

March 26, 2015

VIA HAND DELIVERY

Darrell Nitschke
Executive Secretary
North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480



**RE: Targa Badlands LLC —
Case Number PU-14-853**

Dear Mr. Nitschke:

Enclosed for filing, please find an original and ten (10) copies of the following documents in connection with the above referenced matter:

1. Replacement pages for pages 1, 3, 4, 6, 7, 8, 11, 18, 19, 20, and 21 of Targa Badlands LLC's Application for a Certificate of Site Compatibility (Docket No. 1, filed December 31, 2014); and
2. Appendix B: Class I and Class III Archaeology Reports, Addendum.

Please note that each replacement page includes updated information and is intended to replace the corresponding page in the original Siting Application. The Class I and Class III Archaeology Report is an addendum and contains supplemental information to the previous archaeology reports provided.

Also enclosed is a CD containing the above-referenced documents in PDF format. The CD also contains an updated Siting Application in its entirety for the convenience of the Commission.

If you should have any questions regarding the above information, please advise.

Sincerely,



LAWRENCE BENDER

LB/dmk
Enclosures

cc: Zack Pelham (*via e-mail*)
Julie Prescott (*via e-mail*)
Tom Meriwether (*via e-mail*)

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1.0 SIZE AND TYPE OF FACILITY

The Little Missouri Gas Plant (LMGP) is a gas processing facility originally built by Saddle Butte Pipeline, LLC (Saddle Butte). The original plant (LMGP I), constructed and operated by Saddle Butte, was designed to provide a gas processing capacity of 21 million standard cubic feet per day (MM SCFD), but was de-rated to 12MM SCFD. In December of 2012, Targa Badlands, LLC (Targa) acquired all Saddle Butte assets in North Dakota. Prior to the acquisition, Saddle Butte had initiated an expansion of the original plant to increase the total capacity to approximately 33MM SCFD through the addition of a 21MM SCFD processing plant (LMGP II). In 2013, Targa completed the construction of the 21MM SCFD LMGP II plant resulting in the combined plant capacity of 33MMSCFD. Targa initiated a second expansion (LMGP III) which was completed in March of 2015. This expansion added an additional plant capable of a processing capacity of 40MM SCFD, increasing the combined total processing capacity to 73 MM SCFD. Finally, a third expansion (LMGP IV) with the capacity of processing up to 200MM SFCD is proposed which may increase net capacity of the facility to 273MM SCFD. This application for a site compatibility certificate includes the original plant purchased from Saddle Butte, as well as all expansions which may raise the net capacity of the plant to 273MM SCFD. A diagram depicting the layout of the plant with current and proposed expansions is shown in Figure 1.

The Facility includes LMGP I, II, III, IV, as well as a natural gas liquids (NGL) storage area, and a planned electric substation, hereinafter referred to as "Facility". The Project specifically refers to the LMGP IV expansion, which will include construction of the electrical substation (the "Project"). Figure 1 shows the locations of the existing components of the Facility as well as the Project. Properties owned by Targa adjacent to the existing Facility and the Project are also shown in Figure 1.

The "Smokey" compressor station is associated with the Facility. The station provides final compression to field gas prior to the gas entering the Facility. The parcel of land between Smokey and LMGP I is a short pipeline corridor for the inlets to the Facility. The parcel to the south of the NGL storage area is likewise owned by Targa, but no plans for this parcel have been developed at this time.

2.0 DESCRIPTION OF THE FACILITY

The Facility will utilize two separate gas processing technologies based upon unit capacity. LMGP I and LMGP II utilize a mild refrigeration process to achieve dew point stability in the product. This will be followed by a stabilizer process and also a de-ethanizing process. This simple process provides both specification compliant gas and liquid products. Liquid products are currently stored in storage vessels and transported out of the facility by truck. Upon completion of a third-party pipeline connection, the liquid products will be transported from the facility by third-party pipeline.

LMGP III and LMGP IV will utilize a cryogenic process typically referred to as the Gas Subcooled Process (GSP). This process enables separation of the various components of the mixed gas entering the plant into products such as residue gas (natural gas sold as fuel to industrial and residential consumers) and Y-Grade natural gas liquids (NGLs, a mixture of ethane, propane, butanes, iso-butane mix, pentanes, and natural gasoline) which will be transported by a third-party pipeline to another facility for additional fractionation.

