

United States Department of the Interior
Bureau of Land Management

Environmental Assessment DOI-BLM-MT-C020-2012-159-EA
~~May 21, 2012~~ July 25, 2012

Project Title: Oil and Gas Lease Parcel, October 23, 2012 Sale

Location: Miles City Field Office (see Appendix A for list of lease parcels by number and legal description and Maps 1-12)



**Miles City Oil and Gas Lease Sale EA
DOI-BLM-MT-C020-2012-159-EA**

CONTENTS

	<u>Page</u>
1.0 PURPOSE and NEED.....	1
1.1 Introduction.....	1
1.2 Purpose and Need for the Proposed Action.....	1
1.3 Conformance with BLM Land Use Plan(s).....	2
1.4 Public Scoping and Identification of Issues.....	3
2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION.....	5
2.1 Alternative A (No Action).....	5
2.2 Alternative B (Proposed Action).....	5
2.3 Alternative C (BLM Preferred).....	5
2.4 Additional Considerations for Alternatives B and C.....	5
3.0 AFFECTED ENVIRONMENT.....	7
3.1 Introduction.....	7
3.2 Air Resources.....	7
3.3 Soil Resources.....	15
3.4 Water Resources.....	16
3.5 Vegetation Resources.....	18
3.6 Special Status Species.....	21
3.7 Fish and Wildlife.....	29
3.8 Cultural Resources.....	32
3.9 Native American Religious Concerns.....	33
3.10 Paleontology.....	35
3.11 Visual Resources.....	36
3.12 Forest and Woodland Resources.....	39
3.13 Livestock Grazing.....	42
3.14 Recreation and Travel Management.....	42
3.15 Lands and Realty.....	43
3.16 Minerals.....	44
3.17 Special Designations.....	45
3.18 Social and Economic Conditions.....	45
4.0 ENVIRONMENTAL IMPACTS.....	50
4.1 Assumptions and Reasonably Foreseeable Development Scenario Summary.....	50
4.2 Alternative A (No Action).....	51
4.3 Alternative B (Proposed Action).....	53
4.4 Alternative C (BLM Preferred).....	82
5.0 CONSULTATION AND COORDINATION.....	92
5.1 Persons, Agencies, and Organizations Consulted.....	92
5.2 Summary of Public Participation.....	92
5.3 List of Preparers.....	93
6.0 REFERENCES.....	94
7.0 DEFINITIONS.....	102

APPENDICES

Appendix A – Descriptions of Lease Parcels and Lease Stipulations

Appendix B –Miles City Field Office Stipulation Descriptions

Appendix C – Description of Reasonably Foreseeable Development Scenario Forecast for Analysis Area

Appendix D –Potential Surface Disturbance Associated with Oil & Gas Exploration and Development

Appendix E –Additional Information on Long Medicine Wheel Site and Adjacent Area

Appendix F –Description of Lease Parcel ROW Encumbrances on BLM Surface

MAPS

Map 1– All Nominated Lease Parcels

Map 2– East Sheridan Lease Parcels

Map 3– McCone County Area 1 Lease Parcels

Map 4– McCone County Area 2 Lease Parcels

Map 5– McCone County Area 3 Lease Parcels

Map 6– McCone County Area 4 Lease Parcels

Map 7– McCone County Area 5 Lease Parcels

Map 8– McCone County Area 6 Lease Parcels

Map 9– McCone County Area 7 Lease Parcels

Map 10– South Richland County Lease Parcels

Map 11– North Richland County Lease Parcels

Map 12– Sheridan County Lease Parcels

Map 13– Deferred Lease Parcels

FIGURES

Figure A– Trends in haze index (deciview) on clearest days, 1998-2007

Figure B– Regional climate summary of spring temperatures (March-May) for the West North Central Region (MT, ND, SD, WY), from 1895-2007

Figure C– Regional climate summary of spring temperatures (March-May) for the West North Central Region (MT, ND, SD, WY), from 1991-2005

TABLES

Table 1– US EPA – Air data air quality index report – field office summary (2009-2011)

Table 2– MT NHP and USFWS riparian and wetland areas within lease parcels

Table 3– MT species of concern and BLM sensitive plants in or near lease parcels

Table 4– Aquatic sensitive or special status wildlife species in the analysis area

Table 5– Endangered or sensitive aquatic wildlife species that occur in, or their ranges overlap with, the lease parcels

Table 6– Analysis area occurrence of BLM terrestrial sensitive species and USFWS threatened, endangered, candidate or proposed terrestrial species

Table 7– Site types of concern to Native American within a lease parcel or within the same section as the lease parcel

Table 8– VRM Classes for the analysis area by lease parcel

Table 9– Forestland acreage and forest type by lease parcel

Table 10–Number of parcels, surface ownership, and acres by County

Table 11–Existing development activity

Table 12–Oil and gas leasing and existing development within townships containing parcels

Table 13—Current contributions of federal oil and gas leasing, exploration, development, and production to the 16-county local economy

Table 14—Summary comparison of estimated average annual economic impacts

Table 15—Summary comparison of cumulative annual economic impacts by alternative

Table 16—Summary comparison of employment and income by alternative

Table 17—BLM projected annual emissions of GHGs associated with oil and gas exploration and development activity in the MCFO

Table 18—Selected methane emission reductions reported under the USEPA Natural Gas STAR Program¹

Table 19—Projected non-BLM GHG emissions associated with the MCFO RFD Scenario for fluid mineral exploration and development

Table 20—BLM surface acres deferred by VRM classification

Table 21—List of preparers

Table D-1—Total RFD projected disturbance for oil and gas wells and associated facilities

Miles City Field Office Oil and Gas Lease Sale Parcel Reviews

DOI-BLM-MT-C020-2012-159-EA

1.0 PURPOSE AND NEED

1.1 Introduction

It is the policy of the Bureau of Land Management (BLM) to make mineral resources available for use and to encourage development of mineral resources to meet national, regional, and local needs. This policy is based on various laws, including the Mineral Leasing Act of 1920 and the Federal Land Policy and Management Act of 1976. The Federal Onshore Oil and Gas Leasing Reform Act of 1987 Sec. 5102(a)(b)(1)(A) directs the BLM to conduct quarterly oil and gas lease sales in each state whenever eligible lands are available for leasing. The Montana State Office conducts mineral estate lease auctions for lands managed by the federal government, whether the surface is managed by the Department of the Interior (BLM or Bureau of Reclamation), United States Forest Service, or other departments and agencies. In some cases the BLM holds subsurface mineral rights on split estate lands where the surface estate is owned by another party, other than the federal government. Federal mineral leases can be sold on such lands as well. The Montana State Office has historically conducted five lease sales per year.

Members of the public file Expressions of Interest (EOI) to nominate parcels for leasing by the BLM. From these EOIs, the Montana State Office provides draft parcel lists to the appropriate field offices for review. BLM field offices then review legal descriptions of nominated parcels to determine: if they are in areas open to leasing; if new information has come to light which might change previous analyses conducted during the land use planning process; if there are special resource conditions of which potential bidders should be made aware; and which stipulations should be identified and included as part of a lease. Ultimately, all of the lands in proposed lease sales are nominated by private individuals, companies, or the BLM, and therefore represent areas of high interest.

This environmental assessment (EA) has been prepared to disclose and analyze the potential environmental consequences from leasing all 203 nominated lease parcels encompassing a total of 85,758.14 surveyed federal mineral acres located in the Miles City Field Office (MCFO), to be included as part of a competitive oil and gas lease sale tentatively scheduled to occur in October 23, 2012.

The analysis area includes the 203 nominated parcels in Daniels, McCone, Richland, and Sheridan counties (Map 1).

1.2 Purpose and Need for the Proposed Action

The purpose of offering parcels for competitive oil and gas leasing is to provide opportunities for private individuals or companies to explore for and develop federal oil and gas resources after receipt of necessary approvals and to sell the oil and gas in public markets.

This action is needed to help meet the energy needs of the people of the United States. By conducting lease sales, the BLM provides for the potential increase of energy reserves for the

U.S., a steady source of income, and at the same time meets the requirement identified in the Energy Policy Act, Sec. 362(2), Federal Oil and Gas Leasing Reform Act of 1987, and the Mineral Leasing Act of 1920, Sec. 17.

The decision to be made is whether to sell oil and gas leases on the lease parcels identified, and, if so, identify stipulations that would be included with specific lease parcels at the time of lease sale.

1.3 Conformance with Land Use Plan(s)

This EA is tiered to the information and analysis and conforms to the decisions contained in the Big Dry Resource Management Plan (RMP/EIS) of April 1996 and the Powder River RMP/EIS of March 1985, as amended (1994 Oil and Gas RMP/EIS Amendment, 2003 Final Statewide Oil and Gas Environmental Impact Statement and proposed Amendment of the Powder River and Billings RMPs, and the 2008 Final Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Proposed Amendment of the Powder River and Billings RMPs). The Big Dry and Powder River RMPs are the governing land use plans for the MCFO. The lease parcels to potentially be offered for sale are within areas determined to be open to oil and gas leasing in the Big Dry and Powder River RMPs. An electronic copy of the Big Dry RMP/EIS and the Powder River RMP/EIS, as amended, can be located via the internet on the BLM home page, www.blm.gov/mt. On the home page, locate the heading titled “*Montana/Dakotas*,” then select “*What We Do*”, then click on the “*Planning*” link.

A more complete description of activities and impacts, related to oil and gas leasing, development, production, etc. can be found at pages 111 to 156 of the Big Dry RMP and pages 55 to 77 of the 1994 Oil and Gas Amendment of the Powder River RMP (for leasing decisions), and pages 4-1 to 4-310 of the 2008 Final Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Proposed Amendment of the Powder River and Billings RMPs (for development, production, etc).

Analysis of the 203 parcels is documented in this EA, and was conducted by MCFO resource specialists who relied on professional knowledge of the areas involved, review of current databases, and file information to ensure that appropriate stipulations were recommended for a specific parcel. Analysis may have also identified the need to defer entire or partial parcels from leasing pending further environmental review.

At the time of this review it is unknown whether a particular parcel will be sold and a lease issued. It is unknown when, where, or if future well sites, roads, and facilities might be proposed. Assessment of potential activities and impacts was based on potential well densities discerned from the Reasonably Foreseeable Development (RFD) Scenario developed for this environmental assessment (Appendix C), which is based on information contained in the MCFO RFD developed in 2005 and revised in 2012; it is an unpublished report that is available by contacting the MCFO. The RFD contains projections of the number of possible oil and gas wells that could be drilled and produced in the MCFO area and used to analyze projected wells for the 203 nominated lease parcels. Detailed site-specific analysis and mitigation of activities associated with any particular lease would occur when a lease holder submits an application for permit to drill (APD). A more complete description of mitigation, BMPs, and conditions of

approval related to oil and gas lease activities can be found at pages 302-326 of the Big Dry RMP, pages 130-137 of the 1994 Oil and Gas Amendment of the Powder River RMP, pages 3-6 of the 2008 Record of Decision for the Final Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Proposed Amendment of the Powder River and Billings RMPs, Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development-The Gold Book, and online at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html. Offering the parcels for sale and issuing leases would not be in conflict with any local, county, or state laws or plans.

1.4 Public Scoping and Identification of Issues

Public scoping for this project was conducted through a 15-day scoping period advertised on the BLM Montana State Office website and posted on the MCFO website National Environmental Policy Act (NEPA) notification log. Scoping was initiated March 26, 2012. Scoping comments pertained to lease parcel locations along the Missouri River, mineral ownership, split estate development, and specific recommendations for wildlife resources. Refer to Section 5.2 of this EA for a more complete summary of the scoping comments received.

The BLM coordinates with Montana Fish, Wildlife, and Parks (MFWP), and the United States Fish and Wildlife Service (USFWS) to manage wildlife habitat because BLM management decisions can affect wildlife populations which depend on the habitat. The BLM manages habitat on BLM lands, while MFWP is responsible for managing wildlife species populations. The USFWS also manages some wildlife populations but only those federal trust species managed under mandates such as the Endangered Species Act, Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. Managing wildlife is factored into project planning at multiple scales and is to be implemented early in the planning process.

Coordination with USFWS and MFWP was conducted for the 203 lease parcels being reviewed and in the completion of this EA in order to prepare the analysis, identify protective measures, and apply stipulations and lease notices associated with these parcels being analyzed. A letter was sent to the USFWS and MFWP during the 15-day scoping and 30-day public comment periods requesting comments on the 203 parcels being reviewed.

The BLM consults with Native Americans under various statutes, regulations, and executive orders, including the American Indian Religious Freedom Act, the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act, the National Environmental Policy Act, and Executive Order 13175-Consultation and Coordination with Indian Tribal Governments. BLM sent letters to tribes in Montana, North and South Dakota and Wyoming for the 15-day scoping period informing them of the potential for the 203 parcels to be leased and inviting them to submit issues and concerns BLM should consider in the environmental analysis. Letters were sent to the Tribal Presidents and the Tribal Historical Preservation Officer (THPO) or other cultural contacts for the Cheyenne River Sioux Tribe, Crow Tribe of Montana, Crow Creek Sioux Tribe, Eastern Shoshone Tribe, Ft. Peck Tribes, Lower Brule Sioux Tribe, the Mandan, Hidasta, and Arkira Nation, Northern Arapaho Nation, Northern Cheyenne Tribe, Oglala Sioux Tribe, Rosebud Sioux Tribe of Indians, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa. In addition to scoping letters, THPOs also received file search results from the preliminary review of parcels conducted by BLM. BLM sent a second letter to

the tribes informing them about the 30 day public comment period for the EA and solicit any information BLM should consider before making a decision whether to offer any or all of the 203 parcels for sale.

Relevant issues were identified through a preliminary review process conducted prior to a 15-day public scoping period. Relevant issues include effects to areas within or adjacent to areas that may contain significant cultural characteristics associated with the proposed Long Medicine Wheel ACEC being considered in the upcoming Draft MCFO RMP. No issues were identified by the public during the 15-day scoping period.

2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

2.1 Alternative A - No Action

For EAs on externally initiated Proposed Actions, the No Action Alternative generally means that the Proposed Action would not take place. In the case of a lease sale, this would mean that all expressions of interest to lease (parcel nominations) would be denied or rejected.

The No Action alternative would exclude all 203 lease parcels, covering 85,758.14 surveyed federal mineral acres (61,184.50 surveyed BLM administered surface and 24,573.64 surveyed private/state surface), from the competitive oil and gas lease sale (Maps 1-12). Surface management would remain the same and ongoing oil and gas development would continue on surrounding federal, private, and state leases.

2.2 Alternative B – Proposed Action

The Proposed Action Alternative would be to offer 203 lease parcels of federal minerals for oil and gas leasing, covering 85,758.14 surveyed federal mineral acres (61,184.50 surveyed BLM administered surface and 24,573.64 surveyed private/state surface), in conformance with the existing land use planning decisions. Parcel number, size, and detailed locations and associated stipulations are listed in Appendix A. Maps 1-12 indicate the detailed location of each parcel.

2.3 Alternative C -BLM Preferred

Under the BLM Preferred Alternative, 201 of the 203 lease parcels (199 whole, 2 partial), 82,998.14 surveyed federal mineral acres (58,464.50 surveyed BLM administered surface and 24,533.64 surveyed private/state surface) would be offered with RMP lease stipulations and/or lease notices as necessary (Appendix A) for competitive oil and gas lease sale and lease issuance.

A total of 4 lease parcels (2 whole, 2 partial), 2,760 surveyed federal mineral acres (2,720 surveyed BLM administered surface and 40 surveyed private surface), in whole or part would be deferred (Map 13). All 4 lease parcels, in whole or part, have been found to contain sensitive cultural sites being analyzed in the ongoing MCFO RMP effort. Additional cultural protection measures are being considered in the on-going planning efforts; therefore, all 4 lease parcels, in whole or part, would be deferred at this time pending further review and analysis. This would provide for consideration of alternatives in the future MCFO RMP planning effort utilizing recent research and updated BLM policies.

2.4 Additional Considerations for Alternatives B and C

For the split-estate lease parcels, the BLM provided courtesy notification to private landowners that the federal oil and gas estate under their surface would be included in this lease sale. In the event of activity on such split estate lease parcels, the lessee and/or operator would be responsible for adhering to BLM requirements as well as reaching an agreement with the private surface landowners regarding access, surface disturbance, and reclamation.

The terms and conditions of the standard federal lease and federal regulations would apply to each parcel offered for sale in each of the two Alternatives. Stipulations shown in Appendix A would be included with identified parcels offered for sale. Standard operating procedures for oil and gas operations on federal leases include measures to protect the environment and resources

such as groundwater, air, wildlife, historical and prehistorical concerns, and others as mentioned in the Big Dry and Powder River RMPs at pages 9 to 40 and 302 to 330 of the Minerals Appendix (Big Dry) and 2-1 to 2-28 and the Minerals Appendix Min-36 to Min-42 (2008 Final Supplement to the Montana Statewide Oil and Gas EIS and Proposed Amendment of the Powder River and Billings RMPs). Conditions of Approval (COAs) would be attached to permits issued to explore and develop the parcels to address site-specific concerns or new information. Standard operating procedures, best management practices (BMPs), COAs, and lease stipulations can change over time to meet RMP objectives, resource needs or land use compatibility.

Federal oil and gas leases would be issued for a 10-year period and would remain valid for as long thereafter as oil or gas is produced in paying quantities, required payments are made and lease operations are conducted in compliance with regulations and approved permits. If a lessee fails to produce oil and gas by the end of the initial 10 year period, does not make annual rental payments, does not comply with the terms and conditions of the lease, or relinquishes the lease, ownership of the minerals leased would revert back to the federal government and the lease could be resold.

Drilling of wells on a lease would not be permitted until the lessee or operator secures approval of a drilling permit and a surface use plan as specified in 43 CFR 3162.

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

This chapter describes the existing environment (i.e., the physical, biological, social, and economic values and resources) within the analysis area, which includes the 203 nominated parcels in McCone, Richland, Daniels, and Sheridan counties (Map 1), that could be affected by implementation of the alternatives described in Chapter 2.

The existing environment is described by the different resources found throughout the counties listed above. Within each resource description, lease parcels containing the resource will be listed and analyzed further in Chapter 4. If the lease parcel does not contain the resource, then the lease parcel will be omitted from the description of that specific resource.

Unless otherwise stated, resource analysis in this chapter, and Chapter 4, will be described in approximate acres due to the scaling and precision parameters associated with the Geographic Information System (GIS), in addition to being referenced to a different land survey.

Most of the analysis area consists of open expanses characteristic of the Northern Great Plains. This area is largely comprised of herbaceous vegetation (e.g., grasses) with interspersed shrubs (e.g., sagebrush). Lands with greater moisture or slopes exhibit ponderosa pine, limber pine, limited Douglas fir, and juniper species. Some hardwood trees grow along riparian areas and are common along the Missouri, Yellowstone, and Powder Rivers. The analysis area experiences extreme weather variations on a yearly basis due to its semiarid continental climate. Most of the public lands are scattered throughout the analysis area. The public lands are rich in natural resources, such as wildlife and livestock forage, minerals, cultural resources, paleontological resources, recreation opportunities, and watershed values.

Only those aspects of the existing environment that are potentially impacted by this project are described in detail. The following aspects of the existing environment were determined to not be present or not potentially impacted by this project include: coal, locatable minerals, salable minerals, lands with wilderness characteristics, cave and karst resources, wild and scenic rivers; wilderness study areas (WSAs); and hazardous wastes or solids. These resources and resource uses will not be discussed further in this EA.

3.2 Air Resources

Air resources include air quality, air quality related values (AQRVs), and climate change. As part of the planning and decision making process, BLM considers and analyzes the potential effects of BLM and BLM-authorized activities on air resources.

The Environmental Protection Agency (EPA) has the primary responsibility for regulating air quality, including seven criteria air pollutants subject to National Ambient Air Quality Standards (NAAQS). Pollutants regulated under NAAQS include carbon monoxide (CO), lead, nitrogen dioxide (NO₂), ozone, particulate matter with a diameter less than or equal to 10 microns (PM₁₀), particulate matter with a diameter less than or equal to 2.5 microns (PM_{2.5}), and sulfur dioxide (SO₂). Two additional pollutants, nitrogen oxides (NO_x) and volatile organic compounds (VOCs) are regulated because they form ozone in the atmosphere. Regulation of air quality is

also delegated to some states. Air quality is determined by pollutant emissions and emission characteristics, atmospheric chemistry, dispersion meteorology, and terrain. AQRVs include effects on soil and water, such as sulfur and nitrogen deposition and lake acidification, and aesthetic effects, such as visibility.

Climate is the composite of generally prevailing weather conditions of a particular region throughout the year, averaged over a series of years. Climate change includes both historic and predicted climate shifts that are beyond normal weather variations.

3.2.1 Air Quality

Air quality within the analysis area is not currently monitored. However, based on data from nearby monitors in Meade and Pennington counties, air quality within Harding County is believed to be much better than required by the NAAQS. The EPA air quality index (AQI) is an index used for reporting daily air quality (<http://www.epa.gov/oar/data/geosel.html>) to the public. The index tells how clean or polluted an area's air is and whether associated health effects might be a concern. The EPA calculates the AQI for five criteria air pollutants regulated by the Clean Air Act (CAA): ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, EPA has established NAAQS to protect public health. An AQI value of 100 generally corresponds to the primary NAAQS for the pollutant. The following terms help interpret the AQI information:

- **Good** – The AQI value is between 0 and 50. Air quality is considered satisfactory and air pollution poses little or no risk.
- **Moderate** – The AQI is between 51 and 100. Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive to ozone may experience respiratory symptoms.
- **Unhealthy for Sensitive Groups** – When AQI values are between 101 and 150, members of “sensitive groups” may experience health effects. These groups are likely to be affected at lower levels than the general public. For example, people with lung disease are at greater risk from exposure to ozone, while people with either lung disease or heart disease are at greater risk from exposure to particle pollution. The general public is not likely to be affected when the AQI is in this range.
- **Unhealthy** – The AQI is between 151 and 200. Everyone may begin to experience some adverse health effects, and members of the sensitive groups may experience more serious effects.
- **Very Unhealthy** – The AQI is between 201 and 300. This index level would trigger a health alert signifying that everyone may experience more serious health effects.

AQI data show that there is little risk to the general public from air quality in the analysis area (Table 1). Based on available aggregate data for Richland County (the nearest county with monitoring data) for years 2009–2011, 93 percent of the days were rated “good” and the three-year median daily AQI was 32 for monitors in the analysis area.

Table 1. US EPA – Air Data Air Quality Index Report (2009-2011)

County ¹	# Days in Period	# Days Rated Good or No Data	Percent of Days Rated Good or No Data	# Days Rated Moderate	# Days Rated Unhealthy for Sensitive Groups	# Days Rated Unhealthy	# Days Rated Very Unhealthy
Richland	1,095	1,024	93%	71	0	0	0

¹The Richland County monitor is located near Sidney, MT. Source: EPA Air Data website (http://www.epa.gov/airdata/ad_rep_aqi.html, accessed March 28, 2012).

The area managed by the MCFO is in compliance with all National Ambient Air Quality Standards (NAAQS). Based on monitoring data available for 2010 and 2011, maximum concentrations as a percentage of the NAAQS are summarized in Table 2. Data are not provided for CO and lead which are not monitored within the analysis area.

Table 2. Monitored Concentrations Representative of the Study Area^a

Pollutant	Averaging Time	Applicable Standard ^b	Concentration ^{c, d}	Comments ^d
NO ₂	1 hour	100 ppb	9 ppb (9%)	Three-year average
O ₃	8 hour	0.075 ppm	0.056 ppm (75%)	Three-year average
PM ₁₀	24 hour	150 µg/m ³	96 µg/m ³ (64%)	Three-year average
	Annual	50 µg/m ³	21 µg/m ³ (42%)	Three-year average
PM _{2.5}	24 hour	35 µg/m ³	14 µg/m ³ (40%)	Three-year average
	Annual	15 µg/m ³	6 µg/m ³ (40%)	Three-year average
SO ₂	1 hour	75 ppb	0.058 ppm (77%) ^e	Three-year average
	3 hour	---	---	Not available.

^a Representative concentrations are based on data from the Sidney monitoring station in Richland County.

^b Most restrictive national or state standard.

^c Monitored concentrations are the 2nd highest for 24-hour PM₁₀; three-year average of the annual 4th highest daily maximum for 8-hour O₃; three-year average of the 98th percentile for 24-hour PM_{2.5} and 1-hour NO₂; and arithmetic mean for annual NO₂ and PM_{2.5}.

^d Values in parentheses are monitored concentrations as a percentage of the most restrictive applicable standard.

^e Only two years of recent data were available for SO₂. The two-year average is based on calendar years 2010 and 2011.

Source: EPA Air Data website (http://www.epa.gov/airdata/ad_rep_con.html, accessed March 28, 2012).

Air resources also include visibility, which can be degraded by regional haze due in part to sulfur, nitrogen, and particulate emissions. Based on trends identified during 2005-2009, visibility has degraded slightly at the Medicine Lake National Wildlife Refuge IMPROVE monitor in Sheridan County on the haziest days (20 percent worse days). On the 20 percent best (clearest) days, visibility at this monitor has been improving, as shown by decreasing haze in Figure A.

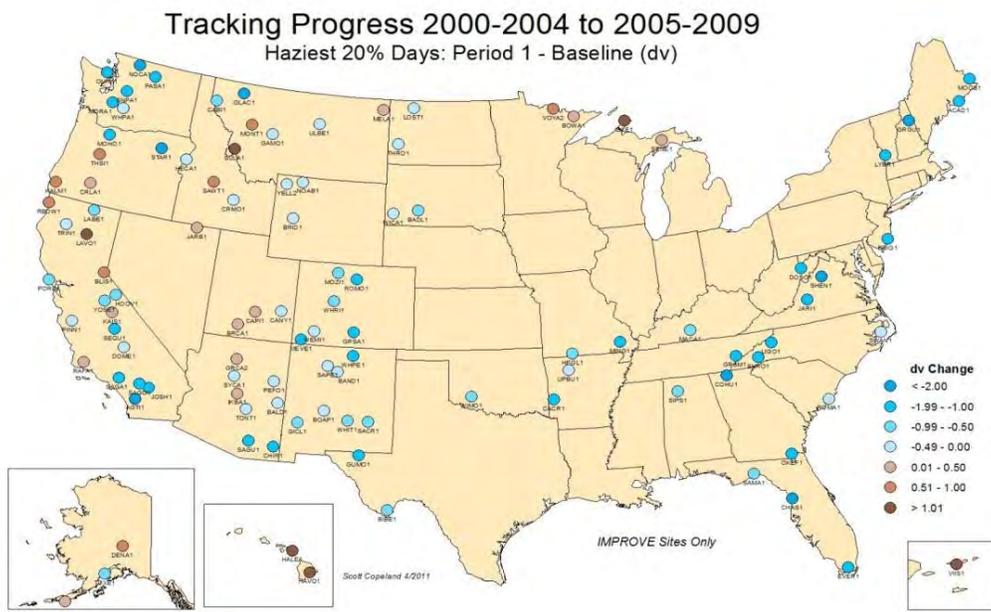


Figure A. Trends in haze index (deciview) on haziest and clearest days, 2005-2009. Source: IMPROVE 2011.

A review of the EPA National Emission Inventory (NEI) 2008 emissions in McCone, Richland, and Sheridan counties show that mobile non-road engines are the primary sources of CO, NO_x, and VOC emissions, resulting in 49, 50, and 40 percent, respectively, of these pollutant emissions. Approximately 92 percent of SO₂ emissions result from coal combustion for

electricity generation. With regard to PM₁₀ and PM_{2.5}, approximately 89 percent and 56 percent of these emissions, respectively, are caused by fugitive dust from unpaved roads. As shown above, these emissions occur in an area with good air quality.

3.2.2 Climate Change

Climate change is defined by the Intergovernmental Panel on climate change (IPCC) as “a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and persist for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity.” (IPCC 2007). Climate change and climate science are discussed in detail in the climate change Supplementary Information Report for Montana, North Dakota, and South Dakota, Bureau of Land Management (Climate Change SIR 2010). This document is incorporated by reference into this EA.

The Intergovernmental Panel on climate change (Climate Change SIR 2010) states, “Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.” Global average temperature has increased approximately 1.4°F since the early 20th century (Climate Change SIR 2010). Warming has occurred on land surfaces, oceans and other water bodies, and in the troposphere (lowest layer of earth’s atmosphere, up to 4-12 miles above the earth). Other indications of global climate change described by the IPCC (Climate Change SIR 2010) include:

- Rates of surface warming increased in the mid-1970s and the global land surface has been warming at about double the rate of ocean surface warming since then;
- Eleven of the last 12 years rank among the 12 warmest years on record since 1850;
- Lower-tropospheric temperatures have slightly greater warming rates than the earth’s surface from 1958-2005.

As discussed and summarized in the climate change SIR, earth has a natural greenhouse effect wherein naturally occurring gases such as water vapor, CO₂, methane, and N₂O absorb and retain heat. Without the natural greenhouse effect, earth would be approximately 60°F cooler (Climate Change SIR 2010). Current ongoing global climate change is caused, in part, by the atmospheric buildup of greenhouse gases (GHGs), which may persist for decades or even centuries. Each GHG has a global warming potential that accounts for the intensity of each GHG’s heat trapping effect and its longevity in the atmosphere (Climate Change SIR 2010). The buildup of GHGs such as CO₂, methane, N₂O, and halocarbons since the start of the industrial revolution has substantially increased atmospheric concentrations of these compounds compared to background levels. At such elevated concentrations, these compounds absorb more energy from the earth’s surface and re-emit a larger portion of the earth’s heat back to the earth rather than allowing the heat to escape into space than would be the case under more natural conditions of background GHG concentrations.

A number of activities contribute to the phenomenon of climate change, including emissions of GHGs (especially CO₂ and methane) from fossil fuel development, large wildfires, activities using combustion engines, changes to the natural carbon cycle, and changes to radiative forces

and reflectivity (albedo). It is important to note that GHGs will have a sustained climatic impact over different temporal scales due to their differences in global warming potential (described above) and lifespans in the atmosphere. For example, CO₂ may last 50 to 200 years in the atmosphere while methane has an average atmospheric life time of 12 years (Climate Change SIR 2010).

With regard to statewide GHG emissions, Montana ranks in the lowest decile when compared to all the states (http://assets.opencrs.com/rpts/RL34272_20071205.pdf, Ramseur 2007). The estimate of Montana's 2005 GHG emissions of 37 million metric tons (MMt) of gross consumption-based carbon dioxide equivalent (CO₂e) account for approximately 0.6 percent of the U.S. GHG emissions (CCS 2007).

Some information and projections of impacts beyond the project scale are becoming increasingly available. Chapter 3 of the climate change SIR describes impacts of climate change in detail at various scales, including the state scale when appropriate. The EPA identifies eastern Montana as part of the Great Plains region. The following summary characterizes potential changes identified by the EPA (EPA 2008) that are expected to occur at the regional scale, where the Proposed Action and its alternatives are to occur.

- The region is expected to experience warmer temperatures with less snowfall.
- Temperatures are expected to increase more in winter than in summer, more at night than in the day, and more in the mountains than at lower elevations.
- Earlier snowmelt means that peak stream flow would be earlier, weeks before the peak needs of ranchers, farmers, recreationalist, and others. In late summer, rivers, lakes, and reservoirs would be drier.
- More frequent, more severe, and possibly longer-lasting droughts are expected to occur.
- Crop and livestock production patterns could shift northward; less soil moisture due to increased evaporation may increase irrigation needs.
- Drier conditions would reduce the range and health of ponderosa and lodgepole pine forests, and increase the susceptibility to fire. Grasslands and rangelands could expand into previously forested areas.
- Ecosystems would be stressed and wildlife such as the mountain lion, black bear, long-nose sucker, marten, and bald eagle could be further stressed.

Other impacts could include:

- Increased particulate matter in the air as drier, less vegetated soils experience wind erosion.
- Shifts in vegetative communities which could threaten plant and wildlife species.
- Changes in the timing and quantity of snowmelt which could affect both aquatic species and agricultural needs.

