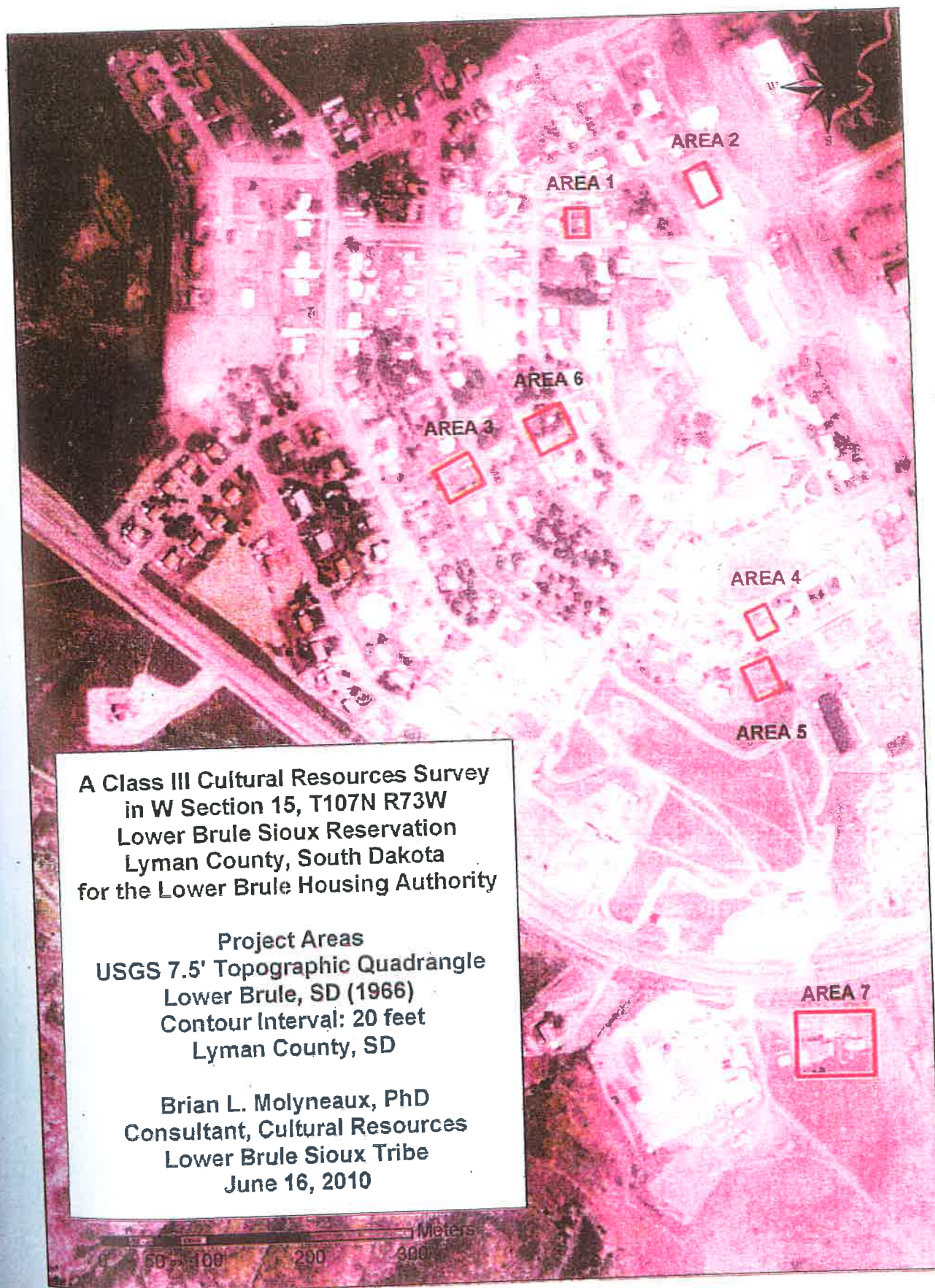


Figure 2 – Project area

9-9

Lower Brule Shooting Range
2016 FSA-NAIP Aerial Photograph

Shooting Stations

Leveled Range

Impact Berm



Lower Brule Shooting Range
2016 FSA-NAIP Aerial Photograph

Lower Brule
Facilities Management