2.1 Design of the Proposed Facility

The Facility was originally planned to accommodate expansions as the gathering field production profile increased over time, and supply and commercial sale opportunities become available. At the present time, the facility is comprised of the original gas processing unit, LMGP I, and a first expansion, LMGP II, both of which are currently operating. A second expansion, LMGP III, was completed in March 2015. A third expansion, LMGP IV, is in planning stages. With the construction and operation of LMGP IV, the Facility will exceed the allowable "refinement of one hundred million cubic feet of gas per day," and a Certificate of Site Compatibility for an energy conversion facility must be sought. See N.D.C.C. § 49-22-03(5)(c).

The entire Facility will be comprised of four gas processing units. These will be LMGP I, LMGP II, LMGP III, and LMGP IV. The design of the Facility will accommodate the rich gas from the Bakken and Three Forks Formations. The Facility will utilize the varying technologies described above and in Section 2.5 based upon the size of the gas processing unit. Table 1 shows the various technologies utilized in each gas processing unit.

Table 1. Listing of Technologies and Power Ratings for the Gas Processing Units

	LMGP I	LMGP II	LMGP III	LMGP IV
Net Capacity	12MM SCFD	21MM SCFD	40MM SCFD	Up to 200 MM SCFD
Slug Catcher	Shared		Shared	
Cryogenic GSP	No	No	Yes	Yes
Refrigeration (propane compression)	Yes (1400 HP)	Yes (1500 HP)	Yes (800 HP)	Yes (6000 HP)
Stabilizer	3000 SBPB (refluxed)	8000 SBPD (non-refluxed)	8000 SBPD (non-refluxed)	35,000 SBPD (non-refluxed)
Stabilizer overhead compression	557 HP (gas-fired)	566 HP (gas-fired)	700 HP (electric)	2760 HP (gas fired)
De-ethanizer Overhead Compression	Included in Stabilizer	292 HP (gas-fired)	None	None
Residue Compression	840 HP (gas-fired)	1680 HP (gas-fired)	2760 HP (gas-fired)	9248 HP (gas-fired)
Hot Oil Heater	6.0MM BTU/hr	2.47MM BTU/hr	3.5MM BTU/hr	16.7MM BTU/hr
Regenerative Gas Heater	None	None	3.16MM BTU/hr	6.39MM BTU/hr
Waste Heat Recovery	None	None	None	2 x 17MM BTU/hr
Flares	40MM SCFD (shared)		40MM SCFD	TBD
Control Rooms	Shared		Shared	

Key: MM BTU/hr = million British Thermal Units per hour
 HP = Horsepower

A block flow-diagram for the facility, including all expansions is shown in Figure 2.

The Facility will have air emissions resulting from combustion of utility gas and operation of flares. The Facility will have no process water discharge.

