

**OPERATING PERMIT APPLICATION  
MONTANA LIMESTONE RESOURCES**

**APPENDIX A-9  
BASELINE ENERGY REPORT**

Revised September 2017

**BASELINE ENERGY STUDY**  
**MONTANA LIMESTONE RESOURCES PROJECT,**  
**GRANITE COUNTY, MONTANA**

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## 1.0 INTRODUCTION AND STUDY AREA

This report describes the existing energy sources in the vicinity of the Montana Limestone Resources Project. The Project will be developed on private land located in northeastern Granite County, approximately one mile west of Drummond, Montana. The study area (Figure 1) is located in all or portions of Sections 1 and 2, T10N, R13W; Section 31, T11N, R12W; and Sections 23, 25-28 and 34-36, T11N, R13W, comprising the former Bar-Four-Bar Ranch and totaling 3,520 acres (5.5 square miles). The northeast boundary of the study area is located less than one mile southwest of the Clark Fork River and Interstate-90.

## 2.0 METHODS

This report provides publically available information on existing electrical, petroleum, and natural gas utilities within a four-mile radius of the center of the study area. The following information sources were consulted for the baseline energy study:

- National Pipeline Mapping System (NPMS) public map viewer
- Pipeline Association for Public Awareness (PAPA) map service
- Phillips66 Pipeline web resources
- Montana Department of Environmental Quality (DEQ) Major Facility Siting Program transmission line data
- U.S. Geological Survey (USGS) topographic maps

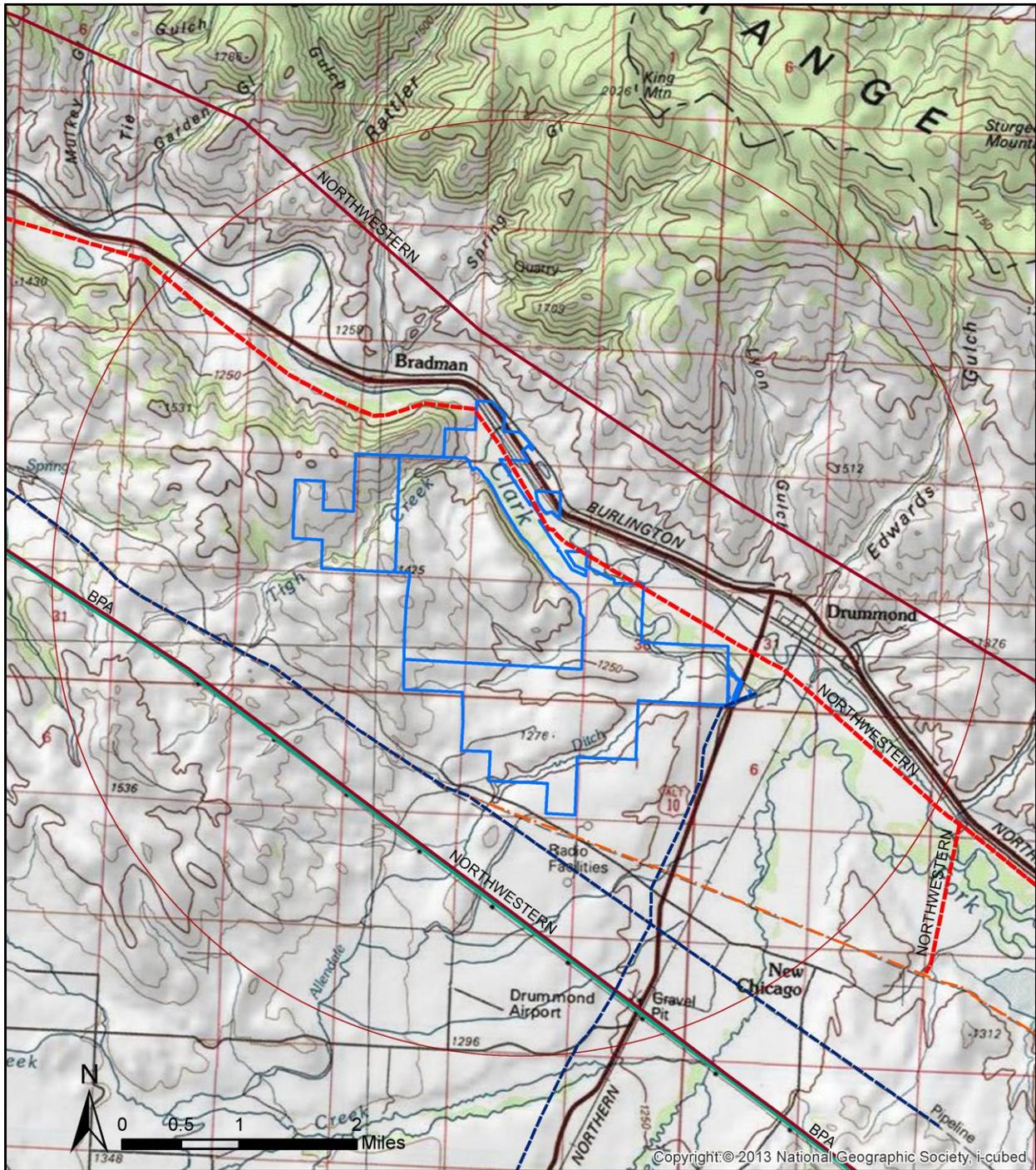
The pipeline resources provided location information for oil and gas transmission lines, but not for smaller gathering or distribution lines. Electrical transmission line information is presented for lines greater than 100 kilovolts (kV) capacity.