Projected and documented broad-scale changes within ecosystems of the U.S. are summarized in the Climate Change SIR. Some key aspects include:

- Large-scale shifts have already occurred in the ranges of species and the timing of the seasons and animal migrations. These shifts are likely to continue (USGCRP 2009, as cited by Climate Change SIR 2010). Climate changes include warming temperatures throughout the year and the arrival of spring an average of 10 days to 2 weeks earlier

through much of the U.S. compared to 20 years ago. Multiple bird species now migrate north earlier in the year.

- Fires, insect epidemics, disease pathogens, and invasive weed species have increased and these trends are likely to continue. Changes in timing of precipitation and earlier runoff would increase fire risks.
- Insect epidemics and the amount of damage that they may inflict have also been on the rise. The combination of higher temperatures and dry conditions have increases insect populations such as pine beetles, which have killed trees on millions of acres in western U.S. and Canada. Warmer winters allow beetles to survive the cold season, which would normally limit populations; while concurrently, drought weakens trees, making them more susceptible to mortality due to insect attack.

More specific to Montana, additional projected changes associated with climate change described in Section 3.0 of the Climate Change SIR (2010) include:

- Temperature increases in Montana are predicted to be between 3 to 5°F at the mid-21st century. As the mean temperature rises, more heat waves are predicted to occur.
- Precipitation increases in winter and spring in Montana may be up to 25 percent in some areas. Precipitation decreases of up to 20 percent may occur during summer, with potential increases or decreases in the fall.
- For most of Montana, annual median runoff is expected to decrease between 2 and 5 percent. Mountain snowpack is expected to decline, reducing water availability in localities supplied by meltwater.
- Wind power production potential is predicted to decline in Montana based on modeling focused on the Great Falls area.
- Water temperatures are expected to increase in lakes, reservoirs, rivers, and streams. Fish populations are expected to decline due to warmer temperatures, which could also lead to more fishing closures.
- Wildland fire risk is predicted to continue to increase due to climate change effects on temperature, precipitation, and wind. One study predicted an increase in median annual area burned by wildland fires in Montana based on a 1°C global average temperature increase to be 241 to 515 percent.

While long-range regional changes might occur within this analysis area, it is impossible to predict precisely when they could occur. The following example summarizing climate data for the West North Central Region (MT, ND, SD, and WY) illustrates this point at the regional scale. A potential regional effect of climate change is earlier snowmelt and associated runoff. This is directly related to spring-time temperatures. Over a 112-year record, overall warming is clearly evident with temperatures increasing 0.21 degrees per decade (Figure B). However, data from 1991-2005 indicate a 0.45 degree per decade cooling trend (Figure C). This example is not an anomaly, as several other 15-year windows can be selected to show either warming or cooling trends. Some of these year-to-year fluctuations in temperature are due to natural processes, such as the effects of El Niños, La Niñas, and the eruption of large volcanoes (Climate Change SIR 2010). This information illustrates the difficulty of predicting actual short-term regional or site-specific changes or conditions which may be due to climate change during any specific time frame.

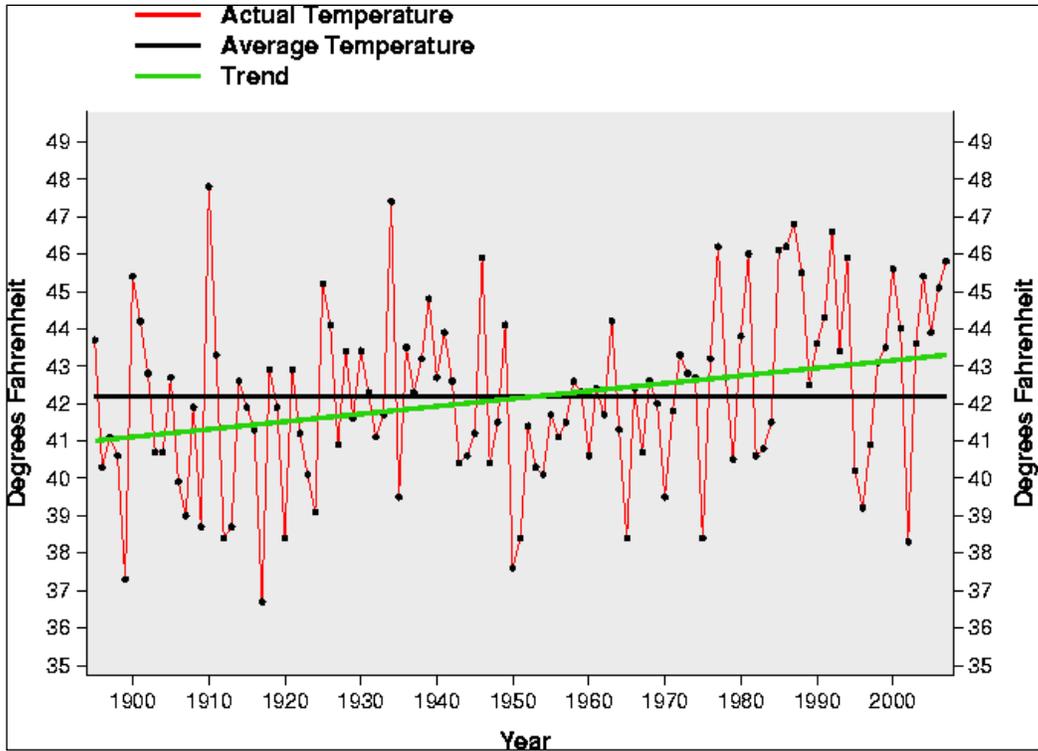


Figure B. Regional climate summary of spring temperatures (March-May) for the West North Central Region (MT, ND, SD, WY), from 1895-2007. (Source: NOAA website – <http://www.ncdc.noaa.gov/oa/climate/research/cag3/wn.html>)

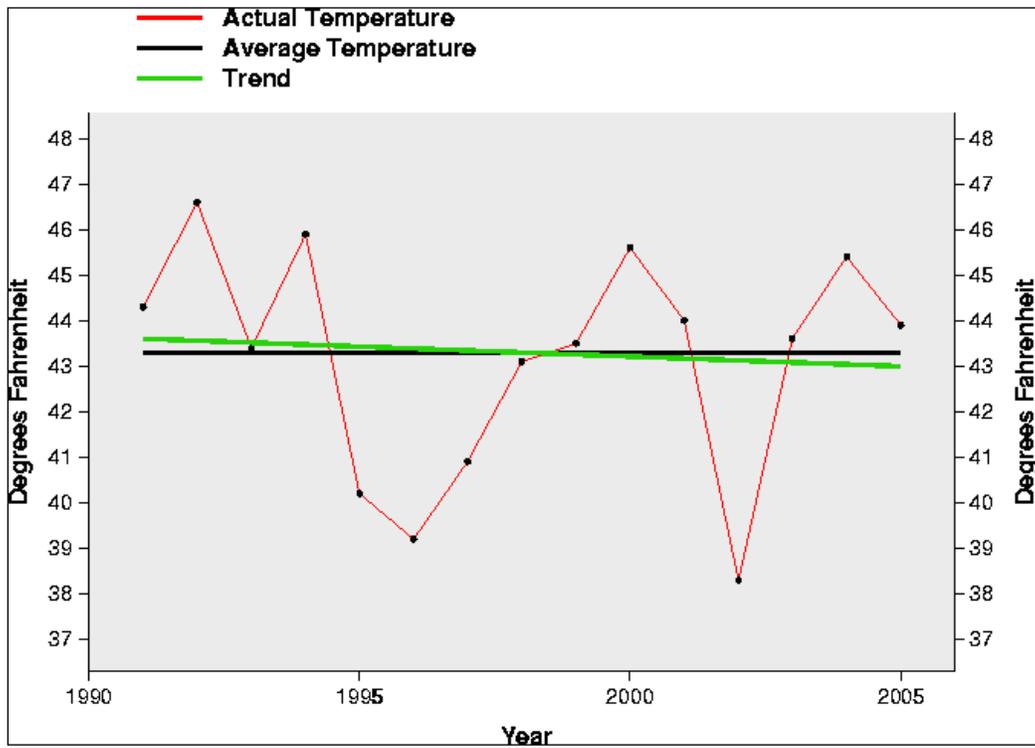


Figure C. Regional climate summary of spring temperatures (March-May) for the West North Central Region (MT, ND, SD, WY), from 1991-2005. (Source: NOAA website – <http://www.ncdc.noaa.gov/oa/climate/research/cag3/wn.html>)

3.3 Soil Resources

The soil-forming factors (climate, parent material, topography, biota, and age) are variable across the planning area, which results in soils with diverse physical, chemical, and biotic properties. Important properties of naturally functioning soil systems include biotic activity, diversity, and productivity; water capture, storage, and release; nutrient storage and cycling; contaminant filtration, buffering, degradation, immobilization, and detoxification; and biotic system habitat.

Reclamation suitability describes the ability of the soil resource to restore functional and structural integrity following disturbance. The rate and degree of recovery is dependent on the action, time of year, and various site characteristics. Soils poorly suited to successful reclamation contain characteristics that include high salt content, poor water-holding capacity, inadequate rooting depth, or highly erosive qualities. Sites poorly suited to reclamation, would require unconventional and/or site-specific reclamation measures.

The lease parcels are located within 6 watersheds [HUC 8 (Hydrological Unit Code); subbasins]: Big Muddy Creek (HUC 10060006), Brush Lake (HUC 10060007), Charlie-Little Muddy Creeks (HUC 10060005), Fort Peck Reservoir (HUC 10040104), Prairie Elk-Wolf Creeks (HUC 10060001), and Redwater River (HUC 10060002). The acreage of the lease parcels comprise between 0.001 and 6.19 percent of each watershed (USGS 2009). Soils considered prime farmlands if irrigated occur within the all watershed-lease parcel areas. However, since dependable water is unavailable on these lands, they are not considered prime farmland. The following describes the common soil properties of lease parcels within each watershed:

The Big Muddy Creek watershed contains proposed parcels MTM 102757-EA, GA, GB, QA, QB, QC, QD, QE, and QF; comprising 0.08 percent of the watershed. The lease parcels are located in Daniels and Sheridan Counties. Parcel soils generally developed from glacial till, alluvium, or residuum derived from the Tongue River Member of the Fort Union Formation. Ecological sites are typically clayey-steep (MLRA 53A, 10-14 p. z.). Terrain within the parcels is commonly hilly. Approximately 81 percent (approx. 978 ac.) of the parcels are considered poorly suited to reclamation.

The Brush Lake watershed contains proposed parcel MTM 102757-FA; comprising 0.03 percent of the watershed. The lease parcel is located in Sheridan County. Parcel soils generally developed from outwash derived from glacial deposits, though the majority of the parcel is inundated and therefore contains sediment rather than soil. The parcel has a gravel ecological site (MLRA 53A, 10-14 p. z.). Terrain within the parcel is gentle. The entire parcel is considered poorly suited to reclamation (approx. 52 ac.).

The Charlie-Little Muddy Creeks watershed contains proposed parcel MTM 102757-DR; comprising 0.001 percent of the watershed. The lease parcel is located in Richland County. Parcel soils generally developed from alluvium derived from the Bearpaw Formation. The parcel has a clayey ecological site (MLRA 53A, 10-14 p. z.). Terrain within the parcel is flat. Soils within the parcel are resilient to disturbances.

The Fort Peck Reservoir watershed contains proposed parcels MTM 102757-E4, E6, E7, E8, E9, FB, FC, FD, FE, FQ, FP, PH, and PJ; comprising 0.51 percent of the watershed. The lease

parcels are located in McCone County. Parcel soils generally developed from residuum or alluvium derived from the Tongue River Member of the Fort Union Formation. Ecological sites are commonly silty or shallow (MLRA 58A, 10-14 p. z.). Terrain within the parcels is commonly hilly with erosive draws. Approximately 59 percent (approx. 4,028 ac.) of the parcels are considered poorly suited to reclamation.

The Prairie Elk-Wolf Creeks watershed contains proposed parcels MTM 102757-C7, C8, DP, DQ, DT, E3, F3, F4, F6, F7, F8, F9, FF, FG, FH, FJ, FK, FL, FM, FN, FR, FT, FU, FV, FW, FX, FY, K3, K4, K6, K7, K8, K9, KG, KH, KJ, KK, KL, KM, KP, KQ, KR, KT, KU, KV, KW, KX, KY, MG, N3, N4, N6, N7, N8, N9, NA, NB, NC, ND, NE, NF, NG, NH, NJ, NK, NL, NM, NN, NP, NQ, NR, NT, NU, NV, NW, NX, NY, P3, P4, P6, P7, P8, P9, PC, PF, PG, PK, PL, PN, PP, PQ, PR, PT, PU, PV, PW, PX, PY, R3, R4, R6, R7, R8, R9, RP, RR, RT, RU, RV, RY, T3, T4, T6, T7, R8, T9, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TP, TQ, TR, TT, TU, TV, TW, TX, TY, U3, U4, U6, U7, U8, U9, UA, UB, UC, UD, UE, UF, UG, UH, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, VB, VC, VD, VE, VF, VG, and VH; comprising 6.18 percent of the watershed. The lease parcels are located in McCone County. Parcel soils generally developed from alluvium, residuum, or glacial till derived from the Hell Creek and Lebo Member of the Fort Union Formation. Ecological sites are commonly silty, sandy, or claypan (MLRA 58A, 10-14 p. z.). Terrain within the parcels is commonly rugged, hilly, or badlands. Approximately 72 percent (approx. 55,930 ac.) of the parcels are considered poorly suited to reclamation.

The Redwater River watershed contains proposed parcels MTM 102757-ME, RN, RQ, RW, and RX; comprising 0.04 percent of the watershed. The lease parcels are located in McCone and Richland Counties. Parcel soils generally developed from residuum or alluvium derived from the Tongue River Member of the Fort Union Formation. Ecological sites are typically silty (MLRA 58A, 10-14 p. z.). Terrain within the parcels is commonly hilly. Approximately 33 percent (approx. 158 ac.) of the parcels are considered poorly suited to reclamation.

3.4 Water Resources

3.4.1 Surface Hydrology

Surface water resources across the MCFO are present as lakes, reservoirs, rivers, streams, wetlands, and springs. Water resources are essential to the residents of eastern Montana to support agriculture, public water supplies, industry, and recreation. Water resources and riparian areas are crucial to the survival of many BLM-sensitive fish, reptiles, birds, and amphibians.

Perennial streams retain water year-round and have variable flow regimes. Intermittent streams flow during the part of the year when they receive sufficient water from springs, groundwater, or surface sources such as snowmelt or storm events. Ephemeral streams flow only in direct response to precipitation. Intermittent and ephemeral streams play an important role in the hydrologic function of the ecosystems within the lease parcels by transporting water, sediment, nutrients, and debris and providing connectivity within a watershed. They filter sediment, dissipate energy from snowmelt and storm water runoff, facilitate infiltration, and recharge groundwater (Levick et al. 2008). The pools of intermittent streams retain water in the summer months, supporting riparian vegetation and providing water resources for wildlife and livestock.

Stream morphology is influenced by a number of factors including: stream flow regime, geology, soils, vegetation type, climate, and land use history. Stream conditions reflect a number of historic and current impacts, ranging from agriculture to mining. Surficial geology is generally represented by Tertiary sandstones, siltstones, and shales, with some alluvium and glacial till which tends to form fine grain soils (loams to clays), that are highly erosive. Streambeds consist typically of sand and silt, with few bedrock channels. Stream morphology is highly influenced by the presence and type of riparian vegetation because streambeds and stream banks generally lack control features (e.g., rocks, cobbles, bedrock).

The lease parcels are located within 6 watersheds [HUC 8 (Hydrological Unit Code); subbasins]: Big Muddy Creek (HUC 10060006), Brush Lake (HUC 10060007), Charlie-Little Muddy Creeks (HUC 10060005), Fort Peck Reservoir (HUC 10040104), Prairie Elk-Wolf Creeks (HUC 10060001), and Redwater River (HUC 10060002). The acreage of the lease parcels comprise between 0.001 and 6.19 percent of each watershed (USGS 2009).

The Big Muddy Creek watershed contains proposed parcels MTM 102757-EA, GA, GB, and QA, QB, QC, QD, QE, QF; comprising 0.08 percent of the watershed. The lease parcels are located in Daniels and Sheridan Counties.

The Brush Lake watershed contains proposed parcel MTM 102757-FA; comprising 0.03 percent of the watershed. The lease parcel is located in Sheridan County.

The Charlie-Little Muddy Creeks watershed contains proposed parcel MTM 102757-DR; comprising 0.001 percent of the watershed. The lease parcel is located in Richland County. The Fort Peck Reservoir watershed contains proposed parcels MTM 102757-E4, E6, E7, E8, E9, FB, FC, FD, FE, FQ, FP, PH, and PJ; comprising 0.51 percent of the watershed. The lease parcels are located in McCone County.

The Prairie Elk-Wolf Creeks watershed contains proposed parcels MTM 102757-C7, C8, DP, DQ, DT, E3, F3, F4, F6, F7, F8, F9, FF, FG, FH, FJ, FK, FL, FM, FN, FR, FT, FU, FV, FW, FX, FY, K3, K4, K6, K7, K8, K9, KG, KH, KJ, KK, KL, KM, KP, KQ, KR, KT, KU, KV, KW, KX, KY, MG, N3, N4, N6, N7, N8, N9, NA, NB, NC, ND, NE, NF, NG, NH, NJ, NK, NL, NM, NN, NP, NQ, NR, NT, NU, NV, NW, NX, NY, P3, P4, P6, P7, P8, P9, PC, PF, PG, PK, PL, PN, PP, PQ, PR, PT, PU, PV, PW, PX, PY, R3, R4, R6, R7, R8, R9, RP, RR, RT, RU, RV, RY, T3, T4, T6, T7, R8, T9, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TP, TQ, TR, TT, TU, TV, TW, TX, TY, U3, U4, U6, U7, U8, U9, UA, UB, UC, UD, UE, UF, UG, UH, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, VB, VC, VD, VE, VF, VG, and VH; comprising 6.18 percent of the watershed. The lease parcels are located in McCone County.

The Redwater River watershed contains proposed parcels MTM 102757-ME, RN, RQ, RW, and RX; comprising 0.04 percent of the watershed. The lease parcels are located in McCone and Richland Counties

Any beneficial use of produced water requires water rights to be issued by Montana Department of Natural Resources and Conservation (MDNRC) as established by law. This water has been used for watering livestock, irrigation, drilling operations, and industrial applications.

3.4.2 Groundwater

The quality and availability of groundwater varies greatly across the region. Residents in eastern Montana commonly get their ground water from aquifers consisting of unconsolidated, alluvial valley-fill materials, glacial outwash, or consolidated sedimentary rock formations and some coal beds.

Alluvial aquifers within the area and generally consist of Quaternary alluvium and undifferentiated Quaternary/Tertiary sediments, which include sand and gravel deposits. Alluvial aquifers occur in terrace deposits and within the floodplains, and along the channels of larger streams, tributaries, and rivers, and are among the most productive sources of groundwater. They are typically 0-40 feet thick. The quality of groundwater from alluvial aquifers is generally good, but can be highly variable [approximately 100 mg/l to 2,800 mg/l TDS, specific conductance (SC) of 500 to 125,000 microsiemens/centimeter (uS/cm), and sodium adsorption ratio (SAR) of 5.0 to 10]. Wells completed in coarse sand and gravel alluvial aquifers can yield as much as 100 gallons per minute (gpm), although the average yield is 15 gpm. Alluvial deposits associated with abandoned river channels or detached terraces are topographically isolated and have limited saturation and yield as much as 20 gpm (Zelt et al. 1999).

Within the analysis area, the primary bedrock aquifers occur in sandstones and coal beds of the Tertiary Fort Union Formation (Cenozoic rocks) and the sandstones of the Cretaceous Hell Creek and Fox Hills formations (Mesozoic rocks). Wells within the Fort Union formation aquifers are typically 100 to 200 feet deep, but can be up to 1500 feet in depth. These wells may produce as much as 40 gpm, but yields of 15 gpm are typical. Where aquifers are confined and artesian conditions exist, wells in the Fort Union Formation will generally flow less than 10 gpm. Well depths to the Hells Creek and Fox Hills formation aquifers are highly variable, but typically range from 200 to 1,000 feet in depth. Groundwater yields from these aquifers may be as much as 200 gpm, but are generally less than 100 gpm. Artesian wells within these aquifers may flow as high as 20 gpm (Zelt et al. 1999). Groundwater yields from the deeper Paleozoic Madison formation aquifer can range from 20 to 6,000 gpm, or can be higher, in karst areas. The depth to the Madison formation aquifer in the planning area can exceed 6,000 feet. Due to the extreme depth of this aquifer, it is rarely accessed for water use. Water quality of this aquifer is highly variable and is dependent on depth, bedrock type, recharge rate, and other factors.

3.5 Vegetation Resources

The vegetation within the MCFO is characteristic of the Eastern Sedimentary Plains of Montana in the 10 to 14-inch precipitation zone and the Northern Dark Brown Glaciated Plains in the 10 to 14-inch precipitation zone, which lie within the Northern Great Plains. The Northern Great Plains is known for its diverse vegetation types, soil types, and topography. Vegetation is comprised of both tall and short grasses as well as both warm and cool season grasses. A variety of grass-like plants, forbs, shrubs and trees also add to the vegetation diversity of this rangeland type. Plant species diversity increases in woody draws and riparian/wetland zones.

Existing influences on local distribution of plant communities include soils, topography, surface disturbance, availability of water, management boundary fence lines, and soil salinity. Vegetation communities have been affected by human activities for over a century. Some of

these activities include: infrastructure developments (roads, powerlines, pipelines, etc.), chemical applications, logging, livestock grazing, farming, and wildfire rehabilitation, prevention, manipulation, and suppression.

The BLM Standards of Rangeland Health (Standards) for BLM administered lands address upland health, riparian health, air quality, water quality, and habitat for native plants and animals. Meeting these Standards ensures healthy, productive, and diverse vegetative resources on public lands. The BLM's policy for implementing the Standards for Rangeland Health (43 CFR §4180.2) provides that all uses of public lands are to complement the established rangeland standards. Application of 43 CFR §4180.2 provides the mechanism to adjust livestock grazing to meet or progress towards meeting Standards for Rangeland Health. Effects of other uses such as oil and gas development or off-highway vehicle use are evaluated against the Standards to provide rationale directing management of these uses.

Six vegetation communities have been identified within the analysis area: native mixed grass prairie, sagebrush/mixed grasslands, ponderosa pine-mixed grassland, agricultural lands, improved or restored pastures, and riparian-wetlands.

There are numerous ecological sites identified within the analysis area, but the primary ones include the following; Claypan (Cy), Sands (Sa), Sandy (Sy), Sandy-Steep (SyStp), Shallow (Sw), Shallow Clay (SwC), Silty (Si), and Silty- Steep (SiStp). The total dry-weight production expected to be found on these sites during a normal growing season ranges from approximately 800 to 1,500 lbs. /acre.

The native mixed grassland community is dominated by perennial grasses. Perennial grasses can be both warm season and cool season grasses. These perennial grasses can also be both tall and short grasses. Some of the more common grasses include western wheatgrass (*Pascopyrum smithii*), needle-and-thread (*Hesperostipa comata*), green needlegrass (*Nassella viridula*), blue grama (*Bouteloua gracilis*), and prairie junegrass (*Koeleria macrantha*). Various forbs and shrubs are present but, occur as a minor species composition component throughout the community.

The sagebrush/ mixed grassland community occurs on lower valley slopes near drainages, especially where soils are deeper. This community can include a combination of silver sagebrush (*Artemisia cana*) and Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*). This setting is common throughout the analysis area. The sagebrush/grassland vegetation community has a perennial grass and forb understory, similar to the species found in a mixed native grassland community. The expected species composition on this community consists of 70-75% native grass species, 10-15% forbs, and 5-10% shrubs and half-shrubs.

Improved or restored pastures consists of cultivated areas planted with introduced grasses (crested wheatgrass, smooth brome (*Bromus inermis*), intermediate wheatgrass (*Thinopyrum intermedium*), and alfalfa (*Medicago sativa*), specifically for the improved vegetation production for livestock consumption. This setting is limited in the analysis area.

The cultivated plant community is comprised of monocultures of crops which may include small grains, alfalfa, or other crops grown primarily as supplemental feed sources for livestock production operations. These areas have been completely disturbed from the native vegetation potentials. This setting is very common in the analysis area.

Wetland areas are defined as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient, and which, under normal circumstances, do support, a prevalence of vegetation adapted for life in saturated soil conditions.” Riparian areas are defined as “a form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil” (Prichard et. al 1995).

Within the analysis area, riparian and wetland areas would be associated with lakes, reservoirs, potholes, springs, bogs, and wet meadows as well as ephemeral, intermittent, or perennial streams. Riparian and wetland areas are among the most productive and important ecosystems (Prichard et. al. 1995). Characteristically, riparian and wetland areas display a greater diversity of plant, fish, wildlife, and other animal species and vegetative structure than adjoining ecosystems. Adequate, healthy riparian and wetland vegetative buffers protect associated waterbodies from accelerated erosion and sedimentation and reduce or eliminate non-point source pollution from upland areas (MDEQ 2007). Healthy riparian and wetland systems filter and purify water as it moves through the riparian-wetland zone, reduce sediment loads and enhance soil stability, provide micro-climate moderation when contrasted to temperature extremes in adjacent areas, and contribute to groundwater recharge and base flow (Eubanks, 2004).

Riparian areas are considered to be some of the most biologically diverse habitats (FSEIS 2008). Some of the more common vegetative species that occur in riparian-wetland areas include prairie cordgrass (*Spartina pectinata*), switchgrass (*Panicum virgatum*), Canada wildrye (*Elymus canadensis*), American licorice (*Glycyrrhiza lepidota*), sedges (*Carex spp.*), rushes (*Juncus spp.*), willow (*Salix spp.*), chokecherry (*Prunus virginiana*), buffaloberry (*Shepherdia argentea*), cottonwood (*Populus spp.*), needleleaf sedge (*Carex duriuscula*), sandbar willow (*Salix exigua*), Nebraska sedge (*Carex nebrascensis*), softstem bulrush (*Schoenoplectus tabernaemontani*), beaked sedge (*Carex rostrata*), yellow willow (*Salix lutea*), common three-square (*Schoenoplectus pungens*), and green ash (*Fraxinus pennsylvanica*). Weedy and invasive species common to riparian areas are knapweed (*Centaurea stoebe*), leafy spurge (*Euphorbia esula*), Russian olive (*Elaeagnus augustifolia*), saltcedar (*Tamarisk ramosissima*), kochia (*Bassia prostrata*), thistle (*Cirsium arvense*), sweet clover (*Melilotus officinalis*), cocklebur (*Xanthium strumarium*), and gumweed (*Grindelia squarrosa*).

Wetlands provide watering points for wildlife and livestock and provide habitat diversity. Species include sedges (*Carex spp.*), rushes (*Juncus spp.*), bulrush (*Schoenoplectus spp.*), cattail (*Typha spp.*), wild rose (*Rosa spp.*), and snowberry (*Symphoricarpos spp.*). At higher

elevations they are associated primarily with springs, seeps, and intermittent streams. Precipitation-dependent wetland sites fluctuate annually, in a range from dry to wet, in direct response to seasonal moisture, temperature, and wind.

From the Montana Natural Heritage Program (MTNHP) wetland data and BLM internal GIS data a total of 23 proposed lease parcels (MTM 102757 QD, DR, RW, UY, UG, T9, NX, NT, NM, NJ, K8, K6, K4, KX, KW, KT, KK, KH, KR, FX, FM, FK, and FF) do not contain riparian, floodplains, or wetland areas. The remaining 180 parcels do contain riparian, floodplains, or wetland areas.

Competition from invasive, non-native plants constitutes a potential threat to native plant species and wildlife habitat within the analysis area. Several invasive, non-native plant species are found in the analysis area including: crested wheatgrass (*Agropyron cristatum*), Japanese brome (*Bromus japonicas*), cheatgrass (*Bromus tectorum*), and foxtail barley (*Hordeum jubatum*). Crested wheatgrass occurs in areas as a result of being planted to increase forage production or to stabilize soils by reducing erosion. Cheatgrass, Japanese brome, and foxtail barley are all aggressive invasive species that out-compete desirable vegetation for water and soil nutrients.

Noxious weeds are invasive species and occur in scattered isolated populations throughout the analysis area. The most common species of noxious weeds are leafy spurge, Russian knapweed, spotted knapweed, field bindweed and Canada thistle. Noxious weed control is the responsibility of the land owner or land managing agency. Chemical and biological control methods are utilized, with chemical control being the more predominant.

3.6 Special Status Species

3.6.1 Special Status Plant Species

According to the MTNHP, no known threatened or endangered plant species are located within the lease parcels. Sixteen plant species on the Montana Plant Species of Concern list have been identified as having suitable habitat in areas near these parcels (MTNHP, 2012). These species are listed in Table 3 and have the potential to exist on the lease parcels. Twelve of these species are also identified as B M “ Sensitive” plants.

According to the MTNHP field guide, these plants are typically found in very specific habitats and do not occur predictably across the landscape. Following is a list of Montana’s species of concern that may have existing populations and/or suitable habitat on or near the lease parcels by county:

Table 3. MT Species of Concern and BLM Sensitive Plants in or near lease parcels

Plant Name	Common Name	County	Habitat Description
Lobelia spicata *	Pale-spiked Lobelia	Richland, Sheridan	Moist meadow
Phlox andicola*	Plains phlox	Sheridan	open sites (sand to clay soils)
Rorippa calycina*	Persistent-sepal Yellow cress	McCone	wetland/riparian
Dalea enneandra	Nine-anther prairie clover	Richland, Sheridan	grasslands (plains)

<i>Dalea villosa</i>	Silky prairie clover	Richland, Sheridan	sandy sites
<i>Solidago ptarmicoides</i>	Praire Goldenrod	Richland	Moist meadow
<i>Viburnum lentago</i> *	Nannyberry	Richland	Riparian forests
<i>Carex gravida</i>	Pregnant sedge	Richland	wetland/riparian
<i>Asclepias ovalifolia</i> *	Ovalleaf Milkweed	Sheridan	prairie
<i>Centunculus minimus</i>	Chaffweed	Sheridan	wetland/riparian
<i>Chenopodium subglabrum</i>	Smooth goosefoot	Sheridan	sandy sites
<i>Cryptantha fedleri</i>	Fendler Cat's-eye	Sheridan	sandy sites
<i>Primula andicola</i> *	Mealy Primrose	Sheridan	wetland/riparian
<i>Carex sychnocephala</i>	Many-headed sedge	Sheridan	wetland/riparian
<i>Cyperus schweinitzii</i> *	Schweintz' Flatsedge	Sheridan	sandy sites
<i>Sisyrinchium septentrionale</i>	Northern Blue-eyed-grass	Sheridan	wetland/riparian

* BLM Sensitive

3.6.2 Special Status Animal Species

3.6.2.1 Aquatic Wildlife

For aquatic wildlife in the analysis area there are 9 fish, 2 amphibian, and 2 reptile species that are special status or are sensitive species (Table 4). All of these species depend on perennial and intermittent streams or rivers with intact floodplains, wetlands, and riparian areas that have functional habitat. One fish species, the pallid sturgeon (*Scaphirhynchus albus*), was federally listed as endangered by the U.S. Fish and Wildlife Service in 1990. Threats to the pallid sturgeon are habitat modification, small population size, limited natural reproduction, hybridization, pollution and contaminants, and commercial harvest. The pallid sturgeon inhabits the large river systems of the analysis area. In the analysis area the Yellowstone River (from the MT/ND border upstream to near Forsyth, MT) and Missouri River (from the MT/ND border upstream to near Fort Benton) are considered pallid sturgeon habitat. Additionally, these large rivers are classified as having the highest concern for fish species (particularly ESA species and species of concern) habitat under the MFWP Crucial Area Planning System (CAPS 2010). The USFWS recently took further action by listing the shovelnose sturgeon (*Scaphirhynchus platorynchus*), which closely resembles the pallid sturgeon, as a threatened species where its range overlaps with the Pallid sturgeon (FWS 2010). In Table 5, endangered or sensitive aquatic wildlife species that occur within each of the lease parcels are listed.