and
Roads

Range

Lower Brule
College
and
High School

0 50 100 200 300 400 500 Feet

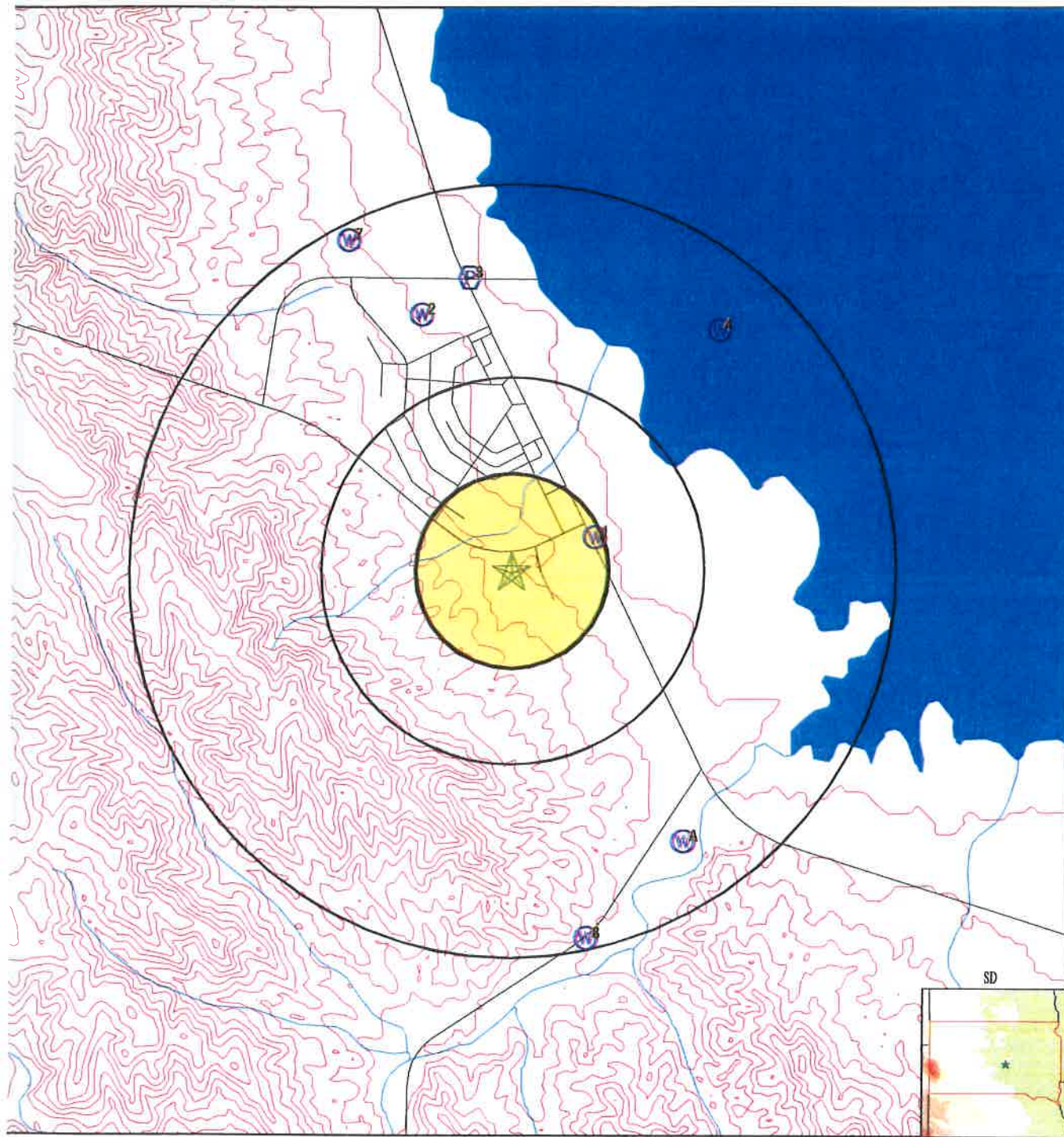


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(1-877-577-5766)



Car trouble mid-trip?
MapQuest Roadside
Assistance is here:
(1-888-461-3625)