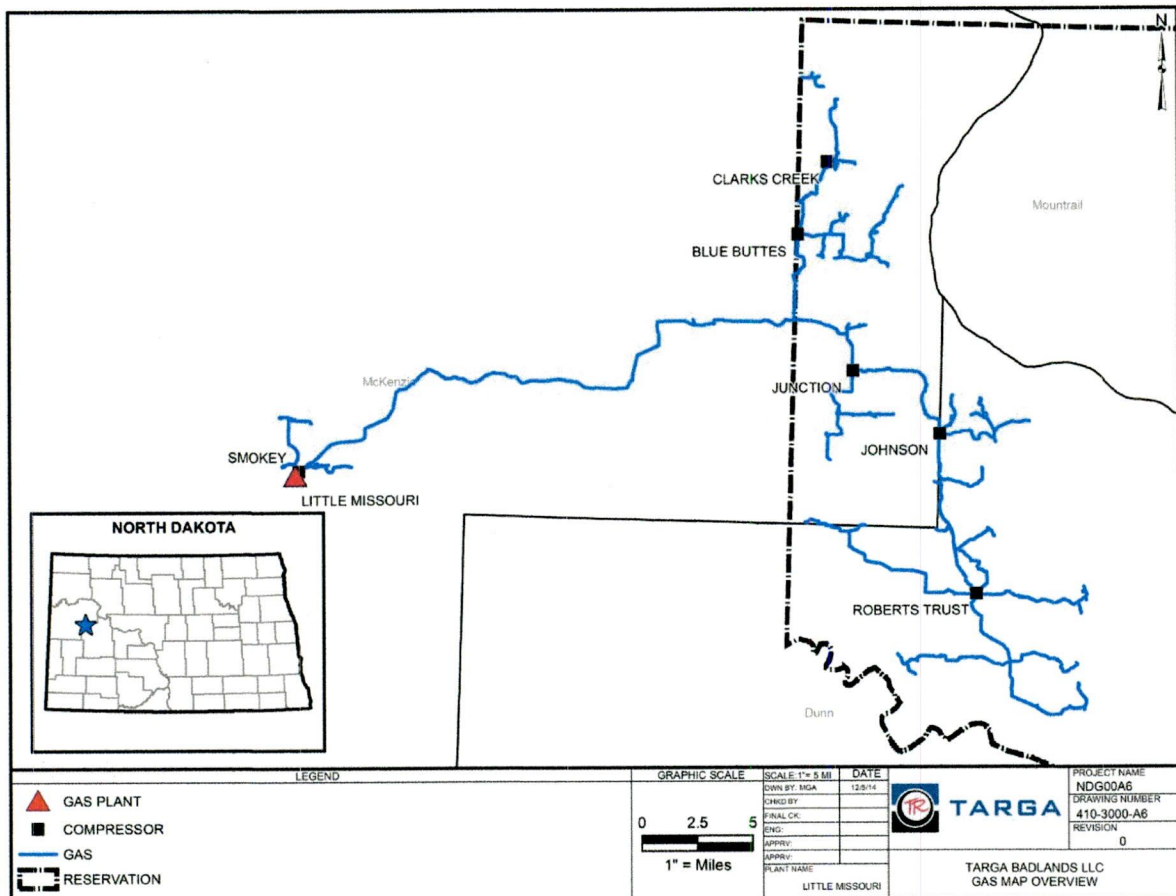
2.2 Purpose of the Proposed Facility

The purpose of the proposed Facility is to convert up to 303MM SCFD of wellhead gas up to 273MM SCFD of saleable gas (residue gas) and NGLs. Residue gas will be transported to market via pipelines. NGLs will be transported to market via pipeline, truck, and rail.

2.3 General Area to be Served

Wellhead gas will be gathered from portions of McKenzie and Dunn Counties, including portions of the Fort Berthold Indian Reservation west of Lake Sakakawea. Wellhead gas will be transported via a gathering pipeline system to the Facility. A map of the gathering system is shown in Figure 3.

Figure 3. Gathering System Map.



Residue gas will be placed into the Northern Border Pipeline, which transects the Facility. Gas transported by the Northern Border Pipeline will serve industrial and residential consumers in the Midwestern United States.

NGLs from LMGP I and LMGP II are currently stored in storage vessels and transported from the Facility by truck. Beginning in March 2015, NGLs from LMGP III are being placed into the Targa Lateral Pipeline, owned and operated by ONEOK Rockies Midstream. Beginning in approximately 2017, NGLs from LMGP I and II will be placed into the Targa Lateral Pipeline. NGLs from LMGP IV will be transported from the Facility by the Targa Lateral Pipeline beginning upon startup of LMGP IV. The Targa Lateral Pipeline will transport the NGLs to facilities in the mid-continent and Gulf Coast regions for additional processing. Following processing, the resulting products will be distributed to various markets.

2.4 Gross and Net Capacity

After addition of LMGP IV, the gross capacity of the Facility will be more than 303MM SCFD. The net capacity of the plant will be up to 273MM SCFD of gas and up to 54,000 standard barrels per day of NGLs. Approximately 5.2MM SCFD of gas will be consumed on-site for utility purposes, including electrical power generation, powering gas compressors, and operation of the flares.

2.5 Technology to be Deployed/Employed

The gas processing technology currently utilized in LMGP I and LMGP II utilizes refrigeration methods. Gas to be processed in LMGP III and LMGP IV will utilize a cryogenic process referred to as the “Gas Subcooled Process”. Both processes involve numerous steps.

The first process step involves of “slugs” of condensate that may arrive at the site with the field grade natural gas. The unit used to remove the slugs of condensate simply called the “slug catcher”. Condensate captured in this unit will be moved to the stabilizer plant, the stabilized liquid then can be pumped the Targa Lateral Pipeline or moved to an onsite storage tank until it is transported off-site for sales.

The second process step involves compression of the gas. The increased pressure results in liquefaction of a portion of the NGLs. Separation of the gas and removal of the liquid phase occurs in the stabilizer towers.