Table 4. Aquatic sensitive or special status wildlife species in the analysis area.

Species	USFWS Status	BLM Sensitive	In Range	Suitable Habitat Present
Pallid sturgeon	Endangered	Special Status	Yes	Yes
Blue sucker	none	Sensitive	Yes	Yes
Northern redbelly X finescale dace	none	Sensitive	Yes	Yes
Paddlefish	none	Sensitive	Yes	Yes
Pearl dace	none	Sensitive	Yes	Yes

Species	USFWS Status	BLM Sensitive	In Range	Suitable Habitat Present
Sauger	none	Sensitive	Yes	Yes
Shortnose gar	none	none	Yes	Yes
Sicklefin chub	none	none	Yes	Yes
Sturgeon chub	none	Sensitive	Yes	Yes
Snapping turtle	none	Sensitive	Yes	Yes
Spiny softshell turtle	none	Sensitive	Yes	Yes
Northern leopard frog	none	Sensitive	Yes	Yes
Plains spadefoot	none	Sensitive	Yes	Yes

***Shortnose gar and Sicklefin chub are listed sensitive species by the Montana Fish, Wildlife, and Parks.**

Table 5. Endangered aquatic wildlife species that occur in, or their ranges overlap with, the lease parcels.

Lease Parcel	Endangered or Sensitive Species
MTM 102757-C7	Pallid sturgeon, Paddlefish, Sauger, Blue Sucker, Sturgeon Chub, Softshelled Turtle, Snapping Turtle, Northern Leopard Frog, Plains Spadefoot Toad
MTM 102757-DP	Pallid sturgeon, Paddlefish, Sauger, Blue Sucker, Sturgeon Chub, Softshelled Turtle, Snapping Turtle, Northern Leopard Frog, Plains Spadefoot Toad
MTM 102757-DQ	Pallid sturgeon, Paddlefish, Sauger, Blue Sucker, Sturgeon Chub, Softshelled Turtle, Snapping Turtle, Northern Leopard Frog, Plains Spadefoot Toad
MTM 102757-DR	Pallid sturgeon, Paddlefish, Sauger, Blue Sucker, Sturgeon Chub, Softshelled Turtle, Snapping Turtle, Northern Leopard Frog, Plains Spadefoot Toad
MTM 102757-DT	Pallid sturgeon, Paddlefish, Sauger, Blue Sucker, Sturgeon Chub, Softshelled Turtle, Snapping Turtle, Northern Leopard Frog, Plains Spadefoot Toad
MTM 102757-TR	Pallid sturgeon, Paddlefish, Sauger, Blue Sucker, Sturgeon Chub, Softshelled Turtle, Snapping Turtle, Northern Leopard Frog, Plains Spadefoot Toad

3.6.2.2 Terrestrial Wildlife

Evaluating wildlife values at the landscape scale is key to understanding potential impacts of a project. Wildlife values, including terrestrial conservation species, species richness, game quality, and aquatic conservation connectivity, have been mapped at the landscape level for Montana by MFWP through their Crucial Areas Planning System (CAPS) 2010.

The lease parcels were reviewed in the CAPS GIS website as an overlay to potential aquatic, terrestrial, and habitat values. This coarse-scale landscape analysis of wildlife resources provides one tool for understanding the context of the wildlife values at a large scale. Fine-scaled tools, data, and resource information based on inventory and monitoring data, as well as local knowledge from BLM and MFWP employees, are used to further examine resource issues at the site-specific level for the specific resources contained in the lease parcels considered in this EA.

The analysis area covers a wide variety of habitat consistent with the Northern Great Plains. Lease parcels are located within short and mixed grass prairies, riparian and hardwood draw habitats, and others. See Section 3.5 for a detailed description of vegetation.

Some of these analysis areas provide habitat for species considered as B M “special status species”. Special status species (SSS), collectively, are USFWS federally listed or proposed species, and the BLM sensitive species from the 2009 Montana/Dakota’s sensitive species list. BLM sensitive species also include both federal candidate species and delisted species within 5 years of delisting. Table 6 presents the following: a list of species; whether the analysis area is within the current range of the species; and if so, whether suitable habitat is present within the lease parcels.

Table 6. Analysis area occurrence of BLM terrestrial sensitive species and USFWS threatened, endangered, candidate or proposed terrestrial species

Species	USFWS Status	BLM Status	In Current Range	Suitable Habitat Present
Mammals				
Gray Wolf*	None	Sensitive	No	Not applicable (N/A)
Grizzly Bear**	Threatened	Sensitive	No	N/A
Black-footed ferret	Endangered	Special Status Species (SSS)	No	No
Black-tailed prairie dog	None	Sensitive	Yes	Yes
Swift fox	None	Sensitive	Yes	Yes
Fisher	None	Sensitive	No	NA
Meadow Jumping Mouse	None	Sensitive	Yes	Yes
Great Basin Pocket Mouse	None	Sensitive	No	N/A
North American Wolverine	None	Sensitive	No	N/A
Pygmy rabbit	None	Sensitive	No	N/A
Long-legged Myotis	None	Sensitive	Yes	Yes
Long-eared Myotis	None	Sensitive	Yes	Yes
Fringed Myotis	None	Sensitive	No	N/A
Fringe-tailed Myotis	None	Sensitive	No	N/A
Pallid bat	None	Sensitive	No	N/A
Northern Myotis	None	Sensitive	Yes	Yes
Townsend’s big-eared bat	None	Sensitive	Yes	Yes
White-tailed prairie dog	None	Sensitive	No	N/A
Birds				
Common loon	None	Sensitive	Yes	Yes
Franklin’s gull	None	Sensitive	Yes	Yes
Interior least tern	Endangered	SSS	Yes	Yes
Black tern	None	Sensitive	Yes	Yes
White-faced ibis	None	Sensitive	Yes	Yes
Whooping crane	Endangered	SSS	Yes	Yes
Yellow rail	None	Sensitive	Yes	Yes
Piping plover	Threatened, with critical habitat	SSS	Yes	Yes
Mountain plover	None	Sensitive	Yes	possible
Marbled godwit	Bird of Conservation Concern (BCC)	Sensitive	Yes	Yes

Species	USFWS Status	BLM Status	In Current Range	Suitable Habitat Present
Long-billed curlew	BCC	Sensitive	Yes	Yes
Black-crowned night heron	None	Sensitive	Yes	Yes
Bobolink	None	Sensitive	Yes	Yes
Greater sage-grouse	Candidate	Sensitive	Yes	Yes
Burrowing owl	BCC	Sensitive	Yes	Yes
Great gray owl	None	Sensitive	No	NA
Three-toed woodpecker	None	Sensitive	No	NA
Trumpeter swan	None	Sensitive	yes	possible
Flammulated owl	None	Sensitive	No	NA
Bald eagle***	BCC	Sensitive	Yes	Yes
Golden eagle	None	Sensitive	Yes	Yes
Ferruginous hawk	None	Sensitive	Yes	Yes
Swainson's hawk	None	Sensitive	Yes	Yes
Peregrine falcon	None	Sensitive	Yes	unlikely
Northern goshawk	None	Sensitive	Yes	unlikely
Sage thrasher	BCC	Sensitive	Yes	Yes
Sprague's pipit	Candidate	Sensitive	Yes	Yes
Sedge wren	None	Sensitive	Yes	Yes
Loggerhead shrike	BCC	Sensitive	Yes	Yes
Chestnut-collared longspur	BCC	Sensitive	Yes	Yes
McCown's longspur	BCC	Sensitive	Yes	Yes
Baird's sparrow	BCC	Sensitive	Yes	Yes
Brewer's sparrow	BCC	Sensitive	Yes	Yes
eConte's sparrow	None	Sensitive	Yes	Yes
also n's Sharp-tailed sparrow	None	Sensitive	Yes	Yes
Horned grebe	BCC	None	Yes	Yes
American bittern	BCC	None	Yes	Yes
Prairie falcon	BCC	None	Yes	Yes
Upland sandpiper	BCC	None	Yes	Yes
Yellow-billed Cuckoo	BCC	Sensitive	Yes	Yes
Short-eared owl	BCC	None	Yes	Yes
ewis's woodpecker	BCC	None	No	NA
Red-headed woodpecker	BCC	Sensitive	Yes	Yes
Black-backed woodpecker	None	Sensitive	No	NA
Sage sparrow	BCC	Sensitive	No	NA
Grasshopper sparrow	BCC	None	Yes	Yes
Dickcissel	BCC	Sensitive	Yes	Yes
Blue-gray naticatcher	None	Sensitive	No	N/A
Harlequin duck	None	Sensitive	No	N/A
Amphibians				
Great Plains toad	None	Sensitive	Yes	Yes
Northern leopard frog	None	Sensitive	Yes	Yes
Plains spadefoot toad	None	Sensitive	Yes	Yes
Boreal/Western Toad	None	Sensitive	No	N/A
Coeur d'Alene salamander	None	Sensitive	No	N/A

Species	USFWS Status	BLM Status	In Current Range	Suitable Habitat Present
Reptiles				
Snapping turtle	None	Sensitive	Yes	Yes
Spiny softshell	None	Sensitive	Yes	Yes
Greater short-horned lizard	None	Sensitive	Yes	Yes
Milk snake	None	Sensitive	Yes	Yes
Western hog-nosed snake	None	Sensitive	Yes	Yes

Table 6 sources: Skarr 2003; Werner, Maxell, Hendricks, and Flath. 2004; Foresman 2001; MTNHP, 2010; BLM, 2009; USDA – NRCS Plants Database, 2010

*Gray wolf has been delisted so has been moved to the sensitive list

**Grizzly bear has been delisted for the Greater Yellowstone ecosystem. In that area it is a Bureau sensitive species.

***Bald eagle has been delisted so has been moved to the sensitive list.

3.6.2.3 Threatened, Endangered, Candidate, and Proposed Species

Threatened, endangered, or candidate bird species may occupy habitat infrequently or seasonally within the analysis area. These species include the whooping crane, interior least tern, piping plover, greater sage-grouse, hereafter referred to as sage grouse, and Sprague’s pipit. In addition, the black-footed ferret is on the USFWS species list for McCone County. (http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species.html)

The USFWS has identified a primary migration corridor for the Aransas-Wood Buffalo population of whooping cranes (http://ecos.fws.gov/docs/recovery_plan/070604_v4.pdf). Lease parcel GA in Daniels County and parcels EA, FA, GB, QA, QC, QD, QE, and QF in Sheridan County are located within this primary migration corridor. Nesting by whooping cranes has not been documented in the analysis area; however, stopover observations have been documented. A whooping crane was documented from approximately 1.5 to 2 miles north of parcels TQ, TR, and TT. This observation occurred in 1988 in a wheat stubble field adjacent to the Missouri River. In addition, observations of whooping cranes have occurred on numerous occasions near parcel FA. The most recent observation occurred in 2008.

Interior least terns migrate up both the Missouri and Yellowstone rivers and utilize gravel bars along these rivers for nesting. Lease parcels C7, DP, DT, and DR are located along the Missouri River. Historic nesting by least terns has been documented to occur from 1.0, 0.16, 0.8, and 0.31 miles from these parcels at the nearest point, respectively. These surveys were conducted in the mid 1990’s, and current survey information is not available. It is expected that suitable nesting habitats have shifted with changes in river morphology since those surveys. No lease parcels are located within or adjacent to the Yellowstone River corridor.

Piping Plover nest along the Missouri River, as well as select nesting locations on wetland habitats in the northeast Montana pothole region. The USFWS has designated 3 separate “units” as critical habitat for piping plover in Montana (<http://www.fws.gov/mountain-prairie/species/birds/pipingplover/>). Unit 1 designates wetlands across approximately 12 townships located in the northeast corner of the state. Lease parcel FA is located within Unit 1. The USFWS designated Unit 2 as the portion of the Missouri River from river mile 1,712 (south of Wolf Point, MT) to river mile 1,586.6 (North Dakota border) as critical habitat for the piping

plover. Lease parcels C7, DP, DT, and DR are located within or immediately adjacent to the Unit 2 critical habitat designation for piping plover. The nearest recorded nesting location by piping plovers is approximately 0.8 miles north of parcel DT. As with Interior least tern survey data, the most recent available survey data for nesting piping plovers also occurred in the 1990's. Current survey data is unavailable. Unit 3 designates habitat around Fort Peck Reservoir. No lease parcels are located adjacent to Unit 3.

Black-footed ferrets are classified as endangered by the USFWS. No black-footed ferret reintroduction sites are located within the field office. A black-footed ferret re-introduction site exists north of Fort Peck Lake on Charles M. Russell National Wildlife Refuge (CMR) lands and on lands administered by the BLM- Malta Field Office. It is likely that the Missouri River and Fort Peck Lake act as geographic barriers to isolate the re-introduction population from expanding into the analysis area.

Black-footed ferrets require prairie dog colonies for survival. According to USFWS guidelines for determining suitable black-footed ferret habitat (USFWS, 1989), a black-tailed prairie dog complex suitable to support ferrets is defined as an aggregation of two or more neighboring prairie dog towns separated by a distance of less than 4.34 miles and totaling 80 acres or more. Recently, the separation distance has been reduced to 1.5 km (.93 miles) (Hanebury, pers. com 2010) to be considered within the range of habitat use by black-footed ferrets. Portions of 3 potential prairie dog colonies are located within 4 proposed lease parcels KW, KX, NR, and TH in McCone County. These potential prairie dog colonies were identified using NAIP imagery, however, ground truthing has not occurred to verify they are actual colonies. It is possible that ground squirrels, pocket gophers, or ant hills can also display as prairie dog colonies utilizing this imagery. Acreages for these potential colonies were estimated. The colony that intersects with lease parcels KW and KX is approximately 90-100 acres, colony intersecting NR is approximately 50 acres, and the colony intersecting TH is approximately 70-80 acres. The nearest colony to colony distance is 3.9 km. This separation distance does not meet the criteria as potential black-footed ferret habitat.

The potential for any native viable population of black-footed ferrets to exist anywhere outside of re-introduction sites is extremely unlikely (<http://www.fws.gov/mountain-prairie/species/mammals/blackfootedferret/>). Based on the lack of existing native populations, and lack of connective habitats from the re-introduction sites, black-footed ferrets would not be expected to occupy any lands within the analysis area, and will not be discussed further.

Two species recently classified as USFWS candidate species occur within the analysis area. These are the Sprague's pipit and the greater sage grouse. Candidate species are those that warrant protection under the Endangered Species Act, but listing the candidate species is precluded by the need to address other listing actions of a higher priority. The USFWS will review the need for listing these species annually and will propose the species for protection when funding and workload for other listing actions allow.

Sprague's pipits were found warranted, but precluded as a threatened or endangered species on September 15, 2010. Sprague's pipits are strongly tied to native prairie (land which has never been plowed) throughout their life cycle (Owens and Myres 1973, pp. 705, 708; Davis 2004, pp.

1138-1139; Dechant et al. 1998, pp. 1-2; Dieni et al. 2003, p. 31; McMaster et al. 2005, p. 219). They are rarely observed in cropland (Koper et al. 2009, p. 1987; Owens and Myres 1973, pp. 697, 707; Igl et al. 2008, pp. 280, 284) or land in the Conservation Reserve Program (a program whereby marginal farmland is planted primarily with grasses) (Higgins et al. 2002, pp. 46-47). Sprague's pipits will use nonnative planted grassland (Higgins et al. 2002, pp. 46-47; Dechant et al. 1998, p. 3; Dohms 2009, pp. 77-78, 88). Vegetation structure may be a better predictor of occurrence than vegetation composition (Davis 2004, pp. 1135, 1137). (Federal Register: September 15, 2010 (Volume 75, Number 178)) Montana Natural Heritage Tracker has documented observations of Sprague's pipits in Daniels, Sheridan, Roosevelt, McCone, Richland, Dawson, Prairie, Custer, and Fallon Counties within the Miles City Field Office. Additionally, B M biologists have documented Sprague's pipits in Carter County. A total of 190 of the 203 proposed lease parcels have been identified as providing potential suitable habitat for Sprague's pipits (<http://apps.fwp.mt.gov/gis/maps/caps/>). These include parcels E3, E4, E6, E7, E8, E9, FB, FD, FC, FE, FF, FG, FH, FJ, FL, FK, FM, FN, FP, FQ, FR, FT, FU, FV, FW, FX, FY, F3, F4, F6, F8, F9, KR, KG, KH, KJ, KK, KQ, KL, KT, KM, KP, KU, KV, KW, KX, KY, K3, K4, K6, K7, K8, K9, NB, NA, ND, NC, NE, NF, N6, NG, NH, NJ, NK, NL, NM, NN, NP, NQ, NR, NU, NT, NY, NV, NW, NX, N3, N4, N7, N8, N9, PC, PF, PG, PH, PJ, PK, PL, PM, PN, PP, PQ, PR, PT, PX, PU, PV, PW, F7, MG, U3, PY, P3, P4, P9, P6, P7, P8, T6, T7, T8, T9, UA, UB, UC, UD, UE, UF, UG, UH, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, U4, U6, U7, U8, U9, VE, VF, VG, VH, RN, RP, RQ, RR, RT, RU, RV, RW, RX, RY, R3, R4, R6, R7, R8, R9, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TU, TW, T4, DP, DQ, DT, DR, GA, ME, GB, QA, QB, QC, EA, QD, QE, QF, and FA. Ground-truthing of the parcels has not occurred to document actual habitat use by Sprague pipits, or that suitable habitat exists within all of the parcels identified by the model. However, it is likely that all or the majority of these parcels provide suitable habitat for the Sprague's pipits.

On March 5, 2010, USFWS concluded sage grouse warrants protection under the Endangered Species Act. However, USFWS determined the listing of the species is precluded by the need to take action on higher priority species. Sage grouse was placed on the list of species that are candidates under the Endangered Species Act.

Sage grouse are a native prairie grouse species that are considered sagebrush obligates and depend on sagebrush for survival. Numerous proposed lease parcels are located within 4 miles of 9 documented sage grouse strutting grounds or "leks", six of which are confirmed active. Lease parcels FV, UH, NF are located within 0.25 miles of 3 separate lek locations. In addition, 52 lease parcels are located within 2 miles of lek locations. These include parcels FT, FU, FV, FW, FX, FY, F3, F4, KR, KG, KJ, KK, KQ, KL, KP, KU, KV, KW, KY, K3, K6, K8, K9, NB, NA, NC, NE, NF, N6, MG, U3, PY, UB, UC, UD, UG, UH, UJ, UK, UL, UP, UQ, UR, UT, UU, UV, UW, U9, VB, VE, VH, and T3.

Instruction Memorandum (IM) No. 2012-043 (BLM, 2011) identified Preliminary Priority Habitat (PPH), and Preliminary General Habitat (PGH) polygons for sage grouse in the analysis area. In addition, IM No. 2012-043 provides conservation policies and procedures for sage grouse management within these polygons. The 52 parcels located within 2 miles of sage grouse leks that are proposed for leasing are located within the PGH polygon delineation. No parcels are located within the PPH polygons.

3.6.2.4 Other Sensitive Species

As noted in Table 6 above, up to 48 wildlife species considered as BLM “sensitive” have the potential to occur within the analysis area. These include 33 birds, 7 mammals, 3 amphibians, and 5 reptiles. This list is a combination of recent and historic observations. In some instances, historic observations are the only known record. If a species is noted as in range, it signifies that habitat within the field office would be considered within the documented range of occupation of habitat by a particular species during some phase of its life cycle. This might be only for a short time frame, during migrations, seasonally, or possibly year-round. Documentation of occupation of habitat by specific wildlife species is considered good across this area for some species, (e.g., sage grouse) and lacking for other species (small mammals, herptiles, raptors, etc.). However, the table documents the potential for wildlife species occurrence if at least one lease parcel is located within a particular sensitive species’ known range of habitat occupation based on available science and research.

Various bird surveys throughout different years have been conducted across the MCFO, which may have included some of the lease parcel areas or at least similar habitats. Surveys have been conducted by the United States Geological Survey, University of Montana Avian Science Center, Rocky Mountain Bird Observatory, MTNHP, and other interested “birders.” Migratory bird species diversity varies across the MCFO area. According to P.D. Skaar’s Montana Bird Distribution, 6th edition (Lenard et al., 2003) species diversity ranges from less than 40 species per “latilong” (~3,200 square miles) to more than 200 across the analysis area.

The analysis area provides potential nesting, foraging, and migratory habitat for various species of raptors. Recent surveys for raptor nests have not occurred over the majority of the proposed lease parcels. However, a small portion of the area was surveyed recently for raptor nests in advance of other proposed projects. Those surveys documented 11 raptor nests in 9 probable breeding territories on or adjacent to 5 parcels including KQ, KL, NF, PT, and PU. Of these, 3 territories were found active, including 2 red-tailed hawk breeding pairs and 1 great horned owl. Other species nests identified include 2 ferruginous hawk nests, 1 golden eagle nest, and 3 “unknown” species nests. Other species fairly common to eastern Montana that would be expected within the analysis area include northern harriers and American kestrels. Raptor species that may utilize these areas in less abundance are bald and golden eagles, ferruginous hawks, sharp-shinned hawks, cooper’s hawks, Swainson’s hawks, burrowing owls, prairie falcons, and merlins. Peregrine falcons are also known to migrate through eastern Montana.

3.7 Fish and Wildlife

3.7.1 Aquatic Wildlife

The aquatic resources in the analysis area include aquatic wildlife and habitat for fish, aquatic arthropods (insects and crustaceans), amphibians, reptiles, and bivalves. The habitat consists of rivers, streams, lakes, and reservoirs that provide habitat for a variety of aquatic wildlife and riparian communities (and their varying lifecycle stages).

Based on known fish presence (MFWP 2010), there are approximately 11 miles of fish-bearing streams within the analysis area on BLM lands, but due to ongoing inventory efforts, the discovery of more prairie streams that support native fish and other aquatic wildlife would occur.

Additionally, prairie fish are constantly moving through a landscape that balances, at the local and landscape scale, between drying and flooding stages. Consequently, the ability to migrate during high flows is a crucial life history strategy.

Aquatic resource conditions of streams are strongly related to riparian vegetation, upland range conditions, land use impacts, and quality and quantity of in-stream water. Habitat conditions throughout the analysis area vary between and within water bodies; the upper and middle reaches of smaller streams may be intermittent, while the lower reaches may receive perennial flows, resulting in different habitat conditions and different aquatic communities within the same stream. Prairie fish are adapted to these cycles of drying and flooding and thrive in these intermittent pools, provided land-use impacts are not severe (Bramblett et al. 2005). However, prairie streams are highly sensitive to disturbance, and due to this factor many prairie stream ecosystems are already imperiled due to anthropogenic activities (Dodds et al. 2004).

Riparian vegetation is a critical component in maintaining aquatic wildlife habitat and is a source of organic nutrients and food items for the prairie stream ecosystem, provides in-stream habitat for fish, amphibians, reptiles, and invertebrates, adds structure to the banks, and reduces erosion; when riparian vegetation senesces and falls into the stream, it adds cover, habitat complexity, and moderates water temperatures. In some cases throughout the analysis area, riparian habitats have been degraded, and the results include increases in erosion and sedimentation, shallower and wider streams (which increases evaporation and thus decreases water quality and quantity), increases in temperature fluctuations, and critically low oxygen content levels; these effects collectively reduce or degrade available aquatic wildlife habitat.

Existing factors limiting or affecting aquatic resources in the analysis area include the lack of a normative flow regime primarily through extensive reservoir development; loss or degradation of riparian habitat; habitat fragmentation; livestock grazing damage; past and current oil and gas development; un-passable fish & aquatic wildlife culverts, oil skimmers, and other stream crossings; and excess siltation due to the various land use activities.

3.7.2 General Wildlife

A diversity of topography and vegetation types exists across the analysis area. This diversity provides habitat for many wildlife species in addition to those previously mentioned.

Current and historic land uses across the lease parcels include grazing, farming, hunting, energy development, and others. Some areas contain large contiguous blocks of well-functioning habitats, while other areas are composed of small, fragmented patches of native habitats. In some areas, existing anthropogenic disturbance at some frequency can be expected to reduce habitat suitability for some species of wildlife intolerant to human activities.

The analysis area supports a wide variety of game and nongame species. Wildlife species and habitat surveys have been conducted throughout the analysis area at various times and for various species. The entire area has not been comprehensively surveyed for all wildlife resources; however, past surveys document what species occur, and provides insight into what other species can be expected to occur within existing habitat types.

Mule deer are the most abundant big game species and use the greatest variety of habitats, generally preferring sagebrush, grassland, and conifer types (BLM 1984). Habitat diversity appears to be a good indicator of intensity of deer use. In mule deer habitats, diversity of vegetation usually followed topographic diversity; thus, rugged topography may be the ultimate factor influencing mule deer use of an area (Mackie et. al. 1998). Habitat such as riparian bottoms, agricultural areas, and forests are used as well, both yearlong or seasonally. Habitat to support mule deer exists within all of the lease parcels.

Winter range is often part of year-round habitat in eastern Montana. Winter ranges are typically in areas of rougher topography and are often dominated by shrub species that provide crucial browse during winter months. Rough topography also provides critical escape and thermal cover important for maintenance and survival. Of the 203 proposed lease parcels, 185 of those are located within mule deer winter range. These include parcels E3, E4, E6, E7, E8, E9, FB, FC, FD, FE, FF, FG, FH, FJ, FL, FK, FM, FN, FP, FQ, FR, FT, FU, FV, FW, FX, FY, F3, F4, F6, F8, F9, KR, KG, KH, KJ, KK, KQ, KL, KT, KM, KP, KU, KV, KW, KX, KY, K3, K4, K6, K7, K8, K9, NB, NA, ND, NC, NE, NF, N6, NG, NH, NJ, NK, NL, NM, NN, NP, NQ, NR, NU, NT, NY, NV, NW, NX, N3, N4, N7, N8, N9, PC, PF, PG, PH, PJ, PK, PL, PM, PN, PP, PQ, PR, PT, PX, PU, PV, PW, F7, MG, U3, PY, P3, P4, P9, P6, P7, P8, T6, T7, T8, T9, UA, UB, UC, UD, UE, UF, UG, UH, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, U4, U6, U7, U8, U9, VB, VC, VD, VE, VF, VG, VH, RP, RT, RU, RV, RW, RY, R3, R4, R6, R7, R8, R9, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TP, TQ, TW, TY, T3, T4, C7, C8, DP, DR, QA, QB, QC, QE, and QF.

White-tailed deer are common in the analysis area. White-tailed deer prefer riparian drainage bottoms, hardwood draws, and conifer areas, but they will also use a variety of other habitats including farmlands. During the winter, white-tailed deer using forested areas prefer dense canopy classes, moist habitat types, uncut areas, and low snow depths. Suitable winter range is a key habitat factor for white-tailed deer, and winter concentration areas occur almost exclusively in riparian and wetland habitats and dense pine (Youmans and Swenson 1982). Although white-tailed deer move on and off winter range, as dictated by seasonal habitat requirements, the animals do not migrate for long distances (Hamlin 1978). A total of 47 parcels are proposed for lease within delineated crucial white-tailed deer winter ranges. These parcels include E4, FJ, FM, KU, NA, NC, NH, NP, NV, NW, N7, PM, PN, PR, PY, P3, P6, P8, T8, T9, UC, UD, UH, UJ, UP, UQ, UR, U9, VB, VC, TD, TF, TG, TP, TQ, TR, TT, TU, TV, TX, TY, C7, DP, DQ, DT, DR, and FA.

Pronghorn antelope are widely distributed across the analysis area. They are generally associated with grasslands and shrublands, but they also seasonally use agricultural fields. Winter ranges for pronghorn antelope generally occur within sagebrush grasslands with at least greater densities of big sagebrush than the surrounding areas. Crucial winter ranges for pronghorn have been identified within the analysis area, and encompass 162 parcels proposed for lease. These include parcels E3, E4, E6, E7, E8, E9, FB, FC, FD, FE, FF, FG, FH, FJ, FL, FK, FM, FN, FP, FQ, FR, FT, FU, FV, FW, FX, FY, F3, F4, F6, F8, F9, KR, KG, KH, KJ, KK, KQ, KL, KT, KM, KP, KU, KV, KY, K3, K6, K7, NB, NA, ND, NC, NE, NF, N6, NG, NH, NN, NP, NQ, NR, NY, NV, NW, N7, PF, PG, PH, PJ, PK, PL, PM, PN, PP, PQ, PR, PT, PX, PU, PV, PW, F7, MG, U3, PY, P3, P4, P9, P6, P7, P8, T6, T7, T8, T9, UA, UB, UC, UD, UE, UF, UG,

UH, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, U4, U6, U7, U8, VE, VG, VH, RN, RP, RQ, RR, RT, RV, RW, RX, RY, R3, R4, R6, R7, R8, R9, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TW, TX, TY, T3, T4, C7, DP, DQ, DT, and DR.

The potential exists for other big game species to occupy the areas. Species include elk, moose, mountain lion, and black bear although presence would likely occur as individuals transition to preferred habitats elsewhere. The potential for big game movements or migrations through eastern Montana are not fully understood. At a local level, it is reasonable to assume big game movements occur at least seasonally. Migration corridors have not been identified through any of the lease parcels.

In addition to sage grouse, sharp-tailed grouse are the other native prairie grouse species in the analysis area. Sharp-tailed grouse generally prefer hardwood draws, riparian areas, and prairie grasslands intermixed with shrubs such as chokecherry and buffaloberry. Portions of 15 lease parcels are located on or within 0.25 miles of sharp-tailed grouse leks. In addition, 95 parcels are located within 2 miles of sharp-tailed grouse leks, and most, if not all, of these parcels would be expected to provide at least seasonal habitat for sharp-tailed grouse. These parcels include E4, E6, E8, E9, FC, FD, FE, FG, FH, FL, FK, FM, FN, FQ, FR, FT, FU, FV, FW, FX, FY, F3, F4, F6, F8, KH, KT, KV, K6, NB, NA, ND, NC, NE, NF, N6, NG, NJ, NK, NL, NM, NN, NP, NQ, NR, NU, NT, NY, NV, NW, N3, N4, N7, N8, N9, PC, PG, PH, PJ, PK, PL, PQ, PT, PX, MG, U3, PY, P3, P4, T7, UH, UJ, UK, UL, UN, UP, UQ, UR, UT, UU, UV, UW, VC, VD, VF, VG, RP, ME, GB, QB, QC, EA, QD, QE, and FA.

Wild turkeys, pheasants, and Hungarian partridge are all species that have been introduced to eastern Montana and would be expected to utilize available habitats within some of the parcels.

3.8 Cultural Resources

BLM is responsible for identifying, protecting, managing, and enhancing cultural resources located on public lands or those that may be affected by BLM management actions on non-federal lands. Cultural resources include archaeological, historic, architectural properties, and traditional lifeway values important to Native Americans. Sites can vary with regard to their intrinsic value as well as their significance to scientific study; therefore, management practices employed are commensurate with their designation. Significant cultural resources values include; their use to gather scientific information on human culture, history, interpretive and educational value, values associated with important people and events of significance in history, and often aesthetic value, as in a prehistoric rock art panel or an historic landscape.

A generalized prehistory of eastern Montana can be categorized in a chronological framework, and time periods are distinguished on the basis of differences in material culture traits or artifacts and subsistence patterns: the PaleoIndian period (ca. 12,500 BP-7800 BP), Archaic period (ca. 7800 BP-1500 BP), Prehistoric period (ca. 1500 BP-200 BP), Protohistoric period (ca. 250 BP-100 BP), and Historic Periods (A.D. 1805-A.D. 1960) (Aaberg et al 2006).

Cultural properties are evaluated with reference to the National Register of Historic Places criteria for the purposes of assessing their historical values and public significance; such evaluations are carefully considered when cultural properties are allocated to use categories,

although preservation and nomination of these properties must be weighted on a case-by-case basis.