PHYSICAL SETTING SOURCE MAP - 3211503.2s



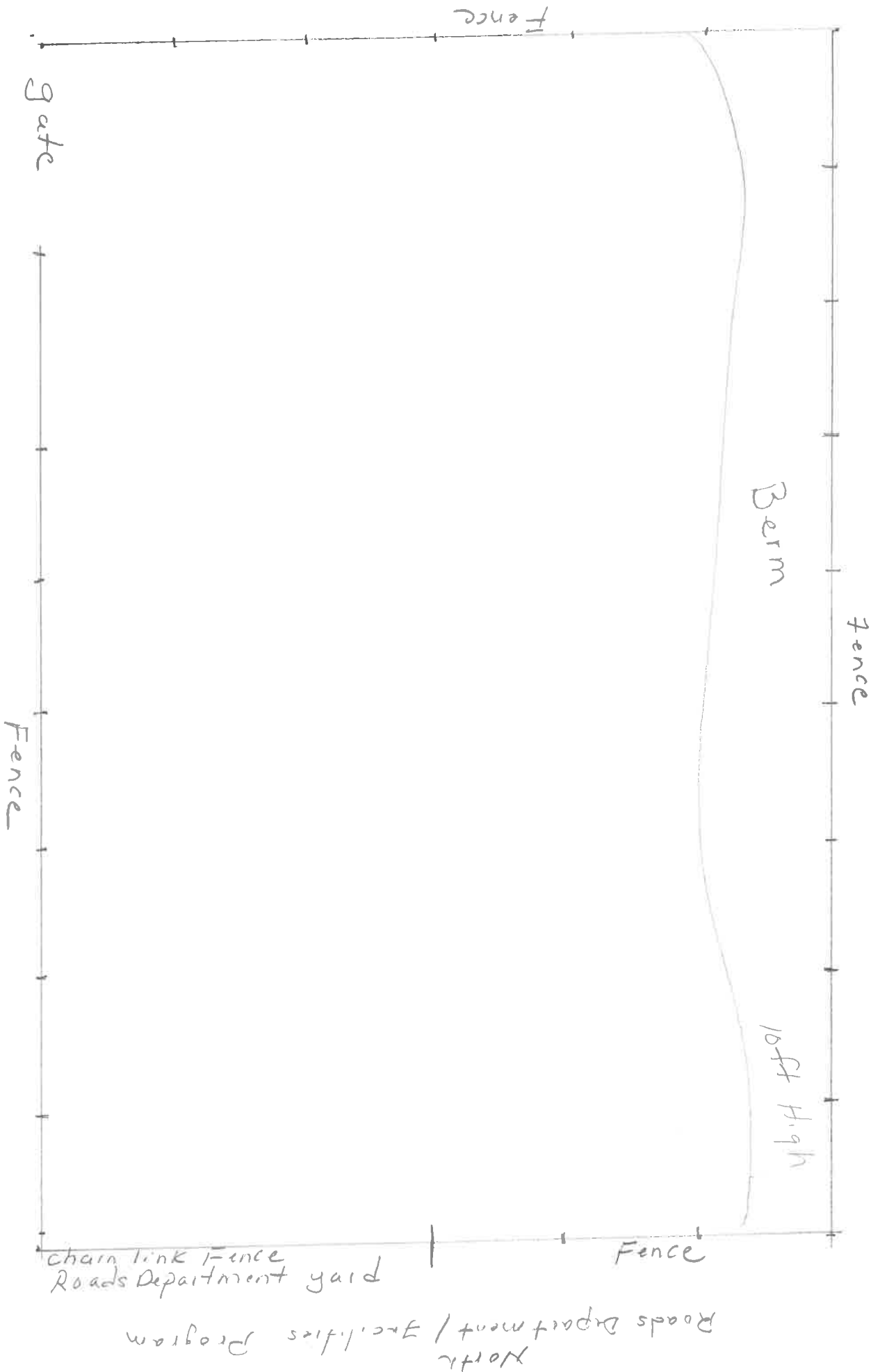
County Boundary
 Major Roads
 Contour Lines
 Earthquake epicenter, Richter 5 or greater
 Water Wells
 Public Water Supply Wells
 Cluster of Multiple Icons

Groundwater Flow Direction
 (G) Indeterminate Groundwater Flow at Location
 (W) Groundwater Flow Varies at Location

NAME: Former BIA Jail
 ADDRESS: BIA Hwy 10
 Lower Brule SD 57548
 PHONE: 44.0679 / 99.5789