The third process step involves the removal of moisture from the gas stream. This is achieved in a mole sieve unit, wherein two columns possessing mole sieve sorbent are utilized to scrub produced water from the gas stream. Only one column is in use at a time. While one column is removing produced water from the gas stream, the other column is undergoing “regeneration”. After the second column is regenerated, and the first column is “saturated”, the process stream is switched between the columns, and the saturated column begins the regeneration process.

The fourth process step involves separation of the remaining NGLs from the gas stream. This involves cooling the gas stream with cryogenic technology to a temperature whereby the NGLs fraction (beginning with ethane) is removed from the gas stream. Effective ethane removal is a key economic driver in the use of this technology.

Part of the cryogenic process involves effective heat transfer between outgoing and incoming gas streams. The outgoing residue gas is allowed to expand in volume, resulting in an isentropic expansion over a turboexpander. Simultaneously, incoming field gas is compressed, which increases the temperature of the gas stream. Exchange of heat between the two streams results in cooling of the incoming field gas and simultaneous warming of the outgoing residue gas. The heat exchange process provides thermal efficiency to the process. NGL product from the stabilizer tower and the cryogenic unit will be combined and ultimately placed into the Targa Lateral Pipeline which will then transport the NGLs product to the ONEOK Bakken NGL pipeline (“ONEOK Pipeline”), which originates near Sidney, Montana. The

residue gas, gas which has been stripped of the vast majority of NGL components, will be placed into the Northern Border Pipeline.

A portion of the gas and NGL produced will fuel a flare. The flare is continuously available in event of a “plant upset”, which is a sudden shutdown condition in the gas processing stream that requires diversion of the process gas away from a non-functioning unit. Rather than vent the heavier than air process gas to atmosphere, and risk a fire or explosion of the gas on plant site, the process gas will be safely combusted by the flare.

Various other plant features will support the gas processing units. These will include motor control center equipment and buildings, instrument air, drain systems, a control room, office and warehouse buildings, metering systems and buildings, truck loading systems, and site security systems.

2.6 Type of Product to be Transmitted

Primary products to be produced are residue gas and NGLs. Table 2 shows the projected volumes of products to be produced.

Table 2: Total Product Volumes to be Produced

Product Name	Volume Produced
Residue Gas	Up to 273MM SCFD
NGLs	Up to 54,000 BPD

2.7 Source of Product to be Transmitted

Wellhead gas will be gathered from portions of McKenzie and Dunn Counties, including portions of the Fort Berthold Indian Reservation west of Lake Sakakawea. Wellhead gas will be transported by gathering pipeline systems to the Facility.

2.8 Final Destination of Product

Residue gas will be placed into the Northern Border Pipeline, which transects the Facility. Gas transported by the Northern Border Pipeline will serve industrial and residential consumers in the Midwestern United States.

NGLs produced by LMGP I and II are currently stored in storage vessels and transported from the Facility by truck. Beginning in March 2015, NGLs from LMGP III are being placed into the Targa Lateral Pipeline, which was built, and is owned and operated by ONEOK Rockies Midstream. Beginning in approximately 2017, NGLs from LMGP I and II will be placed into the Targa Lateral Pipeline. NGLs from LMGP IV will be transported from the Facility by the Targa Lateral Pipeline beginning upon startup of LMGP IV. This pipeline will transport the NGL product to facilities in the mid-continent and Gulf Coast regions for additional processing. Following processing, the resulting products will be distributed to various markets.

2.9 Estimated Thermal Efficiency of the Process

The estimated thermal efficiency of the process is 76%. This is calculated by dividing the total thermal value of products sold by the thermal value of the wellhead gas taken into the inlet of the plant. Since some fuel gas will be burned on site for utility purposes, the thermal value of the fuel gas is not included with the thermal value of the products.

Table 4: Surface Structure Locations

Component Name	Location (Township-Range-Section)
LMGP I	T149N-R98W-S30-SE1/4-SE1/4
LMGP II	T149N-R98W-S30-SE1/4-SE1/4
LMGP III	T149N-R98W-S29-SW1/4-SW1/4
LMGP IV	T149N-R98W-S29-SW1/4-SW1/4

A site location map is shown in Figure 4.

2.14 Merits and Detriments of the Preferred Location

The major merit of the Facility location is proximity and therefore access to the Northern Border Pipeline. Figure 5 shows the location of the pipeline in relation to the Facility. This co-siting of the Facility adjacent to the Northern Border Pipeline allows for direct supply of residue gas to the pipeline. Additionally, the location has a connection to the Targa Lateral Pipeline for transportation of NGLs.

with the GCP, as well as flaring reduction targets, could result in production restrictions recently implemented by the Industrial Commission. Additional gas processing capacity is needed in North Dakota in order for oil and gas producers to avoid flaring wellhead gas, or reducing production.