A recent Class I overview of cultural resources was prepared for the analysis area (Aaberg et al 2006). The cultural environment of the MCFO as of May 2005 contained 7,065 prehistoric and 2,869 historic archeological sites as well as 1,929 paleontological localities. Archeological properties (historic and prehistoric sites) occur in all counties encompassed by the field office. The four counties with nominated lease parcels contain 9.4% percent of all documented prehistoric and 26% of all documented historic resources within the MCFO. Each county contains the following percentages of resource site types within its boundaries: Daniels 0.6% prehistoric 1.7% historic; McCone 2.3% prehistoric 4.3% historic; Richland 2% prehistoric, 6.1% historic; and Sheridan 4.5% prehistoric, 13.9% historic.

The overall archeological site density of the MCFO (historic and prehistoric) is estimated at one site per 93 acres (Aaberg et al 2006). Prehistoric sites are estimated to be distributed at one site per 130.8 acres (4.9 per square mile) and historic sites at one site per 322 acres (two per square mile) for all surveyed acres within the MCFO. Approximately 10% to 15% of all sites are found to be eligible for the National Register of Historic Places.

A review of the Montana State Historical Preservation Office (SHPO) Cultural Resource Information System (CRIS) and Cultural Resource Annotated Bibliography System (CRABS), as well as BLM Cultural Resource databases and GIS data, indicates 21 lease parcels (MTM 102757- FE, FP, FQ, N6, NF, PK, PQ, PT, PX, R3, TD, TJ, TL, TM, TX, U8, UB, UF, UG, UX and UY contain recorded cultural sites within the lease parcel boundaries. Inventory data is not available for a majority of individual lease parcels; however some parcels have incomplete coverage of cultural resource inventory.

In addition, review of the lease parcels indicated that 19 lease parcels are situated within areas that may contain significant cultural characteristics associated with the Lewis and Clark National Historic Trail (MTM 102757-C7, C8, DP, DQ, DR, DT, N3, N4, N7, TQ, TR, TT, TU, U9, VB, VC, VD, VE and VF).

Review of the lease parcels also indicate that all or portions of 9 lease parcels (MTM 102757- NN, U4, U6, U7, UW, UX, UY, VG and VH) are situated within or are adjacent to areas that may contain significant cultural characteristics associated with the Long Medicine Wheel site (24MC1002) and the proposed Long Medicine Wheel ACEC being considered in the upcoming Draft MCFO RMP. The Long Medicine Wheel site is 1 of 5 known medicine wheel sites recorded in the Northern Great Plains (MacDonald 2012:151) and the only known medicine wheel site in the Miles City Field Office area (Aaberg et al. 2006, Brumley 1988). The site is a sensitive site type to Native Americans. Additional information regarding the Long Medicine Wheel site and surrounding area can be found in Appendix E.

3.9 Native American Religious Concerns

B M's management of a tive American Religious concerns is guided through its 8120 Manual: *Tribal Consultation Under Cultural Resources Authorities* and 8120 Handbook: *Guidelines for Conducting Tribal Consultation*. Further guidance for consideration of fluid minerals leasing is

contained in BLM Washington Office Instruction Memorandum 2005-003: Cultural Resources, Tribal Consultation, and Fluid Mineral Leasing. The 2005 memo notes leasing is considered an undertaking as defined in the National Historic Preservation Act. Generally areas of concern to Native Americans are referred to as “Traditional Cultural Properties” (TCPs) which are defined as cultural properties eligible for the National Register because of its association with cultural practices or beliefs that are rooted in that community’s history and are important in maintaining the continuing cultural identity of the community.

Areas of tribal concern in southeast Montana are listed in Appendices B-E of the Ethnographic Overview of Southeast Montana (Peterson and Deaver 2002). Based on input from various tribes, the 2002 Ethnographic Overview also identified 12 sensitive site types. These include battlefield and raiding sites, burials, cairns, communal kills, fasting beds (vision quests), homesteads, medicine lodges, rock art, settlements (campsites), stone rings, spirit homes, and environmental places (plant gathering areas, mineral and fossil collection areas).

The Crow Tribe’s 2002 document noted rock art, fasting sites, siege sites, camp sites, mourning sites, final resting places (burials), buffalo jumps, and environmental areas, including animal habitats and natural areas of concern such as springs. The Northern Cheyenne Tribe in its 2002 document noted large ring sites (both in terms of ring diameters and ring numbers), isolated fasting beds, rock art sites, and large diameter fasting structure as having religious significance to the tribe.

Thirteen parcels contain types of sites or are adjacent to sites that have been identified as being of concern to Native Americans. These are listed by parcel and site type in Table 7 below.

Table 7. Site Types of Concern to Native Americans within a Lease Parcel or within the Same Section as the Lease Parcel

Parcel Number	Site number	In Parcel	In Same Section as Parcel	Site Type
MTM 102757-C7	24MC001		X	Bison Kill, Stone Circles
MTM 102757-FE	24MC0221 24MC0222	X		Rock Cairns,
MTM 102757-FP	24MC0163	X		Buried Campsite
MTM 102757-FQ	24MC0016	X		Stone Circles
MTM 102757-PQ	24MC0259	X		Stone Circles
MTM 102757-PV	24SH0681		X	Stone Circles
MTM 102757-R3	24MC0018	X		Stone Circles
MTM 102757-TD	24MC0149 24MC0159 24MC0160	X		Stone Circles
MTM 102757-TH MTM 102757 TL	24MC0013 24MC0019 24MC0020	X		Stone Circles
MTM 102757-TX	24MC0273	X		Stone Circle and Cairn
MTM 102757-U8	24MC0012 24MC0014	X		Stone Circles and Cairns

MTM 102757-UX	24MC0263 24MC1002	X		Rock Art- Petroglyph Medicine Wheel and Stone Circles
---------------	----------------------	---	--	---

3.10 Paleontology

According to Section 6301 of the Paleontological Resource Protection Act of 2009 Omnibus Public Lands Bill, Subtitle D, SEC. 6301, paleontological resources are defined as “any fossilized remains, traces, or imprints of organisms, preserved in or on the earth’s crust, that are of paleontological interest and that provide information about the history of life on earth” (Paleontological Resource Protection Act of 2009 Omnibus Lands Bill, Subtitle D, SEC. 6301-3612 (P.L. 59-209; 34 Stat. 225; 16 U.S.C. 431-433). All vertebrate fossils, be they fossilized remains, traces, or imprints of vertebrate organisms, are considered significant. Paleontological resources do not include archaeological and cultural (typically human graves) resources.

Paleontological localities are generally not considered eligible for the National Register of Historic Places as individual fossil localities; however, they may be eligible under National Register criteria A, B, and D for other reasons (e.g., the development of paleontology in Montana, association with important events such as exploration surveys, association with paleontologists, for their contribution to understanding of the paleohistory of an area).

Within the MCFO paleontological resources are strongly associated with the Upper Cretaceous Hell Creek formation and the Tertiary Tullock Member of the Fort Union formation.

BLM classified geologic formations that have a high Potential Fossil Yield Classification (PFYC) of 4 or 5. The MCFO has the following geologic formation classifications:

Arikaree	Class 4
Ft Union-Tullock	Class 4
Hell Creek	Class 5
Lance	Class 5
Judith River	Class 4b

A review of B M’s Paleontological Resource database and GIS-mapped PFYC formations indicates all or part of 144 lease parcels are located within PFYC formations rated 4 or 5. The parcels were identified within two of the five geologic formations that are considered significant PFYC formations to the field office; Hell Creek Formation 5, Tullock Member Ft Union 4. Results of the MCFO RMP Paleontological Resources Database search indicate that 7 lease parcels (MTM 102757-FV, FW, N6, NF, UB, UW and UX) contain recorded paleontological localities, three parcels (MTM 102757-FW, N6 and UX) have localities that have been recorded and given Smithsonian trinomial numbers, with one parcel (MTM 102757-UX) having 11 Smithsonian recorded paleontological sites in it and has been designated a Paleontological Site.

Of the four counties that have lease parcels within their boundaries, only one county has parcels which are situated within a PFYC significant formation. The 144 parcels in McCone County containing PFYC 4 or 5 classified geologic formations are, MTM 102757-C7, C8, DP, DQ, F3, F4, F6, F7, F8, F9, FF, FG, FH, FJ, FR, FT, FU, FV, FW, FX, FY, K3, K4, K6, K7, K8, KG, KH, KJ, KK, KL, KM, KP, KQ, KR, KT, KU, KV, KW, KX, KY, MG, NA, N3, N4, N6, N7,

N8, N9, NB, NC, ND, NE, NF, NG, NH, NJ, NK, NL, NN, NP, NR, NV, NW, NX, NY, P3, P4, P6, P7, P8, P9, PK, PM, PN, PP, PQ, PR, PT, PV, PY, R3, R4, R6, R7, R8, R9, RR, T3, T4, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TP, TQ, TT, TV, TW, TX, TY, U3, U4, U6, U7, U8, U9, UA, UB, UC, UD, UE, UF, UG, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, VB, VC, VD, VE, VF, VG, VH, while Daniels, Richland and Sheridan Counties have none.

Within parcel MTM-102757-UX, adjacent to the proposed Long Medicine Wheel ACEC is an area of significant paleontological values known as the Long Medicine Wheel Paleontological area. This 160 acre area has been designated as a Paleontological site. Additional information regarding the Paleontological site can be found in Appendix E.

3.11 Visual Resources

BLM Visual Resource classifications are only applied to BLM surface, as such; the affected environment for visual resources only consists of approximately 61,239 acres of BLM - administered surface in the analysis area (Table 8).

A Class II VRM area classification means that the character of the landscape has unique combinations of visual features such as land, vegetation, and water. The existing character of the landscape should be retained. Activities or modifications of the environment should not be evident or attract the attention of the casual observer. Changes caused by management activities must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

A Class III VRM area classification means the level of change to the character of the landscape should be moderate. Changes caused by management activities should not dominate the view of the casual observer and should not detract from the existing landscape features. Any changes made should repeat the basic elements found in the natural landscape such as form, line, color and texture.

A Class IV VRM area classification means that the characteristic landscape can provide for major modification of the landscape. The level of change in the basic landscape elements can be high. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Table 8: VRM Classes for the analysis area by lease parcel

Leasing Areas	VRM Class II Acres	VRM Class III Acres	VRM Class IV Acres
MCCONE COUNTY	8,541 total acres	315 total acres	52,383 total acres
MTM 102757-E3	12	68	
MTM 102757-E6		74	1,004
MTM 102757-E7			120
MTM 102757-E9		14	507
MTM 102757-FB			240
MTM 102757-FD			80
MTM 102757-FF			40
MTM 102757-FG			1,179
MTM 102757-FJ			400
MTM 102757-FL			1,804

MTM 102757-FK			1,983
MTM 102757-FM			80
MTM 102757-FQ			2,191
MTM 102757-FR			402
MTM 102757-FU			442
MTM 102757-FV			1,359
MTM 102757-FW			547
MTM 102757-FX			81
MTM 102757-F4			1,004
MTM 102757-F6			40
MTM 102757-F8			319
MTM 102757-F9			159
MTM 102757-KR			280
MTM 102757-KH			69
MTM 102757-KK			80
MTM 102757-KL			1,404
MTM 102757-KT			150
MTM 102757-KM			80
MTM 102757-KP			80
MTM 102757-KU			897
MTM 102757-KW			400
MTM 102757-KX			310
MTM 102757-K3			1,165
MTM 102757-K4			40
MTM 102757-K6			80
MTM 102757-NB			965
MTM 102757-ND			40
MTM 102757-NF			1,768
MTM 102757-N6			1,142
MTM 102757-NG			40
MTM 102757-NH			118
MTM 102757-NK			517
MTM 102757-NL			279
MTM 102757-NN			320
MTM 102757-NQ			40
MTM 102757-NT			199
MTM 102757-NY			80
MTM 102757-NX			160
MTM 102757-N3			452
MTM 102757-N7			360
MTM 102757-N9			40
MTM 102757-PF	559		78
MTM 102757-PG			318
MTM 102757-PJ			318
MTM 102757-PK	508		532
MTM 102757-PP			80
MTM 102757-PQ	1,082		39
MTM 102757-PR	379		606
MTM 102757-PT	1,473		8
MTM 102757-PX	560		
MTM 102757-PU	462		258
MTM 102757-PV	1,689		66
MTM 102757-PW	320		

MTM 102757-F7			160
MTM 102757-U3			80
MTM 102757-P3			272
MTM 102757-P4			1,601
MTM 102757-P9			481
MTM 102757-P7			153
MTM 102757-T7			360
MTM 102757-T9			40
MTM 102757-UA			278
MTM 102757-UB			1,769
MTM 102757-UC			65
MTM 102757-UE			280
MTM 102757-UF			602
MTM 102757-UG			80
MTM 102757-UH			75
MTM 102757-UJ			35
MTM 102757-UK			642
MTM 102757-UN			80
MTM 102757-UP			520
MTM 102757-UT			120
MTM 102757-UU			361
MTM 102757-UW			1,879
MTM 102757-UX			1,040
MTM 102757-U4			480
MTM 102757-U6			40
MTM 102757-U7			720
MTM 102757-U8			2,277
MTM 102757-VC	32		79
MTM 102757-VE			400
MTM 102757-RN			40
MTM 102757-RP	772		45
MTM 102757-RR			149
MTM 102757-RT			434
MTM 102757-RU			320
MTM 102757-RV			40
MTM 102757-RW			160
MTM 102757-RX			40
MTM 102757-RY			344
MTM 102757-R3			533
MTM 102757-R4			117
MTM 102757-R6			480
MTM 102757-R8			40
MTM 102757-TA			40
MTM 102757-TB			200
MTM 102757-TC			443
MTM 102757-TD			120
MTM 102757-TF			803
MTM 102757-TG			682
MTM 102757-TH			441
MTM 102757-TJ			1,003
MTM 102757-TK			200
MTM 102757-TL			560
MTM 102757-TM			280

MTM 102757-TQ			440
MTM 102757-TT			160
MTM 102757-TV			40
MTM 102757-TW			160
MTM 102757-TX			80
MTM 102757-TY			240
MTM 102757-T3			198
MTM 102757-T4			240
MTM 102757-C8		159	
MTM 102757-DP	693		472
DANIELS COUNTY	0 total acres	0 total acres	42 total acres
MTM 102757-GA			42

3.12 Forest and Woodland Resources

Evergreen forest habitat types occurring in the analysis area include ponderosa pine (*Pinus ponderosa*), limber pine (*Pinus flexilis*), Douglas-fir (*Pseudotsuga menziesii*), and Rocky Mountain juniper (*Juniperus scopulorum*). Deciduous forest habitat types include green ash (*Fraxinus pennsylvanica*) and boxelder (*Acer negundo*) (Hansen et al. 2008). Ponderosa pine and Rocky Mountain juniper forest types occur on the majority of analysis area forestlands. Green ash and box elder forest types occur along woody draws, streams, rivers, lakes, reservoirs, ponds, and other wet areas. Moisture (along with soil type, nutrient availability, plant density, topography, and climate) is one of the most important factors affecting plant growth; lack of moisture can have a pronounced influence on overall productivity (Hansen et al. 2008). Table 9, summarizes forest and woodland acres in the analysis area by forest type and individual parcel.

Table 9. Forestland Acreage and Forest Type by Lease Parcel

Lease Parcel	Evergreen Forest	Deciduous Forest	Mixed Forest	Total Acres
MTM 102757-C8		1.49		1.49
MTM 102757-DP		2.15	4.18	6.33
MTM 102757-E6			0.44	0.44
MTM 102757-E9		2.32	1.24	3.56
MTM 102757-F4	0.44	8.45		8.89
MTM 102757-F7		0.44		0.44
MTM 102757-F9		1.10		1.10
MTM 102757-FB	0.20		0.18	0.38
MTM 102757-FD		0.97	0.86	1.83
MTM 102757-FG	0.44	4.58	1.72	6.74
MTM 102757-FJ		0.22		0.22
MTM 102757-FK		10.48	6.89	17.37
MTM 102757-FL		16.45	10.45	26.90
MTM 102757-FQ		11.64	11.25	22.89
MTM 102757-FV		1.06		1.06
MTM 102757-K3		1.57	0.22	1.79
MTM 102757-KK		0.31	0.22	0.53
MTM 102757-KL		18.48	1.11	19.59
MTM 102757-KX		0.44		0.44
MTM 102757-N3		10.23	7.5	17.73
MTM 102757-N6	0.44	6.00	0.22	6.66
MTM 102757-N7		11.54	0.44	11.98

MTM 102757-N9		4.89	1.48	6.37
MTM 102757-NB		12.43		12.43
MTM 102757-ND		0.28		0.28
MTM 102757-NF	0.22	1.56	1.56	3.34
MTM 102757-NG		4.23	0.22	4.45
MTM 102757-NH		0.22	0.13	0.35
MTM 102757-NK		21.58	0.89	22.47
MTM 102757-NL		8.21		8.21
MTM 102757-NN		2.45	2.45	4.90
MTM 102757-NQ		1.33		1.33
MTM 102757-NT		17.72	2.45	20.17
MTM 102757-NY		4.67	1.11	5.78
MTM 102757-P3		0.22		0.22
MTM 102757-P4		10.97	3.78	14.75
MTM 102757-P9		11.58	4.88	16.46
MTM 102757-PD		4.21	0.22	4.43
MTM 102757-PF		5.31	8.45	13.76
MTM 102757-PG		7.47	2.44	9.91
MTM 102757-PJ		3.11	7.54	10.65
MTM 102757-PK		9.94	4.35	14.29
MTM 102757-PQ		4.19	8.95	13.14
MTM 102757-PR		0.44	1.33	1.77
MTM 102757-PT		12.60	9.17	21.77
MTM 102757-PU		10.19	11.14	21.33
MTM 102757-PV		2.89	6.70	9.59
MTM 102757-PX		7.76	4.00	11.76
MTM 102757-R3		3.32	1.78	5.10
MTM 102757-R6		1.56	0.67	2.23
MTM 102757-R8		1.91	0.78	2.69
MTM 102757-RN		2.22	0.44	2.66
MTM 102757-RP		19.57	8.52	28.09
MTM 102757-RR		0.44	0.25	0.69
MTM 102757-RT		7.10	1.78	8.88
MTM 102757-RU		14.85	4.31	19.16
MTM 102757-RV			0.65	0.65
MTM 102757-RW		0.41		0.41
MTM 102757-RY		4.03	3.75	7.78
MTM 102757-T3		5.83	1.11	5.94
MTM 102757-T4		0.22		0.22
MTM 102757-TA		1.48	0.44	1.92
MTM 102757-TB		10.51	0.67	11.18
MTM 102757-TD		3.82		3.82
MTM 102757-TF		14.25	1.31	15.56
MTM 102757-TG		3.23	0.44	3.67
MTM 102757-TH		0.61		0.61
MTM 102757-TJ		3.56	2.58	6.14
MTM 102757-TK		2.22	1.11	3.33
MTM 102757-TL		0.22	0.44	0.66
MTM 102757-TM		3.34	0.89	4.23

MTM 102757-TQ		5.47		5.47
MTM 102757-TW		0.67	0.22	0.89
MTM 102757-TX		1.45		1.45
MTM 102757-U4		6.59		6.59
MTM 102757-U6		3.71		3.71
MTM 102757-U7		8.50	0.37	8.87
MTM 102757-U8		14.40	2.45	16.85
MTM 102757-UA		1.56	0.22	1.78
MTM 102757-UB		6.77	5.34	12.11
MTM 102757-UC		1.32		1.32
MTM 102757-UE		1.56	0.22	1.78
MTM 102757-UF		2.79	0.67	3.46
MTM 102757-UG		0.22		0.22
MTM 102757-UH		0.22		0.22
MTM 102757-UJ		0.16	0.18	0.34
MTM 102757-UK		2.47	0.80	3.27
MTM 102757-UN		5.85	0.22	6.07
MTM 102757-UP		1.75	.22	1.97
MTM 102757-UU		7.98	1.11	8.99
MTM 102757-UW		8.94	1.33	10.27
MTM 102757-UX		12.80	2.67	15.47
MTM 102757-VC		10.37		10.37
MTM 102757-VE		25.78	1.68	27.46
Total	1.76	516.22	179.84	697.82

Source: LANDFIRE Vegetation Cover Types, 30-meter resolution, Veg Codes 2054 or 2179 for Conifer Forest, 162 for Hardwoods (Bur Oak)

Historically, many forests in the analysis area consisted of open and park-like stands of ponderosa pine and juniper intermixed with hardwood draws. Mature stands were dominated by large ponderosa pine trees with an understory of native bunchgrasses and low shrubs. Prior to European settlement, fires ignited by lightning and Native Americans frequently burned throughout the analysis area, with fire return intervals of 35 to 40 years (Arno and Gruell 1983). High-frequency low-intensity fires kept forests open and removed understory vegetation, down material, and tree regeneration; resulting in irregularly shaped patches and groups of trees varying in age, size, and density across the landscape.

In the early 1900s, implementation of aggressive fire suppression tactics dramatically interrupted the historic role of fire in ponderosa pine ecosystems; resulting in species composition and structural changes and increased stand density levels. Subsequently, vegetative communities shifted towards late successional stage forests and woodlands. Forests and woodlands have declined in overall health and productivity and are less resilient to disturbances. Overstocked forests and woodlands experience increased stress due to competition for growing space (e.g., water, sunlight, and nutrients). Consequently, these conditions have increased the susceptibility of forested areas to insect attacks, disease, and the risk of stand-replacing fires.

Since the late 1800s, intensive grazing in eastern Montana has removed fine grass fuels that historically carried low-intensity fires over large areas each year (Clark and Sampson 1995). As a result of both fire suppression and livestock grazing, juniper became established on sites that

were previously grass-covered and maintained by periodic wildfires (Smeins and Fuhlendorf 1997). Trees are now growing on sites where natural disturbance historically limited their presence.

Forest and woodland health within the analysis area will continue to deteriorate without implementation of management treatments to reduce fuel accumulations and restore existing stands to desired conditions by improving the overall vigor, productivity, and resiliency of forested vegetation. Selective thinning and removal of vegetative resources through hand and mechanical methods, or low intensity prescribed burns, would be important management tools for ponderosa pine forests.

3.13 Livestock Grazing

Of the 203 lease parcels, 75 involve only private and/or state surface ownership. One hundred and twenty-eight of the lease parcels, in whole or part, have BLM surface ownership. All but thirty-nine of the lease parcels has a BLM grazing authorization. The 203 parcels involve 64 grazing allotments in four different counties. Of the 64 grazing allotments, sixty-two are authorized for cattle grazing only, one is authorized for sheep only and one is authorized for cattle and horse grazing. Thirty-one of the grazing authorizations do not restrict the grazing season of use due to the small percentage of public land within the allotment. The other thirty-three have a restricted season of use. Six allotments graze according to a developed allotment management plan (AMP). Most allotments have several range improvements such as fences, stock ponds, pipelines, springs, windmills, seedings, wells, and access roads for livestock management purposes.

3.14 Recreation and Travel Management

BLM only manages recreational opportunities and experiences on BLM-administered surface. The affected environment consists of approximately 61,239 acres of BLM-administered surface. Recreational activities enjoyed by the public on BLM lands within the analysis area include hunting, hiking, camping, fishing, photography, picnicking, and winter activities such as snowmobiling. Benefits and experiences enjoyed by recreational users include opportunities for solitude, spending time with families, enhancing leisure time, improving sports skills, enjoying nature and enjoying physical exercise.

Of the approximately 61,239 BLM-administered acres proposed for lease, approximately 260 acres (MTM 102757-DP; 256 acres and MTM-102757-VC; 4 acres) are located within the Lewis and Clark Trail Special Recreation Management Area (SRMA). Management objectives within the Lewis and Clark Trail SRMA are to enhance water-based recreation resources while meeting public demand for river access. Recreational activities in the Lewis and Clark Trail SRMA include floating, rafting, fishing, picnicking, day hiking, wildlife viewing, and camping.

Much of the approximately 61,239 BLM-administered acres proposed for lease consist of small and scattered tracts with limited legal public access (i.e., no public easements or rights-of-way across private property). The lack of public access limits use of the BLM parcels for recreational use by the general public. The types of limited public use on these lease parcels can be characterized as casual dispersed recreational activities including hiking, hunting (including outfitters), camping, and wildlife viewing.

3.15 Lands and Realty

The analysis area consists of 203 parcels that include 85,758.14 surveyed surface acres of which 61,184.50 surveyed acres are BLM administered surface, 24,004.94 surveyed acres are private surface, and 568.70 surveyed acres are state surface. Table 10 below categorizes the 203 parcels by surface ownership and county.

There are thirty-five lease parcels with authorized BLM Rights-of Way (ROWS) approved on BLM administered surface (Appendix F).

Table 10. Number of parcels, surface ownership, and acres by county.

County	Parcels	Ownership	Acres
DANIELS			
		BLM	0.00
	1 parcel (MTM-102757 GA)	Private	41.64
	1 TOTAL		41.64
MCCONE			
	125 parcels (MTM-102757 C8, DP, E3, E6, E7, E9, F4, F7, F8, F9, FB, FD, FF, FG, FJ, FK, FL, FM, FQ, FR, FU, FV, FW, FX, K3, K4, K6, KH, KK, KL, KM, KR, KT, KU, KW, KX, N3, N6, N7, N9, NB, ND, NF, NG, NH, NK, NL, NN, NQ, NT, NX, NY, P3, PR, P7, P9, PF, PG, PJ, PK, PP, PQ, PR, PT, PU, PV, PX, R4, R3, R6, R8, RN, RP, RR, RT, RU, RW, T3, T4, T7, T9, TA, TB, TF, TG, TJ, TK, TL, TM, TT, TW, TX, TY, U3, U4, U6, U7, U8, UA, UB, UC, UE, UF, UG, UK, UN, UP, UT, UU, UW, UX, VC, VE, *F6, *KP, *RV, *RX, *RY, *TC, *TD, *TH, *TQ, *TV, *UH, *UJ)	BLM	61,184.50
	78 parcels (MTM-102757 *F6, *KP, *RV, *RX, *RY, *TC, *TD, *TH, *TQ, *TV, *UH, *UJ, C7, DQ, DT, E4, E8, F3, FC, FE, FH, FN, FP, FT, FY, K7, K8, K9, KG, KJ, KQ, KV, KY, MG, N4, N8, NA, NC, NE, NJ, NM, NP, NR, NU, NV, NW, P6, P8, PC, PH, PL, PM, PN, PW, PY, R7, R9, RQ, T6, T8, TE, TN, TP, TR, TU, U9, UD, UL, UM, UQ, UR, UV, UY, VB, VD, VF, VG, VH)	Private	23,258.63
	191 TOTAL		84,443.13
RICHLAND			
		BLM	0.00
	2 parcels (MTM-102757 DR, ME)	Private	51.35
	2 TOTAL		51.35

SHERIDAN			
		BLM	0.00
	7 parcels (MTM-102757-**QC, **QE, EA, GB, QA, QB, QD)	Private	653.32
	4 parcels (MTM-102757 FA, **QC, **QE, QF)	State	568.70
	9 TOTAL		1,222.02

*12 parcels contain both federal and private surface.

** 2 parcels contain both private and State surface.

3.16 Minerals

3.16.1 Fluid Minerals

It is the policy of the BLM to make mineral resources available for development and to encourage development of these resources to meet national, regional, and local needs, consistent with national objectives of an adequate supply of minerals at reasonable prices. At the same time, the BLM strives to assure that mineral development occurs in a manner which minimizes environmental damage and provides for the reclamation of the lands affected.

Currently there are 1,280 federal oil and gas leases covering approximately 931,844 acres in the MCFO. The number of acres leased and the number of leases can vary on daily basis as leases are relinquished, expired, or are terminated. Existing production activity occurs on approximately 18 percent of this lease acreage. Information on numbers and status of wells on these leases and well status and numbers of private and state wells within the external boundary of the field office is displayed in Table 11. Numbers of townships, leases acres within those townships, and development activity for all jurisdictions are summarized in Table 12.

Exploration and development activities would only occur after a lease is issued and the appropriate permit is approved. Exploration and development proposals would require completion of a separate environmental document to analyze specific proposals and site-specific resource concerns before BLM approved the appropriate permit.

Table 11. Existing Development Activity

	FEDERAL WELLS	PRIVATE AND STATE WELLS
Drilling Well(s)	3	92
Producing Gas Well(s)(including CBNG)	495	1087
Producing Oil Well(s)	254	1832
Water Injection Well(s)	137	478
Shut-in Well(s)	114	1011
Temporarily Abandoned Well(s)	85	232

Table 12. Oil and Gas Leasing and Existing Development within Townships Containing Parcels

	McCone County	Richland County	Sheridan County	Daniels County
Number of Townships Containing Lease Parcels	19	2	4	1
Total Acres Within Applicable Township(s)				

	McCone County	Richland County	Sheridan County	Daniels County
	397,816	31,403	93,561	23,075
Acres of Federal Oil and Gas Minerals	88,141	849	2400	42
Percent of Township(s)	22.2%	2.7%	2.6%	0.18%
Acres of Leased Federal Oil and Gas Minerals	Zero	63	1,124	Zero
Percent of Township(s)	0.0%	0.20%	1.2%	0.0%
Acres of Leased Federal Oil and Gas Minerals Suspended	Zero	Zero	Zero	Zero
Percent of Township(s)	0.0%	0.0%	0.0%	0.0%
Federal Wells	No Drilling, producing, shut in, or TA wells.	No Drilling, producing, shut in, or TA wells.	No Drilling, producing, shut in, or TA wells.	No Drilling, producing, shut in, or TA wells.
Private and State Wells	1 SI well, 147 P&A wells, 5 POW, 2 Inj. wells	9 P&A Wells	1 spudded well, 33 P&A wells, 20 POWs, 2 Inj. wells	2 P&A wells

3.17 Special Designations

3.17.1 National Historic/Scenic Trails

Lease parcels MTM 102757-C7, DP, DQ, DR, DT, TR and VC (approximately 730 acres) are adjacent to the Lewis and Clark National Historic Trail (NHT). The Lewis and Clark NHT will continue to be managed in accordance with the Act that established the trail in 1978. It will be managed for public use and enjoyment, while preserving the historic and cultural resources that are related to the events that occurred during the Lewis and Clark Expedition. Any changes in the landscape within view of the Lewis and Clark NHT will be guided by Class II visual resource management objectives.

3.17.2 Areas of Critical Environmental Concern (ACECs)

No Areas of Critical Environmental Concern (ACEC) are located within the nominated lease parcels analysis area. However, review of the lease parcels also indicated that all or portions of 9 lease parcels (MTM 102757- NN, U4, U6, U7, UW, UX, UY, VG and VH) are situated within or are adjacent to areas that may contain significant cultural characteristics associated with the proposed Long Medicine Wheel ACEC being considered in the upcoming Draft MCFO RMP. See section 3.8 Cultural Resources.

3.18 Social and Economic Conditions

3.18.1 Social and Environmental Justice

The social section focuses on the areas in the immediate vicinity of the parcels which are located in Daniels, McCone, Richland and Sheridan Counties, with almost all of the parcels located in McCone County. The 2010 county populations ranged from about 1,750 in Daniels and McCone Counties to 3,375 in Sheridan County to 9,750 in Richland County. County population changes between 2000 and 2010 ranged from losses in Sheridan (-17.6%), McCone (-

12.3%), and Daniels Counties (-13.2) to a slight gain (0.8%) in Richland County. The county seats for these counties include Sidney in Richland County (2010 population 4,843), Plentywood in Sheridan County (1,734), Scobey in Daniels County (1,107) and Circle in McCone County (526). Population density (persons per square mile) is generally very low ranging 0.7 in McCone County to 1.2 in Daniels County to 2.0 in Sheridan County to 4.7 in Richland County. These figures compare to a statewide figure of 6.8. The areas in the vicinity of the parcels are home mostly to large cattle ranches and many of these lease parcels are located in areas that have not previously been developed for oil and gas production. Approximately 28 percent of the land associated with the parcels is split estate (private or state surface with federal mineral estate).

Oil and gas leasing and production on federal lands is already occurring in Richland and Sheridan Counties but not in Daniels or McCone Counties. In the years 2005-2010, Richland County had the highest oil and gas production on federal lands of any of the counties in eastern Montana. Most of the oil and gas industry support service companies for eastern Montana are located in Glendive, Sidney, and Miles City, Montana, and Williston and Dickinson, North Dakota. Oil and gas drilling and production has steadily increased since 2005 in northeastern Montana and western North Dakota in the Williston Basin.