CLIENT: Geotek Eng. & Testing Services
 CONTACT: Linda Watts
 INQUIRY #: 3211503.2s
 DATE: November 21, 2011 3:46 pm

West - open Pasture



East - High School - College

2.5 Acres

5-3-18 Berm



5-3-18 Berm, about 10 feet high





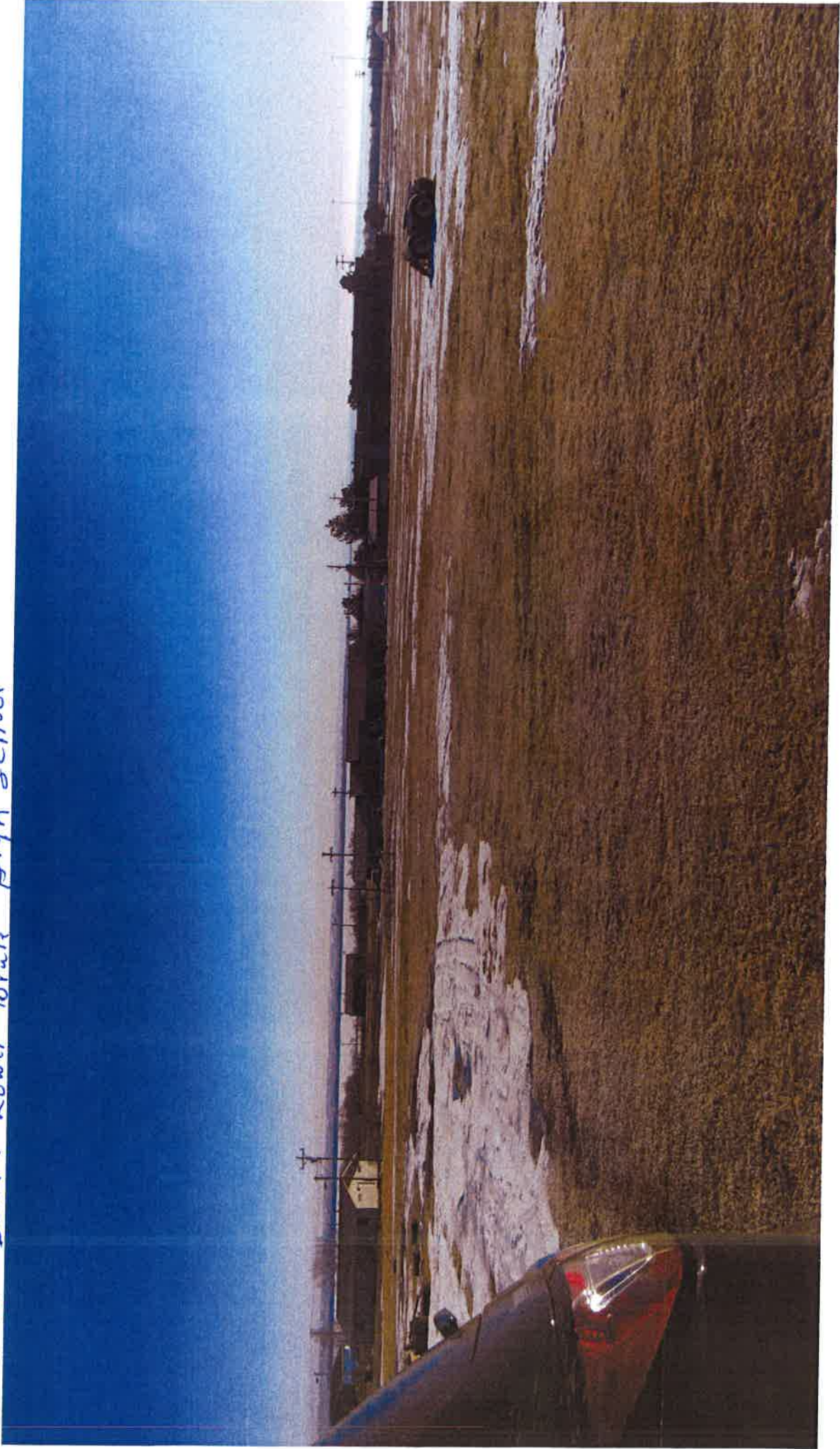
4. 3-13-18



3-13-18 Looking ~~East~~ West



3-13-18 Easth Lower Brule H.gh School



3-13-18 North Facilities Program