3.1 Need for the Facility

As part of the proposed and enacted regulation of gas flaring, North Dakota has established reduced flaring goals for the industry to meet. Key targets are linked to maximum allowed percent flaring by certain dates. Targets are no more than 26% of gas being flared by the end of the fourth quarter of 2014; no more than 23% of gas being flared by the end of the first quarter of 2015; and 10% with the potential for 5% of gas being flared by the fourth quarter of 2020.

Volumes of gas produced, sold, and flared in North Dakota for the third quarter months of 2014 are shown in Table 5 (NDIC, 2014). The calculated percentage of gas flared is provided for reference.

Table 5: Monthly Volumes of Gas Produced, Sold, and Flared in North Dakota

Millions of Cubic Feet	July 2014	August 2014	September 2014
Gas Produced	40,119	41,703	42,103
Gas Sold	28,161	28,879	30,131
Gas Flared	10,822	11,482	10,420
% Gas Flared	26.97%	27.53%	24.75%

Further, flaring of gas on the Fort Berthold Indian Reservation is above the state average, with approximately 35% of wellhead gas being flared in August of 2014 (Scheid 2014). This is well above the State average, and indicates a need for gathering and processing of gas produced on the Fort Berthold Indian Reservation.

The proposed Project will ultimately process up to 303 million standard cubic feet of gas per day, providing equivalent production of up to 273 million standard cubic feet of residue gas per day plus up to 54,000 SBPD of NGLs to industrial and residential consumers.

3.2 Alternatives to the Proposed Facility

There are no reasonable alternatives to a full-scale gas processing plant facility. In certain instances, deployment of “LNG-in-a-box” skid systems may provide some relief from flaring of the full spectrum of wellhead gas components, but such systems require nearly continuous truck traffic to supply empty tube trailers and remove filled tube trailers.

Another alternative is the use of on-site power generation systems, which consume wellhead gas or separated components to provide power to remote pump jacks and supporting electric and electronic systems. However, these systems are not always applicable at every well pad. Further, only small amounts of gas are used in the utilization of these systems, making the only reasonable alternative a gas processing plant facility.

3.3 Alternative Methods for Serving Need

When viewed from a perspective for the need of additional gas processing capacity, at an estimated daily volume of up to 273 million standard cubic feet of gas, very few options are economically and technically viable in processing such large volumes. A full-scale gas plant is the only option which can readily

process a large volume of gas, remove valuable liquid components (NGLs), and provide a residue gas directly to a pipeline, all within economically viable boundaries.

4.0 SCHEDULE

4.1 Certificate of Site Compatibility

A Certificate of Site Compatibility is anticipated to be issued by the Commission on or before December 1, 2015.

4.2 Land acquisition

The expansion of LMGP III and LMGP IV will occur entirely within land owned by Targa and, as such, no additional land acquisition is required.

4.3 Construction Start Date

Targa will begin construction of LMGP IV upon receipt of necessary authorizations. Targa currently anticipates construction will commence on or before June 1, 2016.

4.4 Construction Completion Date

Targa currently anticipates construction of LMGP IV to be completed by June 1, 2017.

4.5 Test Operations

Targa currently anticipates test operations of LMGP IV will be completed by July 15, 2017.

4.6 Commencement of Commercial Production

Targa currently anticipates commencement of operations of LMGP IV will begin by July 31, 2017.

4.7 Any Expansions or Additions

Targa is considering a possible addition of a Reid Vapor Pressure unit immediately to the south of LMGP III, as shown on Figure 4. Targa anticipates this addition could occur in 2017.

A schedule for the development of the Facility is presented in Table 6.

Table 6: Permitting Schedule for The Little Missouri Gas Facility

Project	Start Construction	Complete Construction	Commissioning	Commencing Operations
LMGP I				July 8, 2011
LMGP II				Sept. 10, 2013
LMGP III				March 4, 2015
LMGP IV	June 1, 2016	June 1, 2017	July 15, 2017	July 31, 2017

5.0 POLICIES

5.1 Discussion of Utility's Policies and Commitments to Limit the Environmental Impact, Including Board Resolutions/Management Directives

5.1.1 Health and Safety

Targa's Environmental, Safety and Health Program focuses on protecting people, communities, and the environment. Targa is committed to protecting the health and safety of all employees, the people living in the communities in which Targa works, and everyone who uses Targa products. Wherever the company operates, Targa conducts business with respect and care for the environment and systematically manages risks to drive sustainable business growth. Targa's goal is to eliminate all injuries, occupational illnesses, unsafe practices, and incidents of environmental harm from all company activities.