In 2010, the American Indian population was 2.1% or less in all four counties. The percent of the population living below the poverty level in 2006-2010 ranged from 8.6 in McCone County to 13.5 to 14.5% in all the other counties. This compares to a state figure of 14.5% during the same time period. Seven Indian Reservations are located in the state of Montana and many others are located in the surrounding states, particularly in North and South Dakota. One reservation, Fort Peck, is home to the Assiniboine and Sioux Tribes and is located in the vicinity of the parcels being considered. None of the parcels are located within or adjacent to the Fort Peck Reservation.

The social environment of these counties is described in detail in the Socioeconomic Baseline Report for the Miles City Field Office RMP and EIS (prepared for the DOI, BLM, MCFO, June, 2005).

3.18.2 Economics

Certain existing demographic and economic features influence and define the nature of local economic and social activity. Among these features are the local population, the presence and proximity of cities or regional business centers, longstanding industries, infrastructure, predominant land and water features, and unique area amenities. Although the parcels are located in four counties in eastern Montana, the affected local economy is made up of six counties in Montana (Daniels, Dawson, McCone, Richland, Roosevelt, and Sheridan. Williams County, North Dakota is included in this analysis because Williston, ND is a business center for the area, especially for oil and gas related industries.

The 7-county local economy had an estimated 2009 population of about 55,000 people. Total employment was estimated to be 39,600 jobs; there were an estimated 22,800 households; there were 168 NAIC industrial sectors represented in the local economy; average income per household was \$88,266; and total personal income was an estimated \$2.9 billion (IMPLAN, 2009). Williston, ND (population about 14,700 in 2010) is the largest population and business

center in the area. There were 1.39 people per job within the local economy and 0.58 households per job (IMPLAN, 2009).

In the 10-year period between 2000 and 2009, most of the oil and gas drilling and production within the four counties where leases are proposed (Daniels, McCone, Richland, and Sheridan counties) occurred in Richland County. During this 10-year period, Richland averaged 70.7 wells per year, Sheridan averaged 8.0 wells per year, Daniels averaged about 2.1 wells per year, and McCone averaged 0.8 wells per year. Seventy percent of these wells are producing oil wells, 21 percent were dry holes, and about 9 percent are producing gas wells. (MT DNRM, Oil and Gas Conservation Commission, 2010). Statewide average wellhead prices in 2009 were \$52.96 per bbl. for crude oil and \$3.16 per MCF for natural gas (IPAA, 2012). The estimated average cost of drilling and equipping an oil well in the Bakken formation was \$13,887,020 and \$8,688,205 for dry holes in 2009 (IPAA, 2010).

Local economic effects of leasing federal minerals for oil and gas exploration, development, and production are influenced by the number of acres leased and estimated levels of production. The acres leased, number of wells drilled, and level of production all influence local employment, income, and public revenues (indicators of economic impacts).

In March, 2012, there were 13,990 acres of BLM federal minerals leased for oil and gas in Daniels, McCone, Richland, and Sheridan counties. Annual lease rental is paid on 12,366 acres that are not held by production. Total annual lease bonus and rental revenues to the federal government from leasing federal minerals average an estimated \$2.77 million. Lease rents are not paid on acres that are held by production. Instead, royalties are paid on oil and gas production from these leases.

Federal oil and gas leases generate a one-time lease bonus bid as well as annual rents. The minimum competitive lease bid is \$2.00 per acre. If parcels do not receive the minimum bid they may be leased later as noncompetitive leases that don't generate bonus bids. Within the four counties with lease parcels, the weighted average bonus bid was \$37.13 per acre on federal leases issued in 2011. Average bonus per leased acre ranged from \$35.63 for McCone County to \$640.22 in Richland County.

Lease rental is \$1.50 per acre per year for the first five years and \$2.00 per acre per year thereafter. Typically, oil and gas leases expire after 10 years unless held by production. During the lease period annual lease rents continue until one or more wells are drilled that result in production and associated royalties. Within the four counties with lease parcels, 1,625 acres of federal minerals are held by production.

Forty-nine percent of these federal leasing revenues from public domain minerals are distributed to the state and the state distributes 25 percent of the revenue it receives back to the counties where the leases exist. About 98 percent of the leased federal minerals within the four counties with lease parcels are leased on public domain minerals. With federally acquired minerals (acquired under Bankhead Jones authority), 25 percent of federal revenues are distributed directly to the appropriate counties. The federal government collects an estimated annual average

of about \$2.95 million in federal lease bonus bids and rent within the four counties with lease parcels. An estimated \$1.43 million is distributed to the state/local governments.

Between 2005 and 2010, annual production from federal minerals in the four counties with lease parcels averaged 460,477 barrels of oil and 294,155 MCF of natural gas associated with oil production (ONRR, 2011). The amounts of federal minerals and the contributions of that production to local economies vary among the counties.

Federal oil and gas production in Montana is subject to production taxes or royalties. The federal oil and gas royalties on production from public domain minerals equal 12.5 percent of the value of production (43 CFR 3103.3.1). Forty-nine percent of these royalties from public domain minerals are distributed to the state, of which 25 percent is distributed back to the county of production (Title 17-3-240, MCA). If production comes from acquired federal minerals under the Bankhead Jones authority, 25 percent of the federal revenues are distributed directly to the counties of production.

Local economic contributions of leasing, exploring, and developing federal minerals: The economic contribution to a local economy is measured by estimating the employment and labor income generated by 1) payments to counties associated with the leasing and rent of federal minerals, 2) local royalty payments associated with production of federal oil and gas, and 3) economic activity generated from drilling and associated activities. Activities related to oil and gas leasing, exploration, development, and production form a basic industry that brings money into the state and region and creates jobs in other sectors. Extraction of oil and natural gas (NAICS sector 20), drilling oil and gas wells (NAICS sector 28), and support activities for oil and gas operations (NAICS sector 29) supported an estimated 3,830 total jobs and \$305.6 million in total employee compensation and proprietor income in the 7-county local economy (IMPLAN, 2009).

Currently 117,631 acres of federal minerals are leased within the four counties with lease parcels. Total federal revenues from federal oil and gas leasing, rents, and royalty payments within the four counties with lease parcels averaged an estimated \$6.1 million between 2005 and 2010. Federal revenues disbursed to the state of Montana averaged an estimated \$2.97 million per year. The local counties of production received an estimated combined average \$765,000 per year. These revenues help fund traditional county functions such as enforcing laws, administering justice, collecting and disbursing tax funds, providing for orderly elections, maintaining roads and highways, providing fire protection, and/or keeping records. Other county functions that may be funded include administering primary and secondary education and operating clinics/hospitals, county libraries, county airports, local landfills, and county health systems.

The estimated annual local economic contribution associated with BLM-managed federal leases, rents, drilling, production, and royalty payments combined to support less than 10 total local jobs (full and part-time) and about \$210,000 in local labor income, respectively within the seven county local economy. This amounts to about 0.01 percent of the local employment and local labor and proprietor's income. Table 13 shows the current contributions of leasing federal oil

and gas minerals and the associated exploration, development, and production of federal oil and gas minerals to the seven counties that make up the local economy.

Table 13. Current Contributions of Federal Oil and Gas Leasing, Exploration, Development, and Production to the 7-County Local Economy

Industry	Employment (jobs)		Labor Income (Thousands of 2009 dollars)	
	Area Totals	Federal BLM- managed O&G -Related	Area Totals	Federal BLM- managed O&G-Related
Agriculture	5,622	0	\$140,276	\$0
Mining	3,939	0	\$317,193	\$0
Utilities	259	0	\$27,871	\$5
Construction	2,047	0	\$95,086	\$4
Manufacturing	713	0	\$37,797	\$0
Wholesale Trade	1,636	0	\$97,242	\$3
Transportation & Warehousing	1,536	0	\$120,035	\$3
Retail Trade	3,448	0	\$96,836	\$4
Information	543	0	\$25,221	\$7
Finance & Insurance	1,161	0	\$40,162	\$12
Real Estate & Rental & Leasing	837	0	\$42,867	\$1
Prof, Scientific, & Tech Services	1,161	0	\$56,857	\$5
Mngt of Companies	25	0	\$1,515	\$0
Admin, Waste Mngt & Rem Serv	774	0	\$16,957	\$3
Educational Services	190	0	\$2,088	\$0
Health Care & Social Assistance	4,078	0	\$157,264	\$7
Arts, Entertainment, and Rec	947	0	\$15,372	\$1
Accommodation & Food Services	2,276	0	\$36,879	\$4
Other Services	2,328	0	\$53,813	\$4
Government	6,084	4	\$276,950	\$146
Total	39,604	6	1,658,280	210
BLM-managed Federal O&G as Percent of Total	---	0.01%	---	0.01%

IMPLAN, 2009 database

4.0 ENVIRONMENTAL IMPACTS

4.1 Assumptions and Reasonably Foreseeable Development Scenario Summary

At this stage of the leasing process, the act of leasing parcels would not result in any activity that might affect various resources. Even if lease parcels are leased, it remains unknown whether development would actually occur, and if so, where specific wells would be drilled and where facilities would be placed. This would not be determined until the BLM receives an APD in which detailed information about proposed wells and facilities would be provided for particular leases. Therefore, this EA discusses potential effects that could occur in the event of development.

Upon receipt of an APD, the BLM would initiate a more site-specific NEPA analysis to more fully analyze and disclose site-specific effects of specifically identified activities. In all potential exploration and development scenarios, the BLM would require the use of BMPs documented in “Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development” (USDI and USDA 2007), also known as the “Gold Book.” The BLM could also identify APD COAs, based on site-specific analysis that could include moving the well location, restrict timing of the project, or require other reasonable measures to minimize adverse impacts (43 CFR 3101.1-2 Surface use rights; Lease Form 3100-11, Section 6) to protect sensitive resources, and to ensure compliance with laws, regulations, and land use plans.

For split-estate leases, the BLM would notify the private landowners that oil and gas exploration or development activities are proposed on their lands and they are encouraged to attend the onsite inspection to discuss the proposed activities. In the event of activity on such split estate leases, the lessee and/or operator would be responsible for adhering to BLM requirements as well as reaching an agreement with the private surface landowners regarding access, surface disturbance, and reclamation.

Environmental consequences are discussed below by alternative to the extent possible at this time for the resources described in Chapter 3. As per NEPA regulations at 40 CFR 1502.14(f), 40 CFR 1502.16(h), and 40 CFR 1508.20, mitigation measures to reduce, avoid, or minimize potential impacts are identified by resource below.

4.1.1 Reasonably Foreseeable Development Scenario Summary

The RFD for this EA (Appendix C) is based on information contained in the RFD developed in 2005 and revised in 2012 for the MCFO RMP. The RFD prepared for the MCFO RMP contains the number of possible oil and gas wells that could be drilled and produced in the MCFO area and used to analyze the possible number of well drilled for the 203 nominated lease parcels. These well numbers are only an estimate based on historical drilling and geologic data. A detailed description of the RFD forecast for this EA is found in Appendix C.

4.1.2 Alternative B and C Assumptions

The following assumptions are from the RFD developed for the MCFO RMP. The RFD forecasts the following level of development in the MCFO area.

No surface disturbance would occur as a result of issuing leases. For analysis purposes, the potential number of acres disturbed by exploration and development activities is shown in Tables D-1 in Appendix D. The potential acres of disturbance reflect acres typically disturbed by construction, drilling, and production activities, including infrastructure installation throughout the MCFO. Typical exploration and development activities and associated acres of disturbance were used as assumptions for analysis purposes in this EA. (Note: The assumptions were not applied to Alternative A because the lease parcels would not be offered for lease; therefore, no wells would be drilled or produced on the lease parcel, and no surface disturbance would occur on those lands from exploration and development activities).

4.2 Alternative A (No Action Alternative)

4.2.1 Direct Effects Common to All Resources, not including Economics

Under Alternative A, the 203 parcels, 85,758.14 surveyed federal mineral acres (61,184.50 surveyed acres BLM administered surface and 24,573.64 surveyed acres of private and/or state surface), would not be offered for competitive oil and gas lease sale. Under this alternative, the state and private minerals could still be leased in surrounding areas. Surface management would remain the same and ongoing oil and gas development would continue on surrounding federal, private, and state leases.

There would not be new impacts from oil and gas exploration or production activities on the federal lease parcel lands. No additional natural gas or crude oil would enter the public markets, and no royalties would accrue to the federal or state treasuries from the parcel lands. The No Action Alternative would result in the continuation of the current land and resource uses on the lease parcels.

Except for Economic resources, described below, no further analysis of the No Action Alternative is presented for resources on parcel lands.

4.2.2 Economics

4.2.2.1 Direct and Indirect Effects:

The basis for economic impacts is the number of acres leased, rents paid, and level of production by alternative. The economic contribution to a local economy is measured by estimating the employment and labor income generated by 1) payments to counties associated with the leasing and rent of federal minerals, 2) royalty payments associated with production of federal oil and gas, and 3) economic activity generated from drilling and associated activities. Activities related to oil and gas leasing, exploration, development, and production form a basic industry that brings money into the state and region and creates jobs in other sectors.

Economic effects are summarized and displayed in comparative form in Table 14. Under Alternative A, none of the parcels would be leased. Consequently, no federal, state, or local revenues could be generated from leasing, rents, or royalties associated with production. No employment or income could be generated if none of the parcels are leased. These impacts would be in addition to impacts from existing federal leases, rents, royalties and related activities.

Table 14. Summary Comparison of Estimated Average Annual Economic Impacts

Alternative	Acres Leased	Change in Local Revenue to Counties	Change in Total Employment (full and part-time jobs)	Total Labor Income (\$1,000)	Change in Population	Change in Number of Households
A	0	0	0	0	0	0
B	85,758	\$57,515	55	\$3,421	76	32
C	82,998	\$54,313	54	\$3,299	75	31

4.2.2.2 Cumulative Effects:

Cumulative economic impacts associated with Alternative A would be similar to those described in the economic section of the Affected Environment. The cumulative effects of federal mineral leasing, exploration, development and production within the local economy are summarized in Table 15 and Table 16. The cumulative demographic and economic characteristics of the local economy could not change if none of the proposed parcels are leased.

Table 15. Summary Comparison of Cumulative Annual Economic Impacts by Alternative

Activity	Alternative		
	A	B	C
Existing Acres leased*	117,631	117,631	117,631
Acres that would be leased based on this EA **	0	85,758	82,998
Total acres leased	117,631	203,389	200,629
Acres held by production*	1,625	1,625	1,625
Total acres leased for which lease rents would be paid	116,006	201,764	199,004
Total average annual federal lease and rental revenue	\$2,953,727	\$3,103,804	\$3,098,974
Average annual distribution to State/local government	\$1,433,148	\$1,505,965	\$1,503,622
Average annual oil production (bbl)***	460,477	505,565	504,146
Average annual gas production (MCF)***	294,155	322,958	322,051
Total Average annual Federal O&G royalties	\$3,164,549	\$3,474,411	\$3,464,654
Average annual distribution to State/local government	\$1,535,439	\$1,685,784	\$1,681,050
Total average annual Federal Revenues	\$6,118,276	\$6,578,215	\$6,563,627
Total average annual State/Local Revenues	\$2,968,588	\$3,191,750	\$3,184,672
Total average annual revenue distributed to counties	\$765,090	\$822,606	\$820,782
*LR2000, BLM, March 2012			
**RFD, BLM, March 27, 2012			
***Based on average annual production 2005-2010, Office of Natural Resource Revenue, 2011			

Table 16. Summary Comparison of Employment and Income by Alternative

Industry	Total Jobs Contributed			Total Income Contributed (\$1000)		
	Alt. A	Alt. B	Alt. C	Alt. A	Alt. B	Alt. C
Total Federal Contribution	6	61	59	210	3,630	3,509

IMPLAN, 2009 database

4.3 Alternative B (Proposed Action)

Under Alternative B, 203 parcels, 85,758.14 surveyed federal mineral acres (61,184.50 surveyed acres of federal surface and 24,573.64 surveyed acres of private and/or state surface), would be offered for competitive oil and gas lease sale. No parcels would be deferred.

4.3.1 Direct Effects Common to All Resources

The action of leasing the parcels in Alternative B would, in and of itself, has no direct impact on resources. Any potential effects on resources from the sale of leases would occur during lease exploration and development activities. At the time of this review it is unknown whether a particular lease parcel would be sold and a lease issued.

4.3.2 Indirect Effects Common to All Resources

Oil and gas exploration and development activities such as construction, drilling, production, infrastructure installation, vehicle traffic and reclamation are indirect effects from leasing the lease parcels in Alternative B. It is unknown when, where, how, or if future surface disturbing activities associated with oil and gas exploration and development such as well sites, roads, facilities, and associated infrastructure would be proposed. It is also not known how many wells, if any, would be drilled and/or completed, the types of technologies and equipment would be used and the types of infrastructure needed for production of oil and gas. Thus, the types, magnitude and duration of potential impacts cannot be precisely quantified at this time, and would vary according to many factors. The potential impacts from exploration and development activities would be analyzed after receipt of an APD or sundry notice.

Typical impacts to resources from oil and gas exploration and development activities such as well sites, roads, facilities, and associated infrastructure are described in the Miles City Oil & Gas Amendment/EIS (1994), the Big Dry RMP (1996), the Montana Statewide Oil & Gas Amendment/EIS (2003) and the Supplement (2008) to that document.

4.3.3 Air Resources

4.3.3.1 Direct and Indirect Effects

4.3.3.1.1 Air Quality

Leasing the parcels would have no direct impacts on air quality. Any potential effects from sale of lease parcels could occur at the time the leases are developed.

Potential impacts of development could include increased airborne soil particles blown from new well pads or roads; exhaust emissions from drilling equipment, compressors, vehicles, and dehydration and separation facilities, as well as potential releases of GHGs and VOCs during drilling or production activities. The amount of increased emissions cannot be precisely quantified at this time since it is not known for certain how many wells might be drilled, the types of equipment needed if a well were to be completed successfully (e.g., compressor, separator, dehydrator), or what technologies may be employed by a given company for drilling any new wells. The degree of impact would also vary according to the characteristics of the geologic formations from which production occurs, as well as the scope of specific activities proposed in an APD.

Current monitoring data show that criteria pollutants concentrations are below applicable air quality standards, indicating good air quality. The potential level of development and mitigation described below is expected to maintain this level of air quality by limiting emissions. In addition, pollutants would be regulated through the use of state-issued air quality permits or air quality registration processes developed to maintain air quality below applicable standards.

4.3.3.1.2 Greenhouse Gas Emissions at the MCFO and Project Scales

Sources of GHGs associated with development of lease parcels could include construction activities, operations, and facility maintenance in the course of oil and gas exploration, development, and production. Estimated GHG emissions are discussed for these specific aspects of oil and gas activity because the BLM has direct involvement in these steps. However, the current proposed activity is to offer parcels for lease. No specific development activities are currently proposed or potentially being decided upon for any parcels being considered in this EA. Potential development activities would be analyzed if the BLM receives an APD on any of the parcels considered here.

Anticipated GHG emissions presented in this section are taken from the Climate Change SIR, 2010. Data are derived from emission calculators developed by air quality specialists at the BLM National Operations Center in Denver, Colorado, based on methods described in the Climate Change SIR (2010). Based on the assumptions summarized in the SIR for the MCFO RFD, Table 17 discloses projected annual GHG source emissions from BLM-permitted activities associated with the RFD.

Table 17. BLM Projected Annual GHG Emissions Associated With Oil and Gas Exploration and Development Activity in the MCFO.

Source	BLM Long-Term GHG Emissions in tons/year				Emissions (metric tons/yr)
	CO ₂	CH ₄	N ₂ O	CO ₂ e	CO ₂ e
Conventional Natural Gas	158,154.7	1,572.8	1.2	190,984.1	173,817.6
Coal Bed Natural Gas	268,477.4	5,194.6	0.9	377,826.5	342,855.24
Oil	91,689.0	562.6	0.5	103,663.3	94,068.3
Total	518,321.1	7,330	2.6	672,473.9	610,741.1

To estimate GHG emissions associated with the action alternatives, the following approach was used:

1. The proportion of each alternative relative to the total RFD was calculated based on total acreage of parcels under consideration for leasing relative to the total acreage of federal mineral acreage available for leasing in the RFD.
2. This ratio was then used as a multiplier with the total estimated GHG emissions for the entire RFD (with the highest year emission output used) to estimate GHG emissions for that particular alternative.

Under Alternative B, approximately 85,758 acres of lease parcels with federal minerals would be leased. These acres constitute approximately 1.48 percent of the total federal mineral estate of approximately 5,798,000 acres identified in the MCFO RFD. Therefore, based on the approach

described above to estimate GHG emissions, 1.48 percent of the RFD for this EA total estimated BLM emissions of approximately 610,741 metric tons/year would be approximately 9,038 metric tons/year of CO₂e if the parcels within Alternative B were to be developed.

4.3.3.1.3 Climate Change

The assessment of GHG emissions and climate change is in its formative phase. As summarized in the Climate Change SIR, climate change impacts can be predicted with much more certainty over global or continental scales. Existing models have difficulty reliably simulating and attributing observed temperature changes at small scales. On smaller scales, natural climate variability is relatively larger, making it harder to distinguish changes expected due to external forcings (such as contributions from local activities to GHGs). Uncertainties in local forcings and feedbacks also make it difficult to estimate the contribution of GHG increases to observed small-scale temperature changes (Climate Change SIR 2010).

It is currently not possible to know with certainty the net impacts from lease parcel development on climate. The inconsistency in results of scientific models used to predict climate change at the global scale, coupled with the lack of scientific models designed to predict climate change on regional or local scales, limits the ability to quantify potential future impacts of decisions made at this level. It is therefore beyond the scope of existing science to relate a specific source of GHG emission or sequestration with the creation or mitigation of any specific climate-related environmental effects. Although the effects of GHG emissions in the global aggregate are well-documented, it is currently impossible to determine what specific effect GHG emissions resulting from a particular activity might have on the environment. For additional information on environmental effects typically attributed to climate change, please refer to the cumulative effects discussion below.

While it is not possible to predict effects on climate change of potential GHG emissions discussed above in the event of lease parcel development for alternatives considered in this EA, the act of leasing does not produce any GHG emissions in and of itself. Releases of GHGs could occur at the exploration/development stage.

4.3.3.2 Mitigation

The BLM encourages industry to incorporate and implement BMPs to reduce impacts to air quality by reducing emissions, surface disturbances, and dust from field production and operations. Measures would also be required as COAs on permits by either the BLM or the applicable state air quality regulatory agency. The BLM also manages venting and flaring of gas from federal wells as described in the provisions of Notice to Lessees (NTL) 4A, Royalty or Compensation for Oil and Gas Lost.

Some of the following measures could be imposed at the development stage:

- flaring or incinerating hydrocarbon gases at high temperatures to reduce emissions of incomplete combustion;
- emission control equipment of a minimum 95 percent efficiency on all condensate storage batteries;
- emission control equipment of a minimum 95 percent efficiency on dehydration units, pneumatic pumps, produced water tanks;

- vapor recovery systems where petroleum liquids are stored;
- tier II or greater, natural gas or electric drill rig engines;
- secondary controls on drill rig engines;
- no-bleed pneumatic controllers (most effective and cost effective technologies available for reducing VOCs);
- gas or electric turbines rather than internal combustions engines for compressors;
- NO_x emission controls for all new and replaced internal combustion oil and gas field engines;
- water dirt and gravel roads during periods of high use and control speed limits to reduce fugitive dust emissions;
- interim reclamation to re-vegetate areas of the pad not required for production facilities and to reduce the amount of dust from the pads.
- co-located wells and production facilities to reduce new surface disturbance;
- directional drilling and horizontal completion technologies whereby one well provides access to petroleum resources that would normally require the drilling of several vertical wellbores;
- gas-fired or electrified pump jack engines;
- velocity tubing strings;
- cleaner technologies on completion activities (i.e. green completions), and other ancillary sources;
- centralized tank batteries and multi-phase gathering systems to reduce truck traffic;
- forward looking infrared (FLIR) technology to detect fugitive emissions; and
- air monitoring for NO_x and ozone.

More specific to reducing GHG emissions, Section 6 of the Climate Change SIR identifies and describes in detail commonly used technologies to reduce methane emissions from natural gas, coal bed natural gas, and oil production operations. Technologies discussed in the Climate Change SIR and as summarized below in Table 18 (reproduced from Table 6-2 in Climate Change SIR) display common methane emission technologies reported under the EPA Natural Gas STAR Program and associated emission reduction, cost, maintenance and payback data.

Table 18. Selected Methane Emission Reductions Reported Under the USEPA Natural Gas STAR Program ¹

Source Type / Technology	Annual Methane Emission Reduction ¹ (Mcf/yr)	Capital Cost Including Installation (\$)	Annual Operating and Maintenance Cost (\$)	Payback (Years or Months)	Payback Gas Price Basis (\$/Mcf)
Wells					
Reduced emission (green) completion	7,000 ²	\$1K – \$10K	>\$1,000	1 – 3 yr	\$3
Plunger lift systems	630	\$2.6K – \$10K	NR	2 – 14 mo	\$7
Gas well smart automation system	1,000	\$1.2K	\$0.1K – \$1K	1 – 3 yr	\$3
Gas well foaming	2,520	>\$10K	\$0.1K – \$1K	3 – 10 yr	NR

Table 18. Selected Methane Emission Reductions Reported Under the USEPA Natural Gas STAR Program ¹

Source Type / Technology	Annual Methane Emission Reduction ¹ (Mcf/yr)	Capital Cost Including Installation (\$)	Annual Operating and Maintenance Cost (\$)	Payback (Years or Months)	Payback Gas Price Basis (\$/Mcf)
Tanks					
Vapor recovery units on crude oil tanks	4,900 – 96,000	\$35K – \$104K	\$7K – \$17K	3 – 19 mo	\$7
Consolidate crude oil production and water storage tanks	4,200	>\$10K	<\$0.1K	1 – 3 yr	NR
Glycol Dehydrators					
Flash tank separators	237 – 10,643	\$5K – \$9.8K	Negligible	4 – 51 mo	\$7
Reducing glycol circulation rate	394 – 39,420	Negligible	Negligible	Immediate	\$7
Zero-emission dehydrators	31,400	>\$10K	>\$1K	0 – 1 yr	NR
Pneumatic Devices and Controls					
Replace high-bleed devices with low-bleed devices					
End-of-life replacement	50 – 200	\$0.2K – \$0.3K	Negligible	3 – 8 mo	\$7
Early replacement	260	\$1.9K	Negligible	13 mo	\$7
Retrofit	230	\$0.7K	Negligible	6 mo	\$7
Maintenance	45 – 260	Negl. to \$0.5K	Negligible	0 – 4 mo	\$7
Convert to instrument air	20,000 (per facility)	\$60K	Negligible	6 mo	\$7
Convert to mechanical control systems	500	<\$1K	<\$0.1K	0 – 1 yr	NR
Valves					
Test and repair pressure safety valves	170	NR	\$0.1K – \$1K	3 – 10 yr	NR
Inspect and repair compressor station blowdown valves	2,000	<\$1K	\$0.1K – \$1K	0 – 1 yr	NR
Compressors					
Install electric compressors	40 – 16,000	>\$10K	>\$1K	>10 yr	NR
Replace centrifugal compressor wet seals with dry seals	45,120	\$324K	Negligible	10 mo	\$7
Flare Installation	2,000	>\$10K	>\$1K	None	NR

Source: Multiple EPA Natural Gas STAR Program documents. Individual documents are referenced in Climate Change SIR (2010).

¹ Unless otherwise noted, emission reductions are given on a per-device basis (e.g., per well, per dehydrator, per valve, etc).

² Emission reduction is per completion, rather than per year.

K = 1,000

mo = months

Mcf = thousand cubic feet of methane

NR = not reported

yr = year

In the context of the oil sector, additional mitigation measures to reduce GHG emissions include methane reinjection and CO₂ injection. These measures are discussed in more detail in Section 6.0 of the Climate Change SIR (2010).

In an effort to disclose potential future GHG emission reductions that might be feasible, the BLM estimated GHG emission reductions based on the RFD for the MCFO. For emission

sources subject to BLM (federal) jurisdiction, the estimated emission reductions represent approximately 51 percent reduction in total GHG emissions compared to the estimated MCFO federal GHG emission inventory (Climate Change SIR, as updated October 2010, Section 6.5 and Table 6-3). The emission reductions technologies and practices are identified as mitigation measures that could be imposed during development. Furthermore, the EPA is expected to promulgate new federal air quality regulations that would require GHG emission reductions from many oil and gas sources.

4.3.4 Soil Resources

4.3.4.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on soil resources. Any potential effects from the sale of leases could occur at the time the leases are developed.

Surface use activities associated with oil and gas exploration and development could cause surface disturbances. Such acts result in reduced ground cover, soil mixing, compaction, or removal, exposing soils to accelerated erosion by wind and water, resulting in the irretrievable loss of topsoil and nutrients and potentially resulting in mass movement or sedimentation. Surface disturbances also change soil structure, heterogeneity (variable characteristics), temperature regimes, nutrient cycling, biotic richness, and diversity. Along with this, mixed soils have decreased bulk density, and altered porosity, infiltration, air-water relationships, salt content, and pH (Perrow and Davy, 2003; Bainbridge 2007). Soil compaction results in increased bulk density, and reduced porosity, infiltration, moisture, air, nutrient cycling, productivity, and biotic activity (Logan 2001; 2003; 2007). Altering such characteristics reduces the soil system's ability to withstand future disturbances (e.g., wildfire, drought, high precipitation events, etc.).

The probability and magnitude of these effects are dependent upon local site characteristics, climatic events, and the specific mitigation applied to the project. Within 2-5 years following reclamation, vegetative cover and rates of erosion would return to pre-disturbance conditions (USDI BLM 2008). Exceptions would be sites poorly suited to reclamation (approx. 61,145 ac., 71 percent of the parcels), which could require unconventional and/or site-specific reclamation measures.

4.3.4.2 Mitigation

Stipulations addressing steep slopes would minimize potential impacts and would be included with the lease when necessary (Appendix A). Measures would be taken to reduce, avoid, or minimize potential impacts to soil resources from exploration and development activities. Prior to authorization, proposed actions would be evaluated on a case-by-case basis and would be subject to mitigation measures in order to maintain the soil system. Mitigation would include avoiding areas poorly suited to reclamation, limiting the total area of disturbance, rapid reclamation, erosion/sediment control, soil salvage, decompaction, revegetation, weed control, slope stabilization, surface roughening, and fencing.

4.3.5 Water Resources

4.3.5.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on water resources. Any potential effects from sale of lease parcels could occur at the time the leases are developed.

The magnitude of potential impacts from exploration and development of oil and gas to water resources would be dependent on the specific activity, season, proximity to waterbodies, location in the watershed, upland and riparian vegetation condition, effectiveness of mitigation, and the time until reclamation success. Surface disturbance effects typically are localized, short-term, and occur from implementation through vegetation reestablishment. As acres of surface-disturbance increase within a watershed, so could the effects on water resources.

Oil and gas exploration and development of a lease parcel could cause the removal of vegetation, soil compaction, and soil disturbance in uplands within the watershed, 100-year floodplains of non-major streams, and non-riparian, ephemeral waterbodies. The potential effects from these activities could be accelerated erosion, increased overland flow, decreased infiltration, increased water temperature, channelization, and water quality degradation associated with increased sedimentation, turbidity, nutrients, metals, and other pollutants. Erosion potential can be further increased in the long term by soil compaction and low permeability surfacing (e.g. roads and well pads) which increases the energy and amount of overland flow and decreases infiltration, which in turn changes flow characteristics, reduces groundwater recharge, and increases sedimentation and erosion (DEQ 2007).

Spills or produced fluids could potentially impact surface and ground water resources in the long term. Oil and gas exploration/development could contaminate aquifers with salts, drilling fluids, fluids and gases from other formations, detergents, solvents, hydrocarbons, metals, and nutrients; change vertical and horizontal aquifer permeability; and increase hydrologic communication with adjacent aquifers (EPA 2004). Groundwater removal could result in a depletion of flow in nearby streams and springs if the aquifer is hydraulically connected to such features. Typically produced water from conventional oil and gas wells is from a depth below useable aquifers or coal seams (FSEIS 2008).