## 3.0 RESULTS

### 3.1 PIPELINES

Two pipelines are located south of the Project area and one to the east (Figure 1). One of the pipelines south of the study area is a natural gas pipeline operated and maintained by NorthWestern Energy and the second is the Yellowstone Pipeline, a non-highly volatile liquid<sup>1</sup> (non-HVL) petroleum pipeline owned by Phillips66 Pipeline LLC. Both pipelines follow an east-west route. A third NorthWestern Energy natural gas pipeline is located east of the Project area, and predominantly parallels MT Highway 1 south from Drummond, Montana to Phillipsburg, Montana.

<sup>1</sup>Highly volatile liquids (HVL) are gaseous at atmospheric temperature and pressure, but are transported in a liquid state, under pressure. Examples of HVL are liquefied petroleum gases such as propane, butane, and natural gas liquids. Conversely, non-HVL liquids remain in a liquid state under atmospheric temperature and pressure. Non-HVL refers to hundreds of possible liquids from acetic acid to xylene, including gasoline & diesel fuel (American Petroleum Institute 2005).



**Legend**

- |                     |                                      |
|---------------------|--------------------------------------|
| Study area boundary | <b>Electrical Transmission Lines</b> |
| Four-mile radius    | 100 kilovolt (kV)                    |
| <b>Pipelines</b>    | 161 kV                               |
| NorthWestern Energy | 230 kV                               |
| Phillips66 Pipeline |                                      |

Montana Limestone Resources  
Baseline Energy Study

**Figure 1**  
**Project Location and Energy Network**

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The Yellowstone Pipeline is an interstate pipeline that transports liquid fuels from Billings, Montana to Spokane, Washington (Phillips66 Pipeline LLC 2014). There are multiple diameters listed for the pipeline in the NPMS database, but none larger than 10 inches (NPMS 2014). Both NorthWestern Energy pipelines are intrastate natural gas lines; diameters for these pipelines are not listed in the NPMS database. The NorthWestern Energy natural gas line south of the study area is part of a larger transmission network spanning neighboring counties. There are no reported liquid natural gas (LNG) plants or breakout tanks listed for Granite County (NPMS 2014). Although the locations of smaller gathering and/or distribution lines are not reported in the NPMS database, it is likely there are distribution lines providing natural gas to the residences on the east side of the study area. Table 1 provides the product type, owner, and distance of each pipeline from the study area boundary.

**Table 1  
Pipelines within Four Miles of the MLR Study Area Center**

<b>Pipeline Product</b>	<b>Name/Ownership</b>	<b>Distance &amp; Direction from Study Area Boundary<sup>1</sup></b>
Non-HVL petroleum (gasoline, diesel fuel, Jet A fuel)	Yellowstone Pipeline/ Phillips 66 Pipeline LLC	0.14 miles, South
Natural gas	Unnamed/ NorthWestern Energy	0.39 miles, South
Natural gas	Unnamed/ NorthWestern Energy	<0.1 miles, East

<sup>1</sup> Approximate distance as measured from the study area boundary (see Figure 1).

### **3.2 ELECTRICAL TRANSMISSION LINES**

Four electrical transmission lines with a capacity of 100kV or greater are present within a four-mile center of the study area (Figure 1). NorthWestern Energy owns and operates three of the four: a 100kV line north of the study area and two 161kV lines north and south of the study area. All three of these lines are in service (NorthWestern Energy 2014). The study area overlaps approximately one-half mile of the 100kV line. The Bonneville Power Administration operates the fourth, a 230kV transmission line south of the study area (DEQ 2014). Smaller distribution lines in the range of 25kV to 4160kVa provide service to businesses and residences in the Drummond area (NorthWestern Energy 2014). Table 2 lists the transmission lines and the distance of each line from the study area.

**Table 2**  
**Electrical Transmission Lines within Four Miles of the MLR Study Area Center**

<b>Transmission Line Capacity</b>	<b>Ownership</b>	<b>Distance &amp; Direction from Study Area Boundary<sup>1</sup></b>
100 kilovolts	NorthWestern Energy	<0.1 miles, North/Northeast
161 kilovolts	NorthWestern Energy	0.52 miles, North 1.02 miles, South
230 kilovolts	Bonneville Power Administration	1.02 miles, South

<sup>1</sup> Approximate distance as measured from the study area boundary (see Figure 1).

#### 4.0 LITERATURE CITED

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