At Targa, each employee is responsible for his or her own safety and as such, anyone may stop work at any time he or she believes a particular job or situation to be unsafe. As a result, employees are empowered to take the time to do a job right, so that everyone goes home safely each day to their families. Targa focuses on safety and health extends beyond company employees to all contract employees. To that point, Targa requires all contract employees to be ISN Network-certified contractors and to comply with Targa's safety and health policies and procedures.

The OSHA Process Safety Management regulates Targa's gas plants and many of the company's storage terminals. Targa strives to design, operate, and audit its facilities according to industry standards and best management practices. Targa management is proud of the company's safety record, especially during these times when the industry segment is seeing rapid growth and expansion.

Targa employees live and work in the same community where the company's facilities are located. As such, it is the company's goal is to be a corporate neighbor of choice. This means being committed to the advancement of communities, encouraging environmental sustainability, and working hand-in-hand with Targa facilities' neighbors to address their concerns. Targa supports community initiatives and participates in, or provides support to, local fundraising events, festivals, charities, and school sports.

5.1.2 Environmental Management

Targa works to protect the environment—home to its employees and customers. Protection of the environment is an integral component of the way Targa conducts business. Environmental protection efforts span the life of each project, from planning through construction, restoration, and into full operation.

Environmental data collected to date include information on soils, land use, wetland and waterbody crossings, protected species, and cultural resources. Targa will continue to work with appropriate regulatory agencies and will continue to gather comprehensive information during the permitting process.

To support Targa's efforts in this area, the company has implemented a strong environmental management system that includes automated permit compliance tracking, systems development, compliance audits, and training. In addition, Targa actively works with federal and local agencies on new regulations, technology options, and benchmarking. For example, Targa is a member company of the EPA Natural Gas STAR Program, which is a voluntary partnership between the EPA and oil and natural gas companies to adopt cost effective technologies and practices to reduce emission of methane.

Because the Facility is a permanent, ongoing system, Targa has a continuing commitment to conduct its operations in an environmentally responsible manner. Substantial, continual effort is placed on mechanical integrity, operational safeguards, emergency response, and landowner relationships, all of which reduce the impact of the Facility on the environment. As needed, Targa supplements its internal environmental staff with engineering and environmental consultants to assure compliance with environmental regulations and applicable company policy.

5.2 Justification for Any Deviations from the Applicant's Most Recent Ten Year Plan

Targa submitted a Ten-Year Plan for 2014–2024 to the Commission in June 2014. The plan included the intent to construct an expansion of the Facility within the ensuing five years. Targa has submitted a revised Ten-Year Plan in connection with this application reflecting current plans.

6.0 STUDIES

6.1 Study Area

The study area includes three parcels of land within the Facility Area (Figure 5) that have been or are being developed as a natural gas processing plant or where further expansion of the Facility is proposed. Parcels 1 and 2 are each 40 acres in size and are adjacent to one another, east to west. Parcel 3 is 13 acres in size, and is located immediately north of Parcel 2. In addition, the study area includes areas within ½ mile of these parcels for raptor nests only. Figure 6 depicts the study area and Facility features.