4.3.5.2 Mitigation

Stipulations addressing steep slopes, waterbodies, streams, 100-year floodplains of major rivers, riparian areas, and wetlands would minimize potential impacts and would be included with the lease when necessary (Appendix A). In the event of exploration or development, measures would be taken to reduce, avoid, or minimize potential impacts to water resources including application of appropriate mitigation. Mitigation measures that minimize the total area of disturbance, control wind and water erosion, reduce soil compaction, maintain vegetative cover, control nonnative species, and expedite rapid reclamation (including interim reclamation) would maintain water resources.

Methods to reduce erosion and sedimentation could include: reducing surface disturbance acres; installing and maintaining adequate erosion control; proper road design, road surfacing, and culvert design; road/infrastructure maintenance; use of low water crossings; and use of isolated or bore crossing methods for waterbodies and floodplains. In addition, applying mitigation to

maintain adequate, undisturbed, vegetated buffer zones around waterbodies and floodplains could reduce sedimentation and maintain water quality. Appropriate well completion, the use of Spill Prevention Plans, and Underground Injection Control regulations would mitigate groundwater impacts. Site-specific mitigation and reclamation measures would be described in the COAs.

4.3.6 Vegetation Resources

4.3.6.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on vegetation resources. Any potential effects from sale of lease parcels could occur at the time the leases are developed.

Potential effects from exploration and development of oil and gas to vegetation resources depend on the vegetation type/community, soil community and the topography of the lease parcels. Disturbance to vegetation is of concern because protection of soil resources, maintenance of water quality, conservation of wildlife habitat, and livestock production capabilities could be diminished or lost over the long-term through direct loss of vegetation (including direct loss of both plant communities and specific plant species).

Other potential effects, such as invasive species invasion, could result in loss of desirable vegetation. Invasive species and noxious weeds could also reduce livestock grazing forage, wildlife habitat quality, and native species diversity. In addition, invasive species are well known for changing fire regimes.

Additionally, potential surface disturbing activities could affect vegetation by destroying habitat, churning soils, impacting biological crusts, disrupting seedbanks, burying individual plants, and generating sites for competitive species. In addition, other vegetation impacts could also be caused from soil erosion and result in loss of the supporting substrate for plants, or from soil compaction resulting in reduced germination rates. Potential impacts to plants occurring after seed germination but prior to seed set could be particularly harmful as both current and future generations would be affected.

Fugitive dust generated by construction activities and travel along dirt roads could affect nearby plants by depressing photosynthesis, disrupting pollination, and reducing reproductive success. Oil, fuel, wastewater or other chemical spills could contaminate soils as to render them temporarily unsuitable for plant growth until cleanup measures were fully implemented. If cleanup measures were less successful, longer term vegetation damage could be expected.

Oil and gas development activity could reduce B M's ability to manage livestock grazing while meeting or progressing towards meeting the Standards of Rangeland Health. Development and associated disturbances could reduce available forage or alter livestock distribution leading to overgrazing or other localized excess grazing impacts. Construction of roads, especially in areas of rough topography could cause significant changes in livestock movement and fragment suitable habitat for some plant communities.

If development activity is reducing vegetative resources for livestock grazing and the grazing activity is resulting in the allotment not meeting the standards for rangeland health, then the

authorized officer would have to take action prior to the next grazing season to ensure the BLM lands are progressing towards meeting the standards. This could result in the change of livestock grazing activities in order to improve vegetative conditions.

4.3.6.2 Mitigation

Mitigation would be addressed at the site specific APD stage of exploration and development. If needed, COAs would potentially include, but not limited to, revegetation with desirable plant species, soil enhancement practices, direct live haul of soil material for seed bank revegetation, reduction of livestock grazing, fencing of reclaimed areas, and the use of seeding strategies consisting of native grasses, forbs, and shrubs.

4.3.7 Riparian-Wetland Habitats

4.3.7.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on riparian-wetland habitats. Any potential effects from sale of lease parcels could occur at the time the leases are developed.

The exploration and development of oil and gas within uplands or adjacent to riparian-wetland areas could reduce riparian/wetland functionality by changing native plant productivity, composition, richness, and diversity; accelerating erosion; increasing sedimentation; and changing hydrologic characteristics. Impacts that reduce the functioning condition of riparian and wetland areas could impair the ability of riparian/wetland areas to reduce nonpoint source pollution (MDEQ 2007) and provide other ecosystem benefits. The magnitude of these effects would be dependent on the specific activity, season, proximity to riparian-wetland areas, location in the watershed, upland and riparian-wetland vegetation condition, mitigation applied, and the time until reclamation success. Erosion increases typically are localized, short term, and occur from implementation through vegetation reestablishment. As acres of surface-disturbance increase within a watershed, so could the effects on riparian-wetland resources.

4.3.7.2 Mitigation

Stipulations addressing steep slopes, waterbodies, streams, 100-year floodplains of major rivers, and riparian areas would minimize potential impacts and would be included with the lease when necessary (Appendix A). In the event of exploration or development, site-specific mitigation measures would be identified which would avoid or minimize potential impacts to riparian-wetland areas at the APD stage. Mitigation measures that minimize the total area of disturbance, control wind and water erosion, reduce soil compaction, maintain vegetative cover, control nonnative species, maintain biodiversity, maintain vegetated buffer zones, and expedite rapid reclamation (including interim reclamation) would maintain riparian/wetland resources.

4.3.8 Special Status Plant Species

4.3.8.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on special status plant species. Any potential effects from the sale of leases could occur at the time the leases are developed.

Potential effects from exploration and development of oil and gas would be similar to Section 4.3.6 Vegetation Resources above.

4.3.8.2 Mitigation

Stipulations applied to wildlife resources, steep slopes, waterbodies, streams, 100-year floodplains of major rivers, riparian areas, and wetlands would likely also provide protections for special status plant species. Proposed development would be analyzed on a site-specific basis prior to approval of oil and gas exploration or development activities at the APD stage. Mitigation would also be addressed at the site-specific APD stage. Surveys to determine the existence of federally listed species could occur on BLM-administered surface or minerals prior to approval of exploration and development activities at the APD stage.

4.3.9 Wildlife

4.3.9.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on wildlife. Any potential effects from the sale of lease parcels could occur at the time the leases are developed.

The use of standard lease terms and stipulations on these lands (Appendix A) would minimize, but not preclude impacts to wildlife. Oil and gas development which results in surface disturbance could directly and indirectly impact aquatic and terrestrial wildlife species. These impacts would include loss or reduction in suitability of habitat, improved habitat for undesirable (non-native) competitors, species or community shift to species or communities more tolerant of disturbances, nest abandonment, mortalities resulting from collisions with vehicles and power lines, electrocutions from power lines, barriers to species migration, habitat fragmentation, increased predation, habitat avoidance, and displacement of wildlife species resulting from human presence. The scale, location, and pace of development, combined with implementation of mitigation measures and the tolerance of the specific species to human disturbance all influence the severity of impacts to wildlife species and habitats, including threatened, endangered, candidate, proposed, and other special status species.

4.3.8.1.1 Threatened, Endangered, and Candidate Species

Habitat within the lease parcels exists to support USFWS threatened, endangered, or candidate species including the whooping crane, interior least tern, piping plover, pallid sturgeon, Sprague's pipit, and sage grouse.

BLM has determined that the act of issuing leases within the whooping crane migration corridor will not affect the whooping crane. However, impacts to whooping cranes are possible from subsequent oil and gas development activities permitted at the APD stage. At this time, stipulations do not currently exist to protect any known whooping crane migration staging areas. Line strikes, collisions with vehicles, habitat fragmentation, and other anthropogenic activities could disturb, displace, or cause direct mortality of whooping cranes.

Therefore, if development on any of the leases within the whooping crane migration corridor is proposed within suitable whooping crane staging, stopover or roosting habitat, BLM would consult with the USFWS pursuant to section 7(a)(2) of ESA. An outcome of the consultation process could be that conditions of approval are attached to the permit or the permit could not be approved. Other BMP's could also be developed through consultation, including minimizing disturbance, adherence to Avian Powerline Interaction Committee (APLIC) guidelines, and others as deemed appropriate.

Several lease parcels are located adjacent to Interior least tern nesting habitat along the Missouri River corridor. Existing stipulations from the Big Dry RMP (1995) requires a NSO stipulation within 0.25 miles of wetlands identified as interior least tern habitat. As a result of these stipulations, development would not impact nesting habitat, and issuing the proposed lease parcels would have no affect on interior least terns.

Several lease parcels are located adjacent to piping plover nesting habitat along the Missouri River corridor, and within the Unit 2 critical habitat designation for piping plovers. In addition, one lease parcel is located on a wetland within the Unit 1 critical habitat designation for piping plovers. Existing stipulations from the Big Dry RMP (1995) requires a NSO stipulation within 0.25 miles of wetlands identified as piping plover habitat. As a result of these stipulations, issuing the proposed lease parcels would have no affect on piping plovers or the critical habitat Unit 1 or Unit 2 designations.

Pallid sturgeon individuals and their habitat would occur in or near lease parcel MTM 102757-C7, DP, DQ, DR, DT, and TR have the potential to be affected by the development of oil and gas wells. Potential impacts from development could include: overland oil spills, underground spills from activities associated with horizontal drilling or other practices, spills from drilling mud or other extraction and processing chemicals, and surface disturbance activities that create a localized erosion zone. Oil spills and other pollutants from the oil extraction process could harm the endangered pallid sturgeon in two different ways. First, toxicological impacts from direct contact could have immediate lethal effects to eggs, juveniles, and adults. Second, toxic effects to lower food web levels (e.g. aquatic macro-invertebrates) could indirectly affect the pallid sturgeon species by degrading water quality and degrading or eliminating food resources. Additionally, surface disturbing activities that decrease the availability or input of organic material, large woody debris, and trees could decrease cover, food-web compartments and fluxes, and holding areas for pallid sturgeon. Other aquatic species could experience the same type of direct and indirect impacts.

Currently, in the Big Dry and Powder River RMPs there are no stipulations specific to Pallid sturgeon habitat. However, a floodplain stipulation (NSO 11-2) would not allow surface occupancy in the 100-year floodplain boundary of the Missouri River. Additionally, least tern stipulations (NSO 11-10) protects pallid sturgeon habitat by providing a one-quarter mile buffer along the Missouri River. The stipulations apply to wetlands habitat and the BLM considers the Missouri River wetlands habitat for this bird species. No lease parcels are located along the Yellowstone River.

BLM has determined that issuing leases for the six parcels along the Missouri River will have no affect on the pallid sturgeon. If development were to occur, additional mitigation would be included as conditions of approval at the APD stage. These conditions include the placement of earthen berms and oil skimmers (a culvert device placed in drainages which is intended to block oil from entering streams) to help protect pallid sturgeon habitat in case of oil spills by greatly reducing the potential for spills to reach pallid sturgeon habitat. If oil and gas development is proposed for these six parcels, BLM would consult with the USFWS pursuant to section 7(a)(2) of ESA.

Energy development (oil, gas, and wind) and associated roads and facilities increase the fragmentation of grassland habitat. A number of studies have found that Sprague's pipits appear to avoid non-grassland features in the landscape, including roads, trails, oil wells, croplands, woody vegetation, and wetlands (Dale et al. 2009, pp. 194, 200; Koper et al. 2009, pp. 1287, 1293, 1294, 1296; Greer 2009, p. 65; Linnen 2008, pp. 1, 9-11, 15; Sutter et al. 2000, pp. 112-114). Sprague's pipits avoid oil wells, staying up to 350 meters (m) (1148 feet (ft)) away (Linnen 2008, pp. 1, 9-11), magnifying the effect of the well feature itself. Oil and gas wells, especially at high densities, decrease the amount of habitat available for breeding territories. (Federal Register: September 15, 2010 (Volume 75, Number 178)).

Potential suitable habitat exists for the Sprague's pipit across the majority of the proposed lease parcels; however, inventories have not been conducted within the parcels. Therefore, inventories would be conducted at the APD stage of development to determine the presence or absence of Sprague's pipits in accordance with lease terms. The Sprague's pipit lease notice, LN 14-15, is issued with those leases and would be applied if Sprague's pipits are found in the area. If Sprague's pipits are found, protective measures would be applied as conditions of approval to minimize impacts to Sprague's pipits and their habitat. In the event oil and gas development is proposed within Sprague's pipit habitat, at the APD stage BLM would conference with the USFWS pursuant to section 7(a)(4) of ESA, or if the Sprague's pipit has been listed as threatened or endangered, BLM would consult with the USFWS pursuant to section 7(a)(2).

Sage grouse are species afforded specific protections through a stipulation. Under Alternative B, ¼ mile NSO buffers and 2 mile timing buffers would apply where relevant. Based on research, these stipulations for sage grouse are considered ineffective to ensure that sage grouse can persist within fully developed areas. With regard to existing restrictive stipulations applied by the BLM, (Walker et al. 2007a) research has demonstrated that the 0.4-km (0.25 miles) NSO lease stipulation is insufficient to conserve breeding sage-grouse populations in fully developed gas fields because this buffer distance leaves 98 percent of the landscape within 3.2 km (2 miles) open to full-scale development. Full-field development of 98 percent of the landscape within 3.2 km (2 miles) of leks in a typical landscape in the Powder River Basin reduced the average probability of lek persistence from 87 percent to 5 percent (Walker et al. 2007a).

Other studies also have assessed the efficacy of existing BLM stipulations for sage grouse. Impacts to leks from energy development are most severe near the lek, and remained discernible out to distances more than 6 km (3.6 miles) (Holloran 2005, Walker et al. 2007a), and have resulted in the extirpation of leks within gas fields (Holloran 2005, Walker et al. 2007a). Holloran (2005) shows that lek counts decreased with distance to the nearest active drilling rig, producing well, or main haul road, and that development influence counts of displaying males to a distance of between 4.7 and 6.2 km (2.9 and 3.9 miles). All well-supported models in Walker et al. (2007a) indicate a strong effect of energy development, estimated as proportion of development within either 0.8 km (0.5 miles) or 3.2 km (2 miles), on lek persistence. Buffer sizes of 0.25 mi., 0.5 mi., 0.6 mi. and 1.0 mi. result in an estimated lek persistence of 5 percent, 11 percent, 14 percent, and 30 percent. Lek persistence in the absence of CBNG development averages approximately 85 percent. Models with development at 6.4 km (4 miles) had considerably less support, but the regression coefficient indicated that impacts were still apparent

out to 6.4 km (4 miles) (Walker et al. 2007a). Tack (2009) found impacts of energy development on lek abundances (numbers of males per lek) out to 7.6 miles.

The 2 mile timing stipulation attached to the respective parcels in this proposal only applies between March 1 to June 15, and development can occur within 2 miles outside of those dates. Not all lease parcels would be expected to see full field development as noted in the range of RFD, although effects would most likely mirror these studies to some degree proportionate to the amount of development that occurs outside of the stipulated timeframe. At present, none of the lease parcels are proposed within existing fully developed fields.

Noise has been shown to affect sage-grouse and associated sagebrush obligates. Sage-grouse are known to select highly visible leks with good acoustic properties. Effects to sage-grouse would be a decrease in numbers of males on leks and activity levels and lower nest initiation near oil and gas development. Sage-grouse numbers on leks within 1.6 km (1 mile) of coal bed natural gas compressor stations in Campbell County, Wyoming were shown to be consistently lower than on leks not affected by this disturbance (Braun et al. 2002). Holloran (2005), Holloran et. al (2005a, 2005b), and Anderson (2005) reported that lek activity by sage-grouse decreased downwind of drilling activities, suggesting that noise had measurable negative impacts on sage-grouse. The actual level of noise (measured in decibels) that would not affect greater sage-grouse breeding and nesting activities is presently unknown.

The 50 decibel limit (10 dBA above background noise level) at the lek site for CBNG production facilities within the Powder River RMP area of the FSEIS provides mitigation for noise levels in that RMP area but not for conventional oil and gas development throughout the entire RMP area. In addition, timing restriction (TL 13-3) is applied within 2 miles of leks within the MCFO, which also provide mitigation for noise level effects to sage-grouse.

This alternative also includes the attachment of a sage grouse lease notice (LN 14-11) when the lease parcel is located within 2 miles of a lek. The lease notice would require an operator to implement specific measures to reduce impacts of oil and gas operations on sage grouse populations and habitat quality. The application of this lease notice would be expected to reduce, but not eliminate, impacts to sage grouse and habitats.

4.3.8.1.2 Other Special Status Species

As noted, up to 48 wildlife species that BLM has designated as “sensitive” have the potential to occur within the parcel areas. Stipulations are not provided for all BLM sensitive species in the current RMPs. Stipulations are provided for 7 out of the 48 “non-T &P” sensitive species. For those species afforded some protections through existing stipulations, impacts could be minimized, but not eliminated. Impacts to BLM sensitive species would be similar to those described above, unless they are afforded protective measures from other regulations such as the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703.) or the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668c). BLM does not consult with the USFWS on “sensitive” species and likewise would not receive terms and conditions from USFWS requiring additional protections of those species.

Numerous species of birds were identified as potential inhabitants across the analysis area. With the impacts associated with development, it is reasonable to assume there would be impacts to nesting and migrating bird species. The primary impacts to these species would include disturbance of preferred nesting habitats, improved habitat for undesirable competitors and/or a species shift to disturbance associated species, and increased vehicle collisions.

Research in Sublette County, Wyoming on the effects of natural gas development on sagebrush steppe passerines documented negative impacts to sagebrush obligates such as Brewer's sparrows, sage sparrows, and sage thrashers (Ingelfinger 2001). The impacts were reported greatest along roads where traffic volumes are high and within 100 meters of these roads. Sagebrush obligates were reduced within these areas by as much as 60%. Sagebrush obligate density was reduced by 50% within 100 meters of a road even when traffic volumes were less than 12 vehicles /day. It would be expected that similar population declines would occur to this guild of species from similar development proposals within sagebrush habitats.

Stipulations do not exist specifically for the protection of BLM sensitive songbirds. The MBTA prohibits the take, capture or kill of any migratory bird, any part, nest or eggs of any such bird (16 U.S.C 703 (a)). NEPA analysis pursuant to Executive Order 13186 (January 2001) requires BLM to ensure that MBTA compliance and the effects of Bureau actions and agency plans on migratory birds are evaluated, should reduce take of migratory birds and contribute to their conservation.

Effects to migratory birds from oil and gas development at the APD stage could include direct loss of habitat from roads, well pads and other infrastructure, disturbance, powerline strikes and unintended direct mortality, fragmentation of habitat, change in use of habitats, and potential threats and competition from edge species. Field surveys for nesting birds at proposed development sites would be conducted for activities planned in between April 15 and July 15. Mitigation measures would be assigned at the APD stage to minimize negative effects on migratory bird populations, in compliance with Executive Order 13186 and MBTA. These mitigation measures would be required as COAs. An NSO stipulation for oil and gas surface disturbing activities in riparian and wetland areas would prohibit any potential oil and gas development in those habitats unless approval was granted through the Waivers, Exceptions, and Modifications (WEM) process. BLM would coordinate WEMs with USFWS to assure MBTA compliance.

Take of bald and golden eagles and any other migratory raptors would not occur as a result of the act of leasing parcels. However, as development occurs after permits to drill are issued, there would be potential for take to occur as a result of raptor collisions with vehicles, power lines, and other development-related actions. Therefore, field surveys for raptors at proposed development sites would be conducted for activities planned between March 1 and August 1. To comply with MBTA and BGEPA, BLM would require protective measures and stipulations at the APD stage to prevent or minimize impacts to individual raptors and raptor populations, including bald and golden eagles. The protective measures would be required as COAs.

4.3.8.1.3 Other Fish and Wildlife

The types and extent of impacts to other wildlife species and habitats from development are similar to those described above for other species. Based on the RFD scenarios, direct habitat loss is possible. Initial disturbance could change the occupation of those areas to disturbance-oriented species (e.g., horned larks), or species with more tolerance for disturbances. These changes could also be expected to decrease the diversity of wildlife. Although bladed corridors would be reclaimed after the facilities are constructed, some changes in vegetation could occur along the reclaimed areas. The goal of reclamation is to restore disturbed areas to pre-disturbed conditions. The outcome of reclamation, unlike site restoration, will therefore not always mimic pre-disturbance conditions and offer the same habitat values to wildlife species. Sagebrush obligates, including some species of songbirds and sage grouse, could be most affected by this change.

It is anticipated that some development could occur adjacent to existing disturbances of some type. Depending on proximity and species tolerance, wildlife species within these areas could either have acclimated to the surrounding conditions, previously been displaced by construction activities, or could be caused to be displaced to other areas with or without preferred habitat.

Potential impacts to aquatic wildlife from development could include: overland oil spills, underground spills from activities associated with horizontal drilling or other practices, spills from drilling mud or other extraction and processing chemicals, and surface disturbance activities that create a localized erosion zone. Oil spills and other pollutants from the oil extraction process could harm the aquatic wildlife species in two different ways if the spill substances enter the habitat. First, toxicological impacts from direct contact could have immediate lethal effects to eggs, larvae, juveniles, and adults. Second, toxic effects to lower food web levels (e.g. aquatic macro-invertebrates) could indirectly affect fish, amphibian, and reptile species by degrading water quality and degrading or eliminating food resources.

Additional mitigation could occur as COAs at the APD stage. These conditions could include the placement of earthen berms and oil skimmers (in ephemeral drainages where fish passage will not be blocked) to help protect aquatic wildlife habitat in case of oil spills.

Oil and gas development is allowed within big game crucial winter range with a timing restriction from December 1 to March 31. This stipulation does not apply to operation and maintenance of production facilities. The goal of this stipulation is to protect crucial big game habitats from disturbance during the winter use season. This stipulation provides protection to big game winter habitats and species only during that timeframe, and does not provide protection during the long-term operation and maintenance periods. Development can occur outside of those dates and will exist thereafter until reclamation, thus only delaying impacts until after that year of construction.

Mule deer could be impacted by this project from habitat fragmentation and disturbance. Mule deer winter range habitat has been identified within 185 lease parcels. Development could affect mule deer use of winter range habitat in those areas. Studies conducted in the Pinedale anticline of Wyoming found that mule deer avoided areas in close proximity to well pads with no evidence of well-pad acclimation during 3 out of 4 years. During year 4 of development habitat

selection patterns were influenced more by road density, and not proximity of well pads. The authors attributed this to an unusually severe winter, where movement options and available habitat was limited. Densities of mule deer decreased by an estimated 46% within the developed area over the four years, and indirect impacts were observed out to 2.7-3.7 km of well sites. Mule deer distribution shifted toward less preferred and presumably less suitable habitat. (Sawyer et al. 2005) Similar impacts could be expected from development with this proposal.

White-tailed deer could also be expected to be impacted by this project from habitat fragmentation and disturbance. Winter range for white-tailed deer exists across the analysis area, but covers much less area than other big game ranges. White-tailed deer winter range has been identified within 47 lease parcels.

Pronghorn could be impacted by this project from habitat fragmentation and disturbance. Pronghorn winter range habitat has been identified within 162 lease parcels. Preliminary studies in the upper green river basin in Wyoming report that some pronghorn exhibit movement patterns that suggest almost complete avoidance of gas field areas of intensive development in the Jonah field during the winter, whereas pronghorn in the Pinedale Anticline Project Area (PAPA) apparently have not been avoiding human activities. It is speculated that the difference may exist due to different levels in well densities, as the Jonah field was reported as 1 well/57 acres, and the PAPA at 1 well/124 acres (Berger et al. 2007). Effects to winter range within existing and future oil and gas development and exploration would be similar to those referenced above and could depend on rate and location of development.

Portions of 15 proposed lease parcels are located within 0.25 miles of sharp-tailed grouse leks. An NSO buffer within 1/4 mile of leks applies to the affected portions of the parcels. In addition, 95 lease parcels are located within 2 miles of sharp-tailed grouse leks where timing stipulations from March 1 to June 15 were applied. This timing does not apply to operation and maintenance of production facilities. Although limited research exists that documents impacts to sharp-tailed grouse from development activities, it is expected that sharp-tailed grouse could be impacted similarly to sage grouse. Sharp-tailed grouse could be impacted by this project from habitat fragmentation and disturbance. Vehicles and human activity during breeding and nesting seasons could reduce breeding activity, displace nesting hens and reduce the suitability of habitat for brood-rearing. Mortality could increase as a result of collisions with vehicles.

Wild turkeys, pheasants, and Hungarian partridge could also be affected by disturbance and direct mortality through nest destruction and vehicle collisions during the development stages.

4.3.8.2 Mitigation

Stipulations addressing wildlife resources would minimize potential impacts and would be included with the lease when necessary (Appendix A). Measures would be taken to prevent, minimize, or mitigate impacts to fish and wildlife animal species from exploration and development activities. Prior to authorization, activities would be evaluated on a case-by-case basis, and the project would be subject to mitigation measures. Mitigation could include rapid revegetation, project relocation, or pre-disturbance wildlife species surveying. If oil and gas development is proposed in suitable habitat for threatened or endangered species, consultation

with the USFWS would occur to determine if additional terms and conditions would need to be applied.

4.3.10 Cultural Resources

4.3.10.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on cultural resources. Any potential effects from the sale of leases would occur at the time the leases are developed.

Potential effects from surface disturbances associated with exploration and development activities have the potential to alter the characteristics of a significant cultural or historic property by diminishing the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Other effects to cultural resources from proposed surface disturbance activities include the destruction, damage, or alteration to all or part of the cultural resource and diminishing the property's significant historic features as a result of the introduction of visual, atmospheric, or audible elements. This could alter or diminish the elements of a National Register eligible property and diminish the property's eligibility status. Cultural resource investigations associated with development potentially adds to our understanding of the prehistory/history of the area and discovery of sites that would otherwise remain undiscovered due to burial or omission. Indirect effects to cultural resources within the analysis area by county are as follows:

One lease parcel (MTM 102757-GA) is located in Daniels County and includes 42 acres. Based on modeling, the parcel might contain up to 1 cultural site which could have the potential to be eligible or considered eligible for listing on the National Register of Historic Places.

There are 191 lease parcels (MTM 102757-C7, C8, DP, DQ, DT, E3, E4, E5, E6, E7, E8, E9, F3, F4, F6, F7, F8, F9, FB, FC, FD, FE, FF, FG, FH, FJ, FK, FL, FM, FN, FP, FQ, FR, FT, FU, FV, FW, FY, K3, K4, K6, K7, K8, K9, KG, KH, KJ, KK, KL, KM, KP, KQ, KR, KT, KU, KV, KW, KX, KY, MF, MG, N3, N4, N6, N7, N8, N9, NA, NB, NC, ND, NE, NF, NG, NH, NJ, NK, NL, NM, NP, NQ, NR, NT, NU, NV, NW, NX, NY, P3, P4, P6, P7, P8, P9, PC, PD, PE, PF, PG, PH, PJ, PK, PL, PM, PN, PP, PQ, PR, PT, PU, PV, PW, PX, PY, R3, R4, R6, R7, R8, R9, RN, RP, RQ, RR, RT, RU, RV, RW, RX, RY, T3, T4, T6, T7, T8, T9, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TP, TQ, TR, TT, TU, TV, TW, TX, TY, U3, U4, U6, U7, U8, U9, UA, UB, UC, UD, UE, UF, UG, UH, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, VB, VC, VD, VE, VF, VG & VH) located in McCone County and include 84,680 acres. Based on modeling, the parcels might contain up to 911 cultural sites with 92 to 137 sites having the potential to be eligible or considered eligible for listing on the National Register of Historic Places.

Four lease parcels (MTM 102757-U4, UW, UX, VH) are situated within areas that may contain significant cultural characteristics associated with the Long Medicine Wheel (site #24MC1002). Development of these lease parcels could affect the integrity, setting and context of this site. The site is a sensitive site type to Native Americans. Lease development could degrade or comprise the site's characteristics from human activities through the introduction of visual intrusions and surface alterations. Changes that degrade or alter the integrity, setting or context of the site could affect the site's eligibility for listing on the National Register of Historic Places.

Two lease parcels (MTM-102757- DR and ME) are located in Richland County and include 52 acres. Based on modeling, the parcels might contain up to 1 cultural site which could have the potential to be eligible or considered eligible for listing on the National Register of Historic Places.

Nine lease parcels (MTM 102757- EA, FA, GB, QA, QB, QC, QD, QE & QF) are located in Sheridan County and include 1,224 acres. Based on modeling, the parcels might contain up to 13 cultural sites with 1 to 2 sites having the potential to be eligible or considered eligible for listing on the National Register of Historic Places.

Leasing approximately 85,759 acres of federal minerals within the counties described above could indirectly affect, without mitigation, 926 cultural sites based upon modeling (Aaberg et al 2006) and the range of wells that could be drilled as described in Appendix C. Of the modeled 926 cultural sites, 93 to 139 sites may have the potential to be eligible or considered eligible for listing on the National Register of Historic Places. One known cultural site, which may have the potential to be considered eligible for listing on the National Register of Historic Places, could be directly and indirectly affected, without mitigation.

4.3.10.2 Mitigation

Application of standard lease terms, stipulations, and cultural lease notices provide mechanisms to protect vulnerable significant cultural resource values on these lease parcels (Appendix A). Lease notice LN 14-2 would be applied to 21 lease parcels (MTM 102757-FE, FP, FQ, N6, NF, PK, PQ, PT, PX, R3, TD, TJ, TL, TM, TX, U8, UB, UF, UG, UX & UY). Lease notice LN 14-14 would be applied to 28 lease parcels, of which 19 lease parcels are situated within areas that may contain significant cultural characteristics associated with the Lewis and Clark National Historic Trail (MTM 102757-C7, C8, DP, DQ, DR, DT, N3, N4, N7, TQ, TR, TT, TU, U9, VB, VC, VD, VE and VF), while 9 lease parcels are situated within areas that may contain significant cultural characteristics associated with the Long Medicine Wheel site (24MC1002) and proposed ACEC (MTM 102757-NN, U4, U6, U7, UW, UX, UY, VG and VH). The cultural resource lease stipulation CR16-1 would be applied to all the lease parcels. The inclusion of these requirements at the leasing stage provide notification to the lessee that potentially valuable cultural resource values are or are likely to be present on the lease parcels and the potential mitigation measures that may be required. The application and implementation of these stipulations and lease notices at the development stage would provide the necessary measures to protect cultural resources and sites for all lease parcels except for parcels MTM 102575-UX, UW, U4, and VH in whole or part.

Specific mitigation measures, including but not limited to, possible site avoidance, excavation or data recovery would have to be determined when site-specific development proposals are received. However, in most surface-disturbing situations cultural resources would be avoided by project redesign or relocation. Should a cultural property be unavoidable, significant properties would be site-specifically mitigated prior to implementation of a project.

4.3.11 Native American Religious Concerns

4.3.11.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on Native American religious concerns. Any potential effects from the sale of leases could occur at the time the leases are developed.

For parcels within (MTM 102757-UX) and parcels adjacent to (MTM 102757-U4, UW, and VH) the Medicine Wheel site (24MC1002), a sensitive site type to Native Americans, the exploration and development of oil and gas could alter the setting of the site and diminish its importance to Native American groups who have historic ties to the MCFO area. Leasing the 13 parcels with sites listed in Section 3.9 Table 7 would have no impacts on Native American religious concerns.

Leasing parcels located near the Fort Peck Reservation in McCone, Richland, Roosevelt, and Sheridan Counties would not interfere with the performance of traditional ceremonies and rituals pursuant to the American Indian Religious Freedom Act (AIRFA) or EO 13007. Leasing parcels in this area would not prevent tribes from visiting sacred sites or prevent possession of sacred objects.

4.3.11.2 Mitigation

Mitigation would be the same as section 4.3.10.2 above. For those parcels where no inventory data is available or where no information is available for TCPs, BLM would apply the cultural lease notice (CR 16-1).

4.3.12 Paleontology

4.3.12.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on paleontological resources. Any potential effects from the sale of leases could occur at the time the leases are developed.