**Appendix B:
Class I and Class III Archaeology Reports,
Addendum**

MANUSCRIPT DATA RECORD FORM

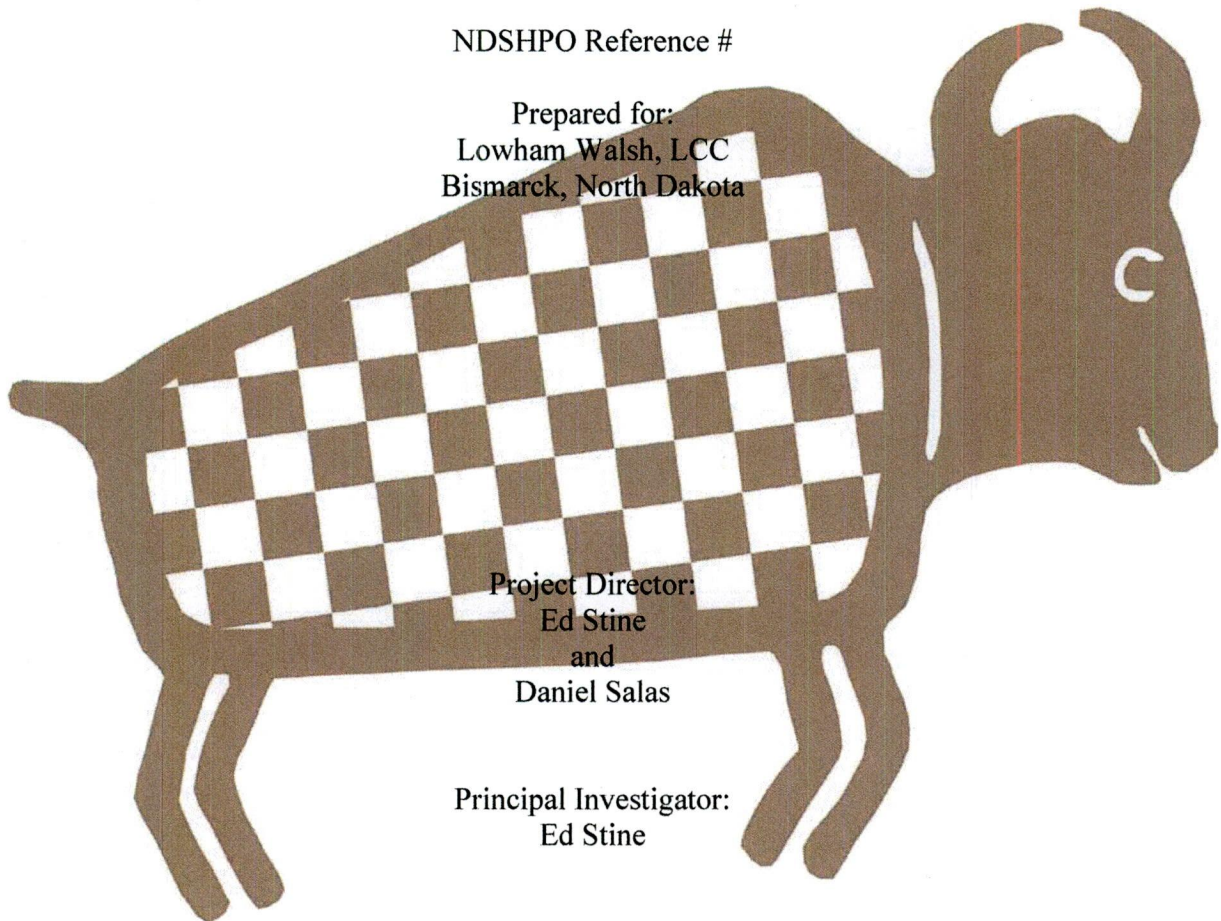
1. Manuscript Number:
2. SHPO Reference #:
3. Author(s): Dierdre Snortland-Banks
4. Title: Targa Badlands, LLC's Little Missouri Gas Plant Expansion: A Class III Cultural Resource Inventory in McKenzie County, North Dakota
5. Report Date: March 2015
6. Number of Pages: 14
7. Type: I
8. Acres: 13 Acres
9. Legal Location(s):

County	TWP	R	SEC	SU
McKenzie	149N	98W	29 and 30	LM

**TARGA BADLANDS, LLC'S
LITTLE MISSOURI GAS PLANT EXPANSION:
A CLASS III CULTURAL RESOURCE INVENTORY IN
MCKENZIE COUNTY, NORTH DAKOTA**

NDSHPO Reference #

Prepared for:
Lowham Walsh, LCC
Bismarck, North Dakota



Project Director:
Ed Stine
and
Daniel Salas

Principal Investigator:
Ed Stine

Prepared by:
Dierdre Snortland-Banks
Metcalf Archaeological Consultants, Inc.
Bismarck, North Dakota

March 2015

Locational information for archaeological and historic sites is protected under North Dakota Century Code § 55-02-07.
All reports (Class I, II, III, Testing, or Data Recovery) or any loose maps that will be distributed outside the agency or client should not contain site locational information. Site locational information includes the location of a site on a topographic map or aerial photographs, the location of a site in tables, such as Township, Range, and Section, or photograph of sites. It is acceptable to mention the Smithsonian Trinomial designation (e.g., 32EM0123) as this does not contain locational information, other than state and county.