Indirect impacts from the sale of leases would be from the surface disturbances associated with oil and gas exploration and development activities, primarily in areas classified as Potential Fossil Yield Classification (PFYC) 4 or 5 areas. Surface-disturbing activities could potentially alter the characteristics of paleontological resources through damage, fossil destruction, or disturbance of the stratigraphic context in which paleontological resources are located, resulting in the loss of important scientific data. However, in most surface-disturbing situations, paleontological resources could be avoided by project redesign or relocation before project approval which would negate the need for the implementation of mitigation measures.

Conversely, surface-disturbing activities could potentially lead to the discovery of paleontological localities that would otherwise remain undiscovered due to burial or omission during review inventories. The scientific study to retrieve and interpret important paleontological resource information provides a better understanding of the nature and distribution of those resources. However, the retrieval and interpretation of information is most successful and meaningful when a site is left intact.

In addition, lease parcel MTM 102757-UX falls within an area of highly significant paleontological values where 11 localities have been recorded and given Smithsonian trinomial numbers and the 160 acre area. The area contains designated paleontological sites.

4.3.12.2 Mitigation

The application of lease terms, the paleontological no surface occupancy stipulation (NSO 11-12), and the paleontological lease notice (LN 14-12) at leasing provides protection to paleontological values during development. The paleontological lease notice would be applied to those lease parcels that fall within the PFYC 4 or 5 areas, requiring a field survey prior to surface disturbance. These inventory requirements could result in the identification of paleontological resources. Avoidance of significant paleontological resources or implementation of mitigation prior to surface disturbance would protect paleontological resources. However, the application of lease terms only allows the relocation of activities up to 200 meters, unless documented in the NEPA document, and cannot result in moving the activity off lease.

Specific mitigation measures could include, but are not limited to, site avoidance or excavation. Avoidance of paleontological properties would be a best management practice. However, should a paleontological locality be unavoidable, significant properties would be mitigated prior to implementation of a project. These measures would be determined when site specific development proposals are received.

In order to protect potential paleontological values the following 144 leases are recommended to have the Paleontological lease notice 14-12 applied per guidance identified in IM 2009-011 and 2008-009: Parcels in McCone County, MTM 102757-C7, C8, DP, DQ, F3, F4, F6, F7, F8, F9, FF, FG, FH, FJ, FR, FT, FU, FV, FW, FX, FY, K3, K4, K6, K7, K8, KG, KH, KJ, KK, KL, KM, KP, KQ, KR, KT, KU, KV, KW, KX, KY, MG, NA, N3, N4, N6, N7, N8, N9, NB, NC, ND, NE, NF, NG, NH, NJ, NK, NL, NN, NP, NR, NV, NW, NX, NY, P3, P4, P6, P7, P8, P9, PK, PM, PN, PP, PQ, PR, PT, PV, PY, R3, R4, R6, R7, R8, R9, RR, T3, T4, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TP, TQ, TT, TV, TW, TX, TY, U3, U4, U6, U7, U8, U9, UA, UB, UC, UD, UE, UF, UG, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, UW, UX, UY, VB, VC, VD, VE, VF, VG, VH (Appendix A), while the application of the no surface occupancy lease stipulation (NSO 11-12) would be applied to lease parcel MTM 102757-UX in whole or part, which falls within an area of highly significant paleontological values to protect those highly significant paleontological values.

4.3.13 Visual Resources

4.3.13.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on visual resources. Any potential effects from the sale of leases could occur at the time the leases are developed.

The exploration and development of oil and gas within VRM classes II, III and IV, as shown in Section 3.11, Visual Resources, Table 8, could result in some level of modification to the existing landscape at the time of development based on the proposed action.

4.3.13.2 Mitigation

All new oil and gas development would implement, as appropriate for the site, BMPs for VRM, regardless of the VRM class. This includes, but would not be limited to, proper site selection, reduction of visibility, minimizing disturbance, selecting color(s)/color schemes that blend with the background and reclaiming areas that are not in active use. Repetition of form, line, color

and texture when designing projects would reduce contrasts between landscape and development. Wherever practical, no new development would be allowed on ridges or mountain tops. Overall, the goal would be to not reduce the visual qualities or scenic value that currently exists.

Specifically, visual impacts would be minimized in the Class II areas by the use of the lease stipulation (CSU 12-4), which would be applied to 13 parcels MTM 102757-E3, PF, PK, PQ, PR, PT, PX, PU, PV, PW, VC, RP, and DP. The stipulation states “all surface-disturbing activities, semi-permanent and permanent facilities in VRM Class II, areas may require special design, including location, painting, and camouflage, to blend with the natural surroundings and meet the visual quality objectives for the area.” In addition those modifications would follow the existing form, line, color and texture of the current landscape. Measure would be taken to mitigate the visual impacts within a Class III and Class IV area to protect the scenic value.

4.3.14 Forest and Woodland Resources

4.3.14.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on forest and woodland resources. Any potential effects from the sale of leases could occur at the time the leases are developed.

Potential impacts from oil and gas development could include the cutting and subsequent removal of forest and woodland vegetation from drill-site development areas; including roads, pads, reserve and earthen pits, surface facilities, pipelines, and powerlines. The degree of impact would vary according to the precise location of development activities in the parcel area and is directly related to topography, miles of road construction (including right-of-way), standing timber volume per acre, and total acres of surface facilities development. Larger numbers of miles/acres of surface disturbance and steeper slopes with larger cuts and fills within forested areas signify that a greater volume of forest and woodland vegetation would be removed. A total of approximately 698 forest and woodland acres could potentially be impacted under this alternative; 2 acres of evergreen, 516 acres of deciduous, and 180 acres of mixed evergreen-deciduous forest.

4.3.14.2 Mitigation

Measures would be taken to prevent, minimize, or mitigate impacts to forest and woodland resources from exploration and development activities. Prior to authorization, activities would be evaluated on a case-by-case basis, and the project would be subject to mitigation measures. The road construction and maintenance BMPs outlined in the Gold Book are consistent with the Water Quality BMPs for Montana Forests (Logan 2001) which are designed to protect water quality and forest soils. Other mitigation measures could include the artificial planting of bareroot or containerized nursery stock seedlings.

All severed forest and woodland vegetative material would need to be removed or reduced to acceptable standards meeting Montana’s Control of Timber Slash and Debris Law (Title 76, Chapter 13, Part 4), commonly referred to as the “Slash” Law; therefore, requiring burning, grinding, chipping, burying, or hauling residual debris off-site to a designated landfill or other location for disposal.

4.3.15 Livestock Grazing

4.3.15.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on livestock grazing. Any potential effects from the sale of leases could occur at the time the leases are developed.

Oil and gas development could result in a loss of vegetation for livestock grazing (e.g., direct removal, introduction of unpalatable plant species, etc.), decrease the palatability of vegetation due to fugitive dust, disrupt livestock management practices, involve vehicle collisions, and decrease grazing capacity. Direct loss of forage could also result from construction of roads, well pads and associated infrastructure and would vary depending on the extent of development. These impacts could vary from short-term impacts to long-term impacts depending on the type of exploration or development, the success of reclamation, and the type of vegetation removed for the oil and gas activities.

4.3.15.2 Mitigation

Measures would be taken to prevent, minimize, or mitigate impacts to livestock grazing from oil and gas exploration and development activities. Prior to authorization, activities would be evaluated on a case-by-case basis, and the project would be subject to mitigation measures. Mitigation could potentially include controlling livestock movement by maintaining fence line integrity, fencing of facilities, revegetation of disturbed sites, and fugitive dust control.

4.3.16 Recreation and Travel Management

4.3.16.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on recreation and travel management. Any potential effects from the sale of leases could occur at the time the leases are developed.

For lease parcels MTM 102757-DP (256 acres) and MTM 102757-VC (4 acres), located within the Lewis and Clark Trail Special Recreation Management Area, potential impacts to recreation could exist where oil and gas development and recreational user conflicts could occur. More specifically, in areas of high oil and gas development potential, there could be user conflicts between motorized recreationists (OHV activities), hunting, target shooting, camping, fishing, river use, picnicking, and winter activities (e.g., snowmobiling) and associated oil and gas activities. These impacts could exist in both the short-term (exploration and construction phases of oil and gas development) and in the long-term (producing wells, maintenance of facilities, etc.). Recreationists could lose some benefit outcomes such as loss of importance sense of place, solitude and possible increase of stress.

Areas frequented by recreationists, where other land use activities are occurring, in addition to oil and gas development, the public could perceive these areas as inaccessible or unavailable because of the existing facilities. As oil and gas development occurs, new routes are created which often attract recreationists seeking additional or new areas to explore for motorized recreational opportunities. Motorized recreational opportunities could be enhanced through the additional opportunities to explore; however, user conflicts and public safety issues could result from the use of the new travel routes. The creation of routes from oil and gas activities could lead to a proliferation of user-created motorized routes, resulting in adverse impacts to the scenic qualities of the area and increased level of surface disturbance.

For those areas with isolated tracks of BLM public lands that generally do not have existing public access, recreation opportunities that occur in these areas are limited to use with adjacent land owner permission or hunting by an outfitter; therefore, oil and gas activities would have little or no impact on recreational experiences in these isolated tracks.

Foreseeable changes in recreation use levels would be an increase on the demand for recreational use of public land. Increases could be expected in, but not limited to, hunting, fishing, hiking, camping, wildlife viewing, and dispersed recreational uses. This could increase the incidence of conflict between recreationists involved in motorized activities and non-motorized activities.

4.3.16.2 Mitigation

Stipulation NSO 11-13 would be attached to lease parcels MTM 102757-DP and MTM 102757-VC, which states “surface occupancy and use is prohibited within developed recreation areas and undeveloped recreation areas receiving concentrated public use to protect developed recreation areas and undeveloped recreation areas receiving concentrated public use.”

Additional measures would be taken to minimize, avoid, or mitigate impacts to recreation from oil and gas exploration and development activities. Prior to authorization, activities would be evaluated on a case-by-case basis, and the project would be subject to mitigation measures. Mitigation measures could potentially include, but are not limited to, reclamation of industrial routes/areas when no longer needed, fencing of facilities, and installing signs along roads.

4.3.17 Lands and Realty

4.3.17.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on lands and realty. Any potential effects from the sale of leases could occur at the time the leases are developed.

Facilities associated with oil and gas development could cause disturbance to the existing rights-of-way (ROWs) as identified in Appendix F. The ROWs are located on 35 lease parcels (MTM-102757 E3, E7, FB, FJ, FK, FM, FQ, FV, FW, F8, KL, KX, K3, NL, NQ, PF, PJ, PT, PX, PU, PV, P3, P7, T9, UJ, UW, UX, U6, VC, RR, R8, TB, TC, TL, TO). Additional ROWs could be required across federal surface for “off-lease” or third party facilities required for potential development of the parcels.

4.3.17.2 Mitigation

Measures would be taken to avoid disturbance to or impacts to existing rights-of-way, identified in Appendix F, in the event of any oil and gas exploration and development activities. Any new “off-lease” or third party rights-of-way required across federal surface for exploration and/or development of the 203 parcels would be subject to lands and realty stipulations to protect other resources as determined by environmental analyses. In order to protect the existing rights-of-way LN 14-1 would be applied to the following lease parcels: MTM-102757 E3, E7, FB, FJ, FK, FM, FQ, FV, FW, F8, KL, KX, K3, NL, NQ, PF, PJ, PT, PX, PU, PV, P3, P7, T9, UJ, UW, UX, U6, VC, RR, R8, TB, TC, TL, TO.

4.3.18 Minerals

4.3.18.1 Fluid Minerals

4.3.18.1.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on fluid minerals. Any potential effects from the sale of leases could occur at the time the leases are developed.

Selling a lease results in revenues paid to the Federal government and also provides opportunities to explore for and develop oil and gas. Additional natural gas or crude oil produced from any or all of the 203 parcels could enter the public markets and results in the irretrievable loss oil and gas resources. Royalties and taxes could accrue to the federal and state treasuries from the lease parcel lands.

Under Alternative B, all of the lease parcels would be offered for lease subject to major (NSO) or moderate (CSU) constraints, timing limitation (TL), and/or standard lease terms and conditions.

Stipulations applied to various areas with respect to occupancy, timing limitation, and control of surface use could affect oil and gas exploration and development, both on and off the federal lease parcel. Leases issued with major constraints (NSO stipulations) could decrease some lease values, increase operating costs, and require relocation of well sites, and modification of field development. Leases issued with moderate constraints (timing limitation and controlled surface Use (CSU) stipulations) could result in similar but reduced impacts, and delays in operations and uncertainty, on the part of operators, regarding restrictions.

4.3.19 Special Designations

4.3.19.1 Direct and Indirect Effects

Leasing the parcels would have no direct impacts on acres with special designations. Any potential effects from the sale of leases could occur at the time the leases are developed.

4.3.19.2 National Historic/Scenic Trails

Lease parcels MTM 102757-C7, DP, DQ, DR, DT, TR and VC (approximately 730 acres) in whole or part are located within the Lewis and Clark National Historic Trail. Indirect effects from lease development on the landscape would be managed by Class II visual resource management objectives and the Lewis and Clark Trail Special Recreation Management Area. For indirect effects see sections 4.3.13 Visual Resources and 4.3.16 Recreation and Travel Management

Potential effects from surface disturbances associated with exploration and development activities after leasing have the potential to alter the characteristics of the significant Lewis and Clark National Historic Trail cultural and historic property by diminishing the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Other effects to the Lewis and Clark National Historic Trail cultural resource from proposed surface disturbance activities include the destruction, damage, or alteration to all or part of the cultural resource and diminishing the property's significant historic features as a result of the introduction of visual, atmospheric, or audible elements. This could alter or diminish the elements of a National Register eligible property and diminish the property's eligibility status. Cultural resource investigations associated with development potentially adds to our

understanding of the prehistory/history of the area and discovery of sites that would otherwise remain undiscovered due to burial or omission.

As a result, these potential effects would be diminished by the application of standard lease terms, stipulations, and cultural lease notices that would provide mechanisms to protect these vulnerable significant cultural resource values on through the application of Lease notice LN 14-14 on 19 lease parcels (MTM 102757-C7, C8, DP, DQ, DR, DT, N3, N4, N7, TQ, TR, TT, TU, U9, VB, VC, VD, VE and VF) in whole or part, that are situated within a 1.5 mile area adjacent to the Lewis and Clark National Historic Trail that may contain significant cultural characteristics associated with the Trail,

4.3.19.3 Areas of Critical Environmental Concern (ACECs)

For the same reasons stated above in Section , 4.3.10.1 Cultural Resources, the potential effects from surface disturbances associated with exploration and development activities have the potential to alter the characteristics of a significant cultural resource property by diminishing the integrity of the property's location, design, setting, materials, workmanship, feeling, or association resulting in unacceptable changes in the visual, atmospheric, or audible elements of the site,

As a result, all or portions of 9 lease parcels (MTM 102757- NN, U4, U6, U7, UW, UX, UY, VG and VH) are situated within areas that may contain significant cultural characteristics associated with the Long Medicine Wheel site (24MC1002) and proposed ACEC. The site is a sensitive site type to Native Americans.

Development of lease parcels MTM 102757- U4, UW, UX and VH could create negative or irretrievable direct and indirect effects on the cultural sites characteristics and eligibility for listing on the National Register of Historic Places.

4.3.19.4 Mitigation

The mitigation measures for the Lewis and Clark NHT would be the same as those described in Sections 4.3.10.2 Cultural Resources, 4.3.13.2 Visual Resources and 4.3.16.2, Recreation and Travel Management.

The mitigation measures for the Long Medicine Wheel proposed ACEC would be the same as those described in Section 4.3.10.2 Cultural Resources,

4.3.20 Social and Economic Conditions

4.3.20.1 Social

4.3.20.1.1 Direct and Indirect Effects

While the act of leasing Federal minerals itself would result in no social impact, subsequent exploration and development may generate impacts to people living near or using the area in the vicinity of the lease. Exploration, drilling or production could create an inconvenience to people living on or adjacent to leases due to increased traffic and traffic delays, and light, noise and visual impacts. This could be especially noticeable in rural areas where oil and gas development has not occurred previously. The amount of inconvenience would depend of the activity affected, traffic patterns within the area, noise and light levels, length of time and season these

activities occur, etc. In addition, competition for housing could occur in some communities. However, residents living in areas that have been experiencing ongoing population losses may support the increased employment and population related to oil and gas development. Residents of counties where the development actually occurs would also benefit from the additional revenues to counties due to oil and gas leasing and development.

There would be no disproportionate effects to low income or minority populations. There are some leases near the Missouri River south of the Fort Peck Indian Reservation. Consultation with potentially affected Tribes would occur at the APD stage.

4.3.20.2 Economics

4.3.20.2.1 Direct and Indirect Effects

The basis for economic impacts is the number of acres leased, rents paid, and level of production by alternative. The economic contribution to a local economy is measured by estimating the employment and labor income generated by 1) payments to counties associated with the leasing and rent of federal minerals, 2) royalty payments associated with production of federal oil and gas, and 3) economic activity generated from drilling and associated activities. Activities related to oil and gas leasing, exploration, development, and production form a basic industry that brings money into the state and region and creates jobs in other sectors. Table 13 is a summary of local revenues, employment, income, population, and household impacts of each alternative.

Leasing approximately 85,758 acres of federal minerals (Alternative B) would increase average annual oil and gas leasing and rent revenues to the federal government by an estimated \$150,000. Average annual leasing and rent revenues that could be distributed to state/local governments could increase by an estimated \$73,000; average annual federal oil and gas royalties could increase by an estimated \$310,000; and average annual royalties distributed to the state/counties could increase by an estimated \$150,000 compared to current levels.

Total average annual federal revenues related to leasing approximately 85,758 acres of federal minerals and associated annual rent and royalty revenues related to average annual production of federal minerals could amount to an estimated \$460,000. Of this, an estimated \$223,000 could be disbursed to the state. Total estimated revenues distributed to the counties could be about \$58,000.

The estimated combined total average annual employment would likely increase from current levels by an estimated 55 jobs and income supported by the additional federal oil and gas leasing, distributions of royalties to local governments, drilling wells, and production would increase by about \$3.4 million within the 7-county local economy (IMPLAN, 2009). There would also be an increase in local population (76 people) and households (32).

Total federal contribution of Alternative B and anticipated related exploration, development, and production of oil and gas could affect local population, total local employment, number of households, average income per household, and total personal income. The economic effects would be spread unevenly among the counties. Most of the revenue would go to McCone County and most of the employment, income, population, and housing effects would occur in Williston, Sidney, and Glendive. Leasing approximately 85,758 acres and associated

exploration, development, and production under Alternative B would provide additional funds (about \$60,000) for county functions such as enforcing laws, administering justice, collecting and disbursing tax funds, providing for orderly elections, maintaining roads and highways, providing fire protection, and keeping records. Other county functions that could be funded include administering primary and secondary education and operating clinics/hospitals, county libraries, county airports, local landfills, and county health systems. Demand for these services would also increase. Leasing approximately 85,758 acres and anticipated exploration, development, and production would change local economic diversity (as indicated by the number of economic sectors), economic dependency (where one or a few industries dominate the economy), and economic stability (as indicated by seasonal unemployment, sporadic population changes and fluctuating income rates) very little across the 7-county area because oil and gas exploration, development, and production is well established in the local economy.

4.3.21 Cumulative Impacts- Alternative B

Cumulative impacts are those impacts resulting from the incremental impact of an action when added to other past, present, and reasonably foreseeable actions regardless of what agency or person undertakes such other actions (40 CFR 1508.7). This section describes cumulative impacts associated with this project on resources. The ability to assess the potential cumulative impacts at the leasing stage for this project is limited for many resources due to the lack of site-specific information for potential future activities. Upon receipt of an APD for any of the lease parcels addressed in this document, more site-specific planning would be conducted in which the ability to assess contributions to cumulative impacts in a more detailed manner would be greater due to the availability of more refined site-specific information about proposed activities.

4.3.21.1 Past, Present and Reasonably Foreseeable Future Actions

Past, present, or reasonably foreseeable future actions that affect the same components of the environment as the Proposed Action are: grazing, roads, wildfire and prescribed fire, range improvement projects, and utility right-of-ways.

4.3.21.2 Cumulative Impacts by Resource

Cumulative effects for all resources in the MCFO are described in the final Big Dry RMP/EIS (pgs. 111 to 156) and the 1992 Oil and Gas Amendment of the Billings, Powder River, and South Dakota Resource Management Plans and Final Environmental Impact Statement and the 1994 Record of Decision and the 2008 Final Supplement to the Montana Statewide Oil and Gas Environmental Impact with a development alternative for coal bed natural gas production (4-1 to 4-310). Anticipated exploration and development activities associated with the lease parcels considered in this EA are within the range of assumptions used and effects described in this cumulative effects analysis for resources other than air, climate, and socio-economics resources. This previous analysis is hereby incorporated by reference for resources other than for air, climate, and economics resources.

4.3.21.2.1 Greenhouse Gas Emissions and Cumulative Impacts on Climate Change

The cumulative effects analysis area is the MCFO, with additional discussion at state-wide, national, and global scales for GHG emissions and climate change.

This section incorporates an analysis of the contributions of the Proposed Action to GHG emissions, followed by a general discussion of potential impacts to climate change. Potential emissions relate to those derived from potential exploration and development of fluid minerals. Additional emissions beyond the control of the BLM, and outside the scope of this analysis, would also occur during any needed refining processes, as well as end uses of final products.

Projected GHG emissions for this project and the MCFO RFD are compared below with recent, available inventory data at the state, national, and global scales. GHG emissions inventories can vary greatly in their scope and comprehensiveness. State, national, and global inventories are not necessarily consistent in their methods or in the variety of GHG sources that are inventoried (Climate Change SIR 2010). However, comparisons of emissions projected by the BLM for its oil and gas production activities are made with those from inventories at other scales for the sake of providing context for the potential contributions of GHGs associated with this project.

As discussed in the Air Quality section of Chapter 4, total projected BLM GHG emissions from the RFD are 610,741.1 metric tons/year CO₂e. Potential emissions under Alternative B would be approximately 1.43 percent of this total. Table 19 displays projected GHG emissions from non-BLM activities included in the Miles City RFD. Total projected emissions of non-BLM activities in the RFD in Appendix B are 1,382,890 metric tons/year of CO₂e. When combined with projected annual BLM emissions, this totals 1,993,631 metric tons/year CO₂e. Potential GHG emissions under Alternative B would be 0.44 percent of the estimated emissions for the entire RFD. Potential incremental emissions of GHGs from exploration and development of fluid minerals on parcels within Alternative B, and Alternative C, would be minor in the context of projected GHG contributions from the entire RFD for the MCFO.

Table 19. Projected non-BLM GHG Emissions Associated With the MCFO Reasonably Foreseeable Development Scenario for Fluid Mineral Exploration and Development.

Source	Non-BLM Long-Term GHG Emissions in tons/year				Emissions (metric tons/yr)
	CO ₂	CH ₄	N ₂ O	Co ₂ e	CO ₂ e
Conventional Natural Gas	545,689.1	5425.9	2.1	658,344.3	599,170.7
Coal Bed Natural Gas	274,925.2	5,330.5	0.9	387,135.7	351,302.8
Oil	422,033.9	2,576.2	1.2	476,522.7	432,416.3
Total	1,242,648.3	13,332.6	4.2	1,522,002.7	1,382,889.8

Montana's Contribution to U.S. and Global GHGs

Montana's GHG inventory (<http://www.eia.doe.gov/oiaf/1605/archive/gg04rpt/emission.html>, Center for Climate Strategies [CCS] 2007) shows that activities within the state contribute 0.6 percent of U.S and 0.076 percent of global GHG emissions (based on 2004 global GHG emission data from the IPCC, summarized in the Climate Change SIR 2010). Based on 2005 data in the state-wide inventory, the largest source of Montana's emissions is fossil fuel combustion to generate electricity, which accounts for approximately 27 percent of Montana's emissions. The next largest contributors are the agriculture and transportation sectors (each at approximately 22 percent) and fossil fuel production (13.6 percent).

GHG emissions from all major sectors in Montana in 2005 added up to a total of approximately 36.8 million metric tons of CO₂e (CCS 2007). Potential emissions from development of BLM lease parcels included in Alternative B would represent approximately 0.02 percent of the state-wide total of GHG emissions based on the 2005 state-wide inventory (CCS 2007).

The EPA published an inventory of U.S. GHG emissions, indicating gross U.S. emissions of 6,633 million metric tons, and net emissions of 5,618 million metric tons (when CO₂ sinks were considered) of CO₂e in 2009 (EPA 2011). Potential annual emissions under Alternative B of this project would amount to approximately 0.00013 percent of gross U.S. total emissions. Global GHG emissions for 2004 (IPCC 2007, summarized by the Climate Change SIR 2010) indicated approximately 49 gigatonnes (10⁹ metric tons) of CO₂e emitted. Potential annual emissions under Alternative B would amount to approximately 0.000018 percent of this global total.

As indicated above, although the effects of GHG emissions in the global aggregate are well-documented, it is currently not possible to determine what specific effect GHG emissions resulting from a particular activity might have on climate or the environment. If exploration and development occur on the lease parcels considered under Alternative B, potential GHG emissions described above could incrementally contribute to the total volume of GHGs emitted to the atmosphere, and ultimately to climate change.

Mitigation measures identified in the Chapter 4 Air Quality section above may be in place at the APD stage to reduce GHG emissions from potential oil and gas development on lease parcels under Alternative B. This is likely because many operators working in Montana, South Dakota, and North Dakota are currently USEPA Natural Gas STAR Program Partners and future regulations may require GHG emission controls for a variety of industries, including the oil and gas industry (Climate Change SIR 2010).

4.3.21.2.2 Cumulative Impacts of Climate Change

As previously discussed in the Air Quality section of Chapter 4, it is impossible to identify specific impacts of climate change on specific resources within the analysis area. As summarized in the Climate Change SIR (2010), climate change impacts can be predicted with much more certainty over global or continental scales. Existing models have difficulty reliably simulating and attributing observed temperature changes at small scales. On smaller scales, natural climate variability is relatively larger, making it harder to distinguish changes expected due to external forcings (such as contributions from local activities to GHGs). Uncertainties in local forcings and feedbacks also make it difficult to estimate the contribution of GHG increases to observed small-scale temperature changes (IPCC 2007, as cited by the Climate Change SIR 2010). Effects of climate change on resources are described in Chapter 3 of this EA and in the Climate Change SIR (2010).

4.3.21.3 Cumulative Impacts to Wildlife

For wildlife species, past and presently on-going oil and gas development, fire, farming, livestock grazing, traffic, and any other form of human and natural disturbances result in cumulative impacts to wildlife.

Construction of roads, production well pads, and other facilities would result in long term (>5 years) loss of habitat and forage in the analysis area. This would be in addition to acres disturbed, or habitats fragmented from various other adjacent activities. As new development occurs, direct and indirect impacts could continue to stress wildlife populations, most likely displacing the larger, mobile animals into adjacent habitat, and increasing competition with existing local populations. Non-mobile animals could be affected by increased habitat fragmentation and interruptions to preferred habitats.

Certain species are localized to some areas and rely on very key habitats during critical times of the year. Disturbance or human activities that could occur in winter range for big game, nesting and brood-rearing habitat for grouse and raptors could displace some or all of the species using a particular area or disrupt the normal life cycles of species. Wildlife and habitat in and around the project could be influenced to different degrees by various human activities. Some species and/or a few individuals from a species group could be able to adapt to these human influences over time.

4.3.21.4 Cumulative Impacts to Economic Conditions

The cumulative effects of federal mineral leasing within the local economy as well as the specific effects of leasing approximately 85,758 acres under Alternative B are summarized in Table 15 and 16. These tables also display in comparative form the cumulative effects of alternatives A, B, and C.

4.4 Alternative C (BLM Preferred)

4.4.1 Direct Effects Common to All Resources

Under Alternative C, 201 of the 203 lease parcels (199 whole, 2 partial), 82,998.14 surveyed federal mineral acres (58,464.50 surveyed BLM administered surface and 24,533.64 surveyed private/state surface) in whole or part would be offered for competitive oil and gas lease sale. The remaining 4 parcels (2 whole, 2 partial), 2,760 surveyed federal mineral acres (2,720 surveyed BLM administered surface acres and 40 surveyed acres of private surface) in whole or part would be deferred pending further review.

4.4.2 Indirect Effects Common to All Resources

Oil and gas exploration and development activities such as construction, drilling, production, infrastructure installation, vehicle traffic and reclamation are indirect effects from leasing the lease parcels in Alternative C. It is unknown when, where, how, or if future surface disturbing activities associated with oil and gas exploration and development such as well sites, roads, facilities, and associated infrastructure would be proposed. It is also not known how many wells, if any, would be drilled and/or completed, the types of technologies and equipment would be used and the types of infrastructure needed for production of oil and gas. Thus, the types, magnitude and duration of potential impacts cannot be precisely quantified at this time, and would vary according to many factors. The potential impacts from Alternative C would be analyzed after receipt of an APD or sundry notice.

Typical impacts to resources from oil and gas exploration and development activities such as well sites, roads, facilities, and associated infrastructure are described in the Miles City Oil &

Gas Amendment/EIS (1994), the Big Dry RMP (1996), the Montana Statewide Oil & Gas Amendment/EIS (2003) and the Supplement (2008) to that document.

4.4.3 Air Resources

4.4.3.1 Air Quality

4.4.3.1.1 Direct and Indirect Effects

Effects to Air Quality would be similar to those for Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of parcels proposed for deferral pending further review. Fewer leased acres would likely result in less future development and fewer emissions than Alternative B. Consequently, air quality impacts under Alternative C would be less than those for Alternative B.

4.4.3.1.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.3.2 GHG Emissions

4.4.3.2.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3 %, due to approximately 2,760 acres of parcels proposed for deferral pending further review. Approximately 82,998 acres of lease parcels with federal minerals would be leased, which constitute 1.4 percent of the total federal mineral estate of approximately 5,798,000 acres identified in the RFD. Therefore, based on the approach described in Alternative B to estimate GHG emissions, 1.4 percent of the RFD total estimated BLM emissions of 610,741.1 metric tons/year could be approximately 8,742.7 metric tons/year of CO_{2e} if the parcels within Alternative C were to be developed.

4.4.3.2.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.3.3 Climate Change

4.4.3.3.1 Direct and Indirect Effects

Effects to climate change would be similar to those for Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of parcels proposed for deferral pending further review. Fewer leased acres would likely result in less future development and fewer GHG emissions than Alternative B. Consequently, climate change impacts under Alternative C would be less than those for Alternative B.

4.4.3.3.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.4 Soil Resources

4.4.4.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3% due to approximately 2,760 acres of parcels proposed for deferral pending further review. Sites poorly suited to reclamation would be reduced to approximately 58,818 acres (71 percent of the parcels).

The potentially impacted acres within the Prairie Elk-Wolf Creeks watershed would be reduced by 3.6 percent as compared to Alternative B. Soils are the same as those described in the Effected Environment section 3.3. Approximately 72 percent (approx. 53,603 ac.) of the parcels are considered poorly suited to reclamation.

4.4.4.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.5 Water Resources

4.4.5.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of the lease parcels proposed for deferral pending further review.

The potentially impacted acres on water resources would be decreased by 1,620 acres.

4.4.5.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.6 Vegetation Resources

4.4.6.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of the lease parcels proposed for deferral pending further review.

4.4.6.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.7 Riparian-Wetland Habitats

4.4.7.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of the lease parcels proposed for deferral pending further review. The potentially impacted acres on riparian resources would be decreased by 920 acres.

4.4.7.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.8 Wildlife & Fisheries/Aquatics

4.4.8.1 Direct and Indirect Effects

Direct and indirect impacts would be similar to Alternative B; however, the area impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review. This alternative would reduce the amount of parcels proposed in mule deer winter range, pronghorn winter range, Sprague's pipit habitat, and within 2 miles of both

sage grouse and sharp-tailed grouse leks. Potential impacts to these resources would be reduced under this alternative.

4.4.8.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.9 Special Status Plant Species

4.4.9.1 Direct and Indirect Effects

Direct and indirect impacts would be same as Alternative B; however the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review.

4.4.9.2 Mitigation

Mitigation would be that same as Alternative B.