Metcalf
Archaeological
Consultants, Inc.

ABSTRACT

Targa Badlands, LLC proposes to expand the Little Missouri Gas Plant located approximately 1.8 mile east of Highway 85 in McKenzie County, North Dakota. Lowhman Walsh, LLC contacted Metcalf Archaeological Consultants, Inc. on behalf of Targa Badlands, LLC to conduct a Class III cultural resource inventory of the project area. The Public Service Commission is the lead agency for this undertaking. Fieldwork was conducted on December 11, 2014 by Metcalf Principal Investigator Ed Stine and Archaeological Technicians Bill Christensen and Lynsee Langsdon. The inventory area was a 40-acre block, the majority of which has been disturbed and mostly covered with existing structures. Metcalf Archaeological Consultants, Inc.'s archaeologists revisited a previously recorded precontact site, 32MZ474. Precontact site 32MZ474, a lithic scatter, was originally recorded in 1980 by UNDAR as part of the Northern Border Pipeline inventory. UNDAR recommended the site as *not eligible* for inclusion on the National Register of Historic Places and construction of the pipeline proceeded through the site area. When Metcalf archaeologists visited the site, they found the location devoid of vegetation and covered with backdirt from construction activities. No artifacts or features were observed. Pipeline construction has destroyed the southern portion of the site and landscaping the northern portion; only a small finger of the site between the two areas may remain. The site has lost all integrity as a result of cultivations, pipeline construction, and recent landscaping. Metcalf concurs with UNDAR's recommendation: the site is *not eligible* for the NRHP. On March 13, 2015 further fieldwork was conducted on an additional 13 acres by Project Director Daniel Salas and Archaeological Technician Lynsee Langsdon. No other cultural resources (i.e., sites, buildings, structures, objects, or districts that are at least 50 years in age) were encountered during the inventory. Metcalf recommends a finding of *No Historic Properties Affected* (36CFR800.4[d][1]) for the proposed undertaking as surveyed, mapped, and documented herein.

Metcalf Archaeological Consultants, Inc.

Paul Pansegrau
Loham Walsh, LLC
107 West Main Avenue, Suite 325
Bismarck, North Dakota 58501

December 19, 2014

RE: Class III Cultural Resource Inventory for the Proposed Little Missouri Gas Plant Expansion
Located in McKenzie County, North Dakota

Dear Mr. Pansegrau:

Metcalf Archaeological Consultants, Inc. (Metcalf) attempted to conduct a Class III Cultural Resource Inventory of the proposed Little Missouri Gas Plant expansion in McKenzie County, North Dakota on December 11, 2014. Field personnel included Principal Investigator Ed Stine Archaeological Technicians Bill Christensen and Lynsee Langsdon. Snow cover over most of the project area reduced ground surface visibility and precluded systematic inventory coverage of the area of potential effects. Metcalf were

The one area where snow had melted was the location of site 32MZ474, a lithic scatter recorded in 1980 by UNDAR as part of the Northern Border Pipeline inventory. The site was described as a small dispersed lithic scatter situated on the top and upper slopes of a small knoll above Spring Creek with artifacts scattered over a 150 x 150 meter area in a plowed field. UNDAR collected 19 pieces of flaking debris and eight tools, including a side notched projectile point, and excavated seven shovel probes. None of the probes yielded cultural remains. UNDAR recommended the site as not eligible for inclusion on the National Register of Historic Places and that construction of the pipeline proceed. When Metcalf archaeologists visited the site, they found the area devoid of vegetation and covered with backdirt. It was unclear if the backdirt was hauled in or the result of local landscaping. They did not observe any artifacts or features. The site has lost all integrity as a result of cultivations, pipeline construction, and recent landscaping. Pipeline construction has destroyed the southern portion of the site and landscaping the northern area; only a small finger of the site between the two areas may remain. Metcalf concurs with UNDAR's recommendation: the site is not eligible for the NRHP. The site condition is documented on the attached photographs.

Sincerely,



Ed Stine
Principal Investigator

Metcalf Archaeological Consultants, Inc., P.O. Box 2154 Bismarck, ND 58502
Office 701-258-1215 | Fax 701-258-7156 | Email: macnodak@metcalfarchaeology.com



Metcalf
Archaeological
Consultants, Inc.



View to the west over landscaped portion of 32MZ474 (Image 2245).



View to the west over landscaped portion of 32MZ474 (Image 2246).