4.4.10 Cultural

4.4.10.1 Direct and Indirect Effects

Direct and indirect impacts would be similar to those disclosed in Alternative B; however the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review. Specifically, potential effects would not occur on the 4 lease parcels proposed for deferral in whole or part (MTM 102757-U4, UW, UX and VH) all within McCone County. The parcels proposed for deferral are located in proximity to the Long Medicine Wheel site (24MC1002) and proposed Long Medicine Wheel ACEC.

The 189 lease parcels MTM 102757-C7, C8, DP, DQ, DT, E3, E4, E5, E6, E7, E8, E9, F3, F4, F6, F7, F8, F9, FB, FC, FD, FE, FF, FG, FH, FJ, FK, FL, FM, FN, FP, FQ, FR, FT, FU, FV, FW, FY, K3, K4, K6, K7, K8, K9, KG, KH, KJ, KK, KL, KM, KP, KQ, KR, KT, KU, KV, KW, KX, KY, MF, MG, N3, N4, N6, N7, N8, N9, NA, NB, NC, ND, NE, NF, NG, NH, NJ, NK, NL, NM, NP, NQ, NR, NT, NU, NV, NW, NX, NY, P3, P4, P6, P7, P8, P9, PC, PD, PE, PF, PG, PH, PJ, PK, PL, PM, PN, PP, PQ, PR, PT, PU, PV, PW, PX, PY, R3, R4, R6, R7, R8, R9, RN, RP, RQ, RR, RT, RU, RV, RW, RX, RY, T3, T4, T6, T7, T8, T9, TA, TB, TC, TD, TE, TF, TG, TH, TJ, TK, TL, TM, TN, TP, TQ, TR, TT, TU, TV, TW, TX, TY, U3, U6, U7, U8, U9, UA, UB, UC, UD, UE, UF, UG, UH, UJ, UK, UL, UM, UN, UP, UQ, UR, UT, UU, UV, , UY, VB, VC ,VD, VE, VF & VG are located in McCone County and include 81,920 acres. Based on modeling, the parcels might contain up to 881 cultural sites with 89 to 133 sites having the potential to be eligible or considered eligible for listing on the National Register of Historic Places.

Direct and indirect effects from lease development to the Long Medicine Wheel site would be avoided due to lease parcels MTM 102757-U4, UW, UX and VH being proposed for deferral.

Impacts to the remaining lease parcels in Daniels (42 acres), Richland (52 acres) and Sheridan (1,224 acres) Counties would be the same as those described in Alternative B.

Leasing the 82,998 acres of federal minerals within the above described counties could indirectly affect 893 cultural sites with 90 to 134 sites having the potential to be eligible or considered eligible for listing on the National Register of Historic Places.

4.4.10.2 Mitigation

Mitigation would be the same as Alternative B; however, no mitigation would be needed for the lease parcel in whole or part MTM 102757- U4, UW, UX and VH proposed for deferral.

4.4.11 Native American Religious Concerns

4.4.11.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review. Direct and indirect effects from the lease parcels to the Long Medicine Wheel ACEC would be avoided due to of lease parcel MTM 102757-U4, UW, UX and VH proposed for deferral.

4.4.11.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.12 Paleontology

4.4.12.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review. Specifically, effects would not occur on four lease parcels in whole or part (MTM 102757-U4, UW, UX and VH) proposed for deferral.

4.4.12.2 Mitigation

Mitigation would be the same as Alternative B, except the recommendation to apply Paleontological lease notice 14-12 would only apply to 142 leases and portions of two others because lease parcels MTM 102757-U4, UW, UX and VH in whole or part are proposed for deferral. In addition, application of no surface occupancy lease stipulation (NSO 11-12) would not apply to a portion of lease parcel MTM 102757-UX because it is one of the parcels proposed for deferral.

4.4.12.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.13 Visual Resources

4.4.13.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,720 acres of lease parcels on BLM surface proposed for deferral pending further review. Table 20 shows the acres of BLM surface that are proposed for deferral and their respective VRM Classification.

Table 20. BLM surface acres deferred by VRM classification

Leasing Areas	VRM Class II Acres	VRM Class III Acres	VRM Class IV Acres
MCCONE COUNTY	0 total acres	0 total acres	2,720 total acres
MTM 102757-U4			40
MTM 102757-UW			1,640
MTM 102757-UX			1,040

4.4.13.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.14 Forest and Woodland Resources

4.4.14.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,720 acres of lease parcels on BLM surface proposed for deferral pending further review. Under this alternative, acreage potentially impacted would be approximately 2 acres of evergreen, 499 acres of deciduous, and 177 acres of mixed evergreen-deciduous forest.

4.4.14.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.15 Livestock Grazing

4.4.15.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review.

4.4.15.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.16 Recreation and Travel Management

4.4.16.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3% due to approximately 2,720 acres of lease parcels on BLM surface proposed for deferral pending further review.

4.4.16.2 Mitigation

Mitigation would be the same as Alternative B.

4.4.17 Lands and Realty

4.4.17.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by approximately 3%, due to approximately 2,760 surveyed surface acres of 4 lease parcels proposed for deferral (2 total parcels MTM-102757 UX , VH; and 2 partial parcels MTM-102757 UW, U4) pending further review. The parcels or portions of parcels proposed for deferral consist of 2,720.00 surveyed BLM administered surface acres and 40.00 surveyed private surface acres.

Under this alternative 201 parcels (199 whole and 2 partial parcels), consisting of 82,998.14 surveyed surface acres (58,464.50 surveyed BLM administered surface acres, 23,964.94 surveyed private surface acres, and 568.70 surveyed state surface acres) would be offered for lease.

Based on the Master Title plats and LR2000 reports, two of the proposed deferred parcels (MTM-102757 UW, UX) have portions of McCone lectrick's authorized 20' wide overhead power line ROW MTM-55529 on them. The portions of the one ROW affected by deferrals cross the W $\frac{1}{2}$ SW $\frac{1}{4}$, Section 4, of parcel MTM-102757-UW and the NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 9, of parcel MTM-102757-UX, both in T24N, R46E. The remaining thirty-three lease parcels listed in Appendix F would be affected by authorized BLM ROWs on BLM administered surface.

4.4.17.2 Mitigation

Mitigation would be the same as Alternative B, however, Lease Notice 14-1 would not be applied to lease parcel MTM-1027570-UX or the remaining portion of lease parcel MTM-102757-UW for portions of McCone lectrick's 20' wide overhead power line ROW MTM-555290 due to the proposed deferrals.

4.4.18 Minerals

4.4.18.1 Fluid Minerals

4.4.18.1.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the total number of acres offered for sale would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review. The remaining 201 lease parcels, in whole or part, would be offered for lease subject to major (NSO) or moderate (CSU, TL) constraints and/or standard lease terms and conditions.

Deferring lease parcels would result in delays of some development plans, relocation of development to state or private leases, or possibly eliminate development plans because of the need to include federal acreage as part of a plan. In addition, less natural gas or crude oil would enter the public markets.

4.4.19 Special Designations

4.4.19.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review.

Direct and indirect effects from lease development to the Long Medicine Wheel site (24MC1002) and proposed ACEC would be avoided due to lease parcel MTM 102757- U4, UW, UX and VH in whole or part proposed for deferral.

Direct and indirect effects from lease development to the Long Medicine Wheel Paleontological area would be avoided due to lease parcel MTM 102757-UX proposed for deferral.

4.4.19.2 Mitigation

Mitigation would be the same as Alternative B for the Lewis and Clark NHT.

The mitigation measures for the Long Medicine Wheel site (24MC1002) and proposed ACEC would be the same as those described in Section 4.3.10.2 Cultural Resources for the lease parcels not deferred.

4.4.20 Social and Economic Conditions

4.4.20.1 Social

4.4.20.1.1 Direct and Indirect Effects

Direct and indirect impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review.

4.4.20.2 Economics

4.4.20.2.1 Direct and Indirect Impacts

Economic impacts associated with Alternative C would be very similar to those described for Alternative B. Under this alternative, leasing approximately 82,998 acres of federal minerals could increase average annual oil and gas leasing and rent revenues to the federal government by an estimated \$145,000. Average annual leasing and rent revenues that could be distributed to state/local governments could increase by an estimated \$70,000. Average annual federal oil and gas royalties would increase by an estimated \$289,000. Average annual royalties distributed to the state/counties could increase by an estimated \$140,000.

Total average annual federal revenues and associated annual rent and royalty revenues related to average annual production of federal minerals could amount to an estimated \$434,000. Total average annual revenues from leasing, rent, and royalties distributed to the state and counties could be an estimated \$211,000. Total estimated revenues distributed to the counties could be about \$54,000.

The estimated combined total average annual employment and income supported by additional federal oil and gas leasing, distributions of royalties to local governments, drilling wells, and production could amount to an estimated 54 total jobs (full and part-time) and \$3.3 million within the local economy (IMPLAN, 2009). There would be an estimated increase in local population (75 people) and households (31).

Total federal contribution under Alternative C and anticipated related exploration, development, and production of oil and gas could cause local population, total local employment, number of households, average income per household, and total personal income would be very similar to impacts expected from Alternative B. The economic effects would continue to be spread unevenly among the counties. Most of the local revenue would go to McCone County and most of the employment, income, population, and housing effects would occur in Williston, Sidney, and Glendive. Leasing the approximately 82,998 acres and anticipated exploration, development, and production under alternative C would provide additional funds for county functions such as enforcing laws, administering justice, collecting and disbursing tax funds, providing for orderly elections, maintaining roads and highways, providing fire protection, or keeping records. Demand for these services would also increase along with the population. Leasing additional acres and anticipated exploration, development, and production would likely change local economic diversity (as indicated by the number of economic sectors), economic

dependency (where one or a few industries dominate the economy), or economic stability (as indicated by seasonal unemployment, sporadic population changes and fluctuating income rates) across the 7-county area very little because oil and gas exploration, development, and production is well established in the local economy.

4.4.21 Cumulative Impacts- Alternative C

Cumulative impacts are those impacts resulting from the incremental impact of an action when added to other past, present, and reasonably foreseeable actions regardless of what agency or person undertakes such other actions (40 CFR 1508.7). This section describes cumulative impacts associated with this project on resources. The ability to assess the potential cumulative impacts at the leasing stage for this project is limited for many resources due to the lack of site-specific information for potential future activities. Upon receipt of an APD for any of the lease parcels addressed in this document, more site-specific planning would be conducted in which the ability to assess contributions to cumulative impacts in a more detailed manner would be greater due to the availability of more refined site-specific information about proposed activities.

4.4.21.1 Past, Present and Reasonably Foreseeable Future Actions

Past, present, or reasonably foreseeable future actions that affect the same components of the environment as the Proposed Action are: grazing, roads, wildfire and prescribed fire, range improvement projects, and utility right-of-ways.

4.4.21.2 Cumulative Impacts by Resource

Cumulative effects for all resources in the MCFO are described in the final Big Dry RMP/EIS (pgs. 111 to 156) and the 1992 Oil and Gas Amendment of the Billings, Powder River, and South Dakota Resource Management Plans and Final Environmental Impact Statement and the 1994 Record of Decision and the 2008 Final Supplement to the Montana Statewide Oil and Gas Environmental Impact with a development alternative for coal bed natural gas production (4-1 to 4-310). Anticipated exploration and development activity associated with the lease parcels considered in this EA are within the range of assumptions used and effects described in this cumulative effects analysis for resources other than climate, wildlife, and economics resources.

4.4.21.3 Greenhouse Gas Emissions and Cumulative Impacts on Climate Change

GHG Emissions and cumulative impacts on climate change would likely be slightly less than those under Alternative B.

4.4.21.4 Cumulative Impacts of Climate Change

Due to the relatively small decrease in GHG emissions under Alternative C, cumulative climate change impacts on resources would be slightly less than those for Alternative B.

4.4.21.5 Cumulative Impacts to Wildlife & Fisheries/Aquatics

Cumulative impacts would be the same as Alternative B; however, the area potentially impacted would be reduced by 3%, due to approximately 2,760 acres of lease parcels proposed for deferral pending further review. If the remaining lease parcels are developed, potential additional cumulative impacts to wildlife would occur over less area than what is described in Alternative B Cumulative Impacts Section.

4.4.21.6 Cumulative Impacts to Economic Conditions:

Direct and indirect impacts would be similar to Alternative B. Under this alternative, the cumulative effects of federal mineral leasing within the local economy as well as the specific effects of leasing approximately 82,998 acres are summarized in Table 15 and 16. These tables also display in comparative form the cumulative effects of alternatives A, B, and C.

5.0 CONSULTATION AND COORDINATION:

5.1 Persons, Agencies, and Organizations Consulted

Coordination with USFWS and MFWP was conducted for the 203 lease parcels being reviewed and in the completion of this EA in order to prepare the analysis, identify protective measures, and apply stipulations and lease notices associated with these parcels being analyzed. A letter was sent to the USFWS and MFWP during the 15-day scoping and 30-day public comment periods requesting comments on the 203 parcels being reviewed.

The BLM consults with Native Americans under Section 106 of the National Historic Preservation Act. BLM sent letters to tribes in Montana, North and South Dakota and Wyoming at the beginning of the 15 day scoping period informing them of the potential for the 203 parcels to be leased and inviting them to submit issues and concerns BLM should consider in the environmental analysis. Letters were sent to the Tribal Presidents and THPO or other cultural contacts for the Cheyenne River Sioux Tribe, Crow Tribe of Montana, Crow Creek Sioux Tribe, Eastern Shoshone Tribe, Ft. Peck Tribes, Lower Brule Sioux Tribe, the Mandan, Hidasta, and Arkira Nation, Northern Arapaho Nation, Northern Cheyenne Tribe, Oglala Sioux Tribe, Rosebud Sioux Tribe of Indians, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa. BLM sent a second letter to the tribes informing them about the 30 day public comment period for the EA and solicit any information BLM should consider before making a decision whether to offer any or all of the 203 parcels for sale.

5.2 Summary of Public Participation

5.2.1 Scoping

Public scoping for this project was conducted through a 15-day scoping period advertised on the BLM Montana State Office website and posting on the field office website NEPA notification log. Scoping was initiated March 26, 2012; however, scoping comments were received through May 1, 2012. Surface owner notification letters were also distributed briefly explaining the oil and gas leasing process and planning process. The surface owner notification letter requested written or oral comments regarding any issues or concerns that should be addressed in the environmental analysis.

A total of 62 surface owner notification letters were distributed for the oil and gas leasing analysis process in the MCFO. The written and verbal communication resulted in a total of nine individual scoping comments pertaining to this EA.

Of the nine comments, four were comments/requests for additional information regarding split estate and verification of mineral ownership. One comment addressed concerns related to the location of parcels along the Missouri River and potential develop in those parcels. Four comments provided specific information pertaining to suggestions for mitigation measures addressing sharp-tailed grouse, ferruginous hawks, burrowing owls, and migratory birds in the analysis area.

30-day Public Comment Period

On May 21, 2012, the EA, along with an unsigned FONSI, was made available for a 30-day public comment period. Notification letters were distributed to external entities, local agencies,

and tribes to explain that an EA and the unsigned FONSI were available for review and comment.

A total of 1 written submission was received after the 30-day comment period, which resulted in 3 substantive comments addressing various resources throughout the analysis area. After review and consideration of the comments, no modifications were made to the EA. Changes made to the analysis are noted with gray-scale shading and/or strikeout so the modifications to the EA can easily be identified.

Of the three comments, one comment requested BLM to complete an Environmental Impact Statement (EIS) and an Environmental Inventory Report (EIR) which would include baseline studies and additional information gathered by the BLM for various resources and activities needed for analysis. Another comment requested BLM to address impacts to various resources: weeds/invasive species, shallow groundwater aquifers, air quality immediately exiting the wells, regional air quality based on the number of acres in McCone County, noise, dust, visual resources, Missouri River, endangered species and their habitats, wetland and riparian habitats. The third comment requested BLM to address mitigation and planning reports prior to oil and gas development activities.

After the 30-day protest period, but before lease issuance, the BLM will issue the Decision Record and signed Finding of No Significant Impact for this EA. This information, along with other updates and Lease Sale Notice information can be found on the Montana/Dakotas BLM website <http://blm.gov/57jd>. Current and updated information about our EAs, Lease Sale Notices, and corresponding information pertaining to this sale can be found at the link referenced above.

Table 21. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Bobby Baker	Wildlife Biologist	Wildlife
Jake Chaffin	Fisheries Biologist	Fisheries/Water Resources
Will Hubbell	Archaeologist	Cultural/Paleontology/Special Designations
Mel Schroeder	Soil Scientist	Soils
Dena Lang	Outdoor Recreation Planner	Recreation/VRM/Travel Management
Scott Kichman	Natural Resource Specialist	GIS
Tami Sabol	Forester	Forestry
Jeff Gustad	Rangeland Management Specialist	Livestock Grazing/Vegetation/Invasive Species
Doug Melton	Archeologist	Native American Religious Concerns
Pam Wall	Realty Specialist	Lands/Realty
Paul Helland	Petroleum Engineer	Fluid Minerals
Irma Nansel	Natural Resource Specialist	EA Lead
Kathy Bockness	Planning & Environmental Coordinator	NEPA
Joan Trent	Social Scientist	Social Analysis
John Thompson	Planning & Environmental Specialist	Economic Analysis
Terra Gusler	Legal Land Examiner-Sale Lead	Expressions of Interest/Lease Sale

In addition to the primary preparers listed above, the following individuals provided document review:

Todd Yeager
David Breisch
Shane Findlay
Mark Sant
Ruth Miller

Acting Field Manager
Asst. Field Manager, Div. of Minerals & Non Renewable
Supervisory Land Use Specialist, Div. of Nonrenewable
Tribal Coordinator
Land Use Specialist

6.0 REFERENCES

50 CFR Part 17 [Docket No. FWS–R6–ES–2009–0081] [MO 92210-0-0008]

Aaberg, S.A., R. Hanna, C. Crofutt, J. Green, and M. Vischer. 2006. Miles City Resource Management Plan (RMP) and Environmental Impact Statement (EIS) Class I Overview of Paleontological & Cultural Resources in Eastern Montana (March 2006). Prepared by Aaberg Cultural Resource Consulting Service under subcontract to ALL Consulting and prepared for the United States Department of the Interior, Bureau of Land Management, Miles City Field Office. March 2006, Billings, MT.

Adair, Ann and Scott Rickard, 2005 “The Economic and Fiscal Impacts of Montana’s Petroleum and Natural Gas Industry in 2003”, Montana State University-Billings, Center for Applied Research.

All census data: <http://quickfacts.census.gov/qfd/index.html> 10/20/2010.

Arno, Stephen F. and George E. Gruell. 1983. Fire history at the forest grassland ecotone in southwestern Montana. *Journal of Range Management*. 36(3): 332-336.

Bainbridge, DA. 2007. *A Guide for Dryland Restoration: New Hope for Arid Lands*. Island Press. Washington, DC.

Bald Eagle Protection Act of 1940 (16 U.S.C. 668-668d, 54 Stat. 250) as amended -- Approved June 8, 1940, and amended by P.L 86-70 (73 Stat. 143) June 25, 1959; P.L. 87-884 (76 Stat. 1346) October 24, 1962; P.L. 92-535 (86 Stat. 1064) October 23, 1972; and P.L. 95-616 (92 Stat. 3114) November 8, 1978.

Barton, B. and S. Crispin. 2003. *Globally Significant Plants in Southeastern Big Horn and Southwestern Rosebud Counties, Montana*. Montana Natural Heritage Program, Helena, MT. 27pp. + app.

Berger, K.M., J.P. Beckmann, and J. Berger. 2007. *Wildlife and Energy Development: Pronghorn of the Upper Green River Basin – Year 2 Summary*. Wildlife Conservation Society, Bronx, NY.

BLM Annual Report, 2008, Federal Oil and Gas Leases Issued in FY2008.

BLM Annual Report, 2008, Federal Total Reported Royalty Revenues.

BLM Federal Land Status Records (LSR), 2012, Montana Master Title Plats (MTPs), March 13, 2012.

BLM LR2000, 2010, Authorized Leases/Leases Held by Production, April 4, 2011.

BLM LR2000, 2012, Authorized Rights-of-Way, March 13, 2012.

- Bramblett, R.G., T.R. Johnson, A.V. Zale, and D.G. Heggem. 2005. Development and evaluation of a fish assemblage index of biotic integrity for Northwestern Great Plains streams. *Transactions of the American Fisheries Society*. 134: 624-640.
- Braun, C.E., O.O. Oedekoven, and C.L. Aldridge. 2002. Oil and gas development in western North America: effects on sagebrush steppe avifauna with particular emphasis on sage grouse. *Transactions of the North American Wildlife and Natural Resources Conference* 67:337-349.
- Brumley, John. 1988. *Medicine Wheels on the Northern Plains. Archaeological Survey of Alberta Manuscript Series No.12.*
- Brumley, John H., Ted Birnie, and Rebecca Kallevig, 1993. "Archaeological Investigations at the Long Site (24MC1002)". *Archaeology In Montana* Volume 34(1):45-58.
- Bureau of Land Management. 1998. Areas of Critical Environmental Concern Environmental Assessment and Proposed Amendment of the Billings, Powder River and South Dakota Resource Management Plans. August 1998. Bureau of Land Management, Miles City Field Office. Miles City, MT.
- Canadian Wildlife Service and U.S. Fish and Wildlife Service. 2007. International recovery plan for the whooping crane. Ottawa: Recovery of Nationally Endangered Wildlife (RENEW), and U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 162 pp.
http://ecos.fws.gov/docs/recovery_plan/070604_v4.pdf
- CAPS, 2010. Montana, Fish, Wildlife and Parks Crucial Area Planning System.
<http://fwp.mt.gov/gis/maps/caps/>
- Carlson, J. C. and S. V. Cooper. 2003. Plant and Animal resources and Ecological Condition of the Forks Ranch Unit of the Padlock Ranch, Big Horn County, Montana and Sheridan County, Wyoming. Report to the Padlock Ranch and Montana BLM. Montana Natural Heritage Program, Helena, MT. 27pp. + app.
- Center for Climate Strategies (CCS). 2007. Montana Greenhouse Gas Inventory and Reference Case Projections 1990-2020. Center for Climate Strategies and Montana Department of Environmental Quality. September 2007.
- Clark, Lance R. and R. Neil Sampson. 1995. *Forest Ecosystem Health in the Inland West: A Science and Policy Reader*. Forest Policy Center, American Forests.
- Climate Change SIR. 2010. Climate Change Supplementary Information Report for Montana, North Dakota, and South Dakota, Bureau of Land Management. Report on Greenhouse Gas Emissions and Climate Change for Montana, North Dakota, and South Dakota. Technical report prepared for the Montana/Dakotas Bureau of Land Management by URS Corporation. URS Project 22241790.

- Coates, Ladd. 2005. Personal communication with Ladd Coates, Miles City Field Office Outdoor Recreation Planner, on recreation in the Miles City Field Office area. January, 27, 2005.
- Division, Annual Review 2000-2008 County Drilling and Production Statistics.
- Dodds, W.K., K. Gido, M.R. Whiles, K.M. Fritz, and W.J. Matthews.
- EIA, 2010. Energy Information Administration, Montana Quick Facts, 6/3/2010.
- EPA, 2004 Study to Evaluate the Impacts to USDWs by Hydraulic Fracturing of Coalbed Methane Reservoirs http://www.epa.gov/safewater/uic/wells_coalbedmethanestudy.html accessed 5/26/10.
- EPA, 2008. <http://www.epa.gov/Region8/climatechange/pdf/ClimateChange101FINAL.pdf>
- EPA. 2011. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2009. EPA 430-R-11-005. April 15.
- EPA. 2012. AirData Website (<http://www.epa.gov/airdata/>). Accessed March 28.
- Eubanks, Ellen. 2004. Riparian Restoration. 0423 1201P. San Dimas, CA: U.S. Department of Agriculture, Forest Service, San Dimas Technology and Development Center. 137 p. http://www.fs.fed.us/t-d/php/library_card.php?p_num=0423%201201P
- Federal Register: September 15, 2010 (Volume 75, Number 178)]
- Foresman, K.R. 2001. The Wild Mammals of Montana. Special publication No 12. American Society of Mammalogists. Lawrence, KS.: Allen Press.
- Friesen, Nathan. 2010. E-mail dated 10/06/2010 from Nathan Friesen of the Heritage Resources Branch of Saskatchewan Tourism, Parks, Culture and Sport to Mark Sant, BLM Montana State Office concerning Montana Oil and Gas lease near the Canadian Border.
- Greiser, T. Weber and Alan Stanfill. 1982 Test Excavations At Site 24MC1. Report prepared for Montana Department of Highways by Historical Research Associates, Missoula.
- Hamlin, K.L. 1978. Population ecology and habitat relationships of mule deer and white-tailed deer in the prairie agricultural habitats of eastern Montana. Montana Deer Studies. Montana Department of Fish, Wildlife and Parks, Project W-120-R-10, Job Progress Report.
- Hanebury, L. 2010. Personal communication. Fish and Wildlife Biologist, USFWS, March 11, 2010.
- Hansen, P.L., W. H. Thompson, J. G. Massey, and M. Thompson. 2008. Classification and management of upland, riparian, and wetland sites of USDI Bureau of Land

Management's Miles City Field Office, a stern Montana, USA. Prepared for the Miles City Field Office by Ecological Solutions Group, LLC. Stevensville, MT.

- Hufstetler, Mark, Mitizi Rossillon, Dale Martin, and Alice Emerson. 1992. Draft National Register of Historic Places, Multiple Properties Form: Archaeological and Historic Resources of Sheridan County, Montana. Form prepared for the Montana State Historic Preservation Office, Helena by Renewable Technologies, Inc., Butte, MT.
- Holloran, M. J, and S. H. Anderson. 2005b. Spatial Distribution of Greater Sage-Grouse nests in Relatively Contiguous Sagebrush Habitats. *The Condor*, 107:742–752.
- Holloran, M.J. 2005. Greater Sage Grouse (*Centrocercus urophasianus*) population response to natural gas field development in western Wyoming. Dissertation, University of Wyoming, Laramie, USA. <http://www.uwyo.edu/wycoopunit/showthesis.asp?thesisid=182>.
- Holloran, M.J. and S.H. Anderson. 2005a. Greater sage-grouse population response to natural gas development in western Wyoming: are regional populations affected by relatively localized disturbances? In Wildlife Management Institute (Ed.), *Transactions from the 70th North American Wildlife and Natural Resources Conference* (March 16–19, 2005, Arlington, VA). Wildlife Management Institute.
- IMPLAN, 2009. Minnesota IMPLAN Group 2009
- IMPROVE. 2011. Spatial and Seasonal Patterns and Temporal Variability of Haze and its Constituents in the United States: Report V. Interagency Monitoring of Protected Visual Environments. June.
- Independent Petroleum Association of America, Oil and Gas Producing Industry in Your State, pg.70-71.
- Ingelfinger, F. 2001. The Effects of Natural Gas Development on Sagebrush Steppe Passerines in Sublette County, Wyoming. Thesis. University of WY, Laramie, Wyoming.
- IPPC. 2007. Intergovernmental Panel on Climate Change. IPCC Fourth Assessment Report: Climate Change 2007 (AR4).
- enard, S., J. Carlson, J. Ili s, C. Jones, and C. Tilly. 2003. P.D. Skaar's Montana Bird Distribution, 6th Edition. Montana Audubon, Helena, Montana.
- Levick, L., J. Fonseca, D. Goodrich, M. Hernandez, D. Semmens, J. Stromberg, R. Leidy, M. Scianni, D. P. Guertin, M. Tluczek, and W. Kepner. 2008. The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest. U.S. Environmental Protection Agency and USDA/ARS Southwest Watershed Research Center, EPA/600/R-08/134, ARS/233046, 116 pp. <http://azriparian.org/docs/arc/publications/EphemeralStreamsReport.pdf> accessed 7/22/10.

- Life on the edge: The ecology of Great Plains prairie streams. 2004. *BioScience*, 54(3): 205 – 216.
- Logan R. 2001. Water Quality BMPs for Montana Forests. Montana State University Extension Service. Bozeman, MT.
- MacDonald, Douglas. 2012 *Montana before History: 11,000 Years of Hunter-Gatherers in the Rockies and Plains*. Mountain Press, Missoula.
- Mackie, R.J., D. Pac, K. Hamlin, and G. Dusek. 1998. Ecology and Management of Mule Deer and White-tailed Deer in Montana. Fed. Aid in Wildlife Restor. Proj. W-120-R. Mont. Dept. Fish, Wildl. And Parks, Helena. 180 pgs.
- Maley T.S., 1979, Handbook of Mineral Law: M.M.R.C. Publications, Boise, Idaho, 2nd ed.
- MDEQ 2007. Montana Nonpoint Source Management Plan <http://montananps319grants.pbworks.com/f/NPSPlan.pdf> accessed 7/15/10
- MFWP 2010. Montana Fish, Wildlife and Parks, Fisheries Information System <http://fwp.mt.gov/fishing/mFish/>
- Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat. 755) as amended by: Chapter 634; June 20, 1936; 49 Stat. 1556; P.L. 86-732; September 8, 1960; 74 Stat. 866; P.L. 90-578; October 17, 1968; 82 Stat. 1118; P.L. 91-135; December 5, 1969; 83 Stat. 282; P.L. 93-300; June 1, 1974; 88 Stat. 190; P.L. 95-616; November 8, 1978; 92 Stat. 3111; P.L. 99-645; November 10, 1986; 100 Stat. 3590 and P.L. 105-312; October 30, 1998; 112 Stat. 2956.
- Montana Department of Natural Resources and Conservation, Oil and Gas Conservation
- Montana Department of Natural Resources and Conservation, Oil and Gas Conservation Division, Annual Review 2000-2009 County Drilling and Production Statistics
- Montana Department of Revenue, Van Charlton, 2009
- Montana Field Guide, 2010. Montana Plants Field Guide (<http://fieldguide.mt.gov>, 9 November 2010).
- Montana Natural Heritage Program, Montana State Library, Helena, Montana. 2010.
- Montana Natural Heritage Program. Natural Heritage Tracker Program (<http://mtnhp.org/Tracker/NHTMap.aspx>, October 2010).
- Office of Natural Resource Revenue, Lease Bonus and Rent Revenue, Production, and Royalties, 2011.

- Perrow, MR and AJ Davy. 2003. Handbook of Ecological Restoration: Vol. 1 Principles of Restoration. Cambridge University Press. New York, NY.
- Peterson L. and S. Deaver. 2002. An Ethnographic Overview of Southeast Montana, February 2001. Prepared for the BLM State Office, Billings, MT.
- Prichard, D., et al. 1993, Revised 1995. Riparian Area Management. Process for Assessing Proper Functioning Condition. U.S. Department of the Interior Bureau of Land Management. Technical Reference 1737-9. 51 pp.
<ftp://ftp.blm.gov/pub/nstc/techrefs/Final%20TR%201737-7.pdf>
- Ramseur, J.L. 2007. State greenhouse gas emissions: Comparison and analysis. Congressional Research Service Report RL34272 for Congress. December 5, 2007.
- Sawyer, H., R. Nielson, D. Strickland, and L. McDonald. 2005. Annual Report. Sublette Mule Deer Study(Phase II): Long-term monitoring plan to assess potential impacts of energy development on mule deer in the Pinedale Anticline Project Area. Western Ecosystems Technology, Inc. Cheyenne, WY.
- Shoup, Bentley and Randolph Moses, 2011 “Paleontological Resources Survey Report: Long Medicine Wheel ACEC; Report #: MT-202-11-358, McCone County, Montana”, Prepared by ARCADIS U.S., Inc., Buffalo, WY for the United States Department of the Interior, Bureau of Land Management, Miles City Field Office.
- Smeins, F. E. and S. D. Fuhlendorf. 1997. Biology and ecology of Ashe juniper. *In*: Juniper Symposium Proceedings. Texas A&M University, College Station, Texas, USA.
- Socioeconomic Baseline Report for the Miles City Field Office RMP & EIS Planning Effort prepared for the DOI, BLM, Miles City Field Office, June 2005.
- State of Montana, Census and Economic Information Center, 2010 Census Data, 2011
- Tack, J.D. 2010. Sage Grouse and the Human Footprint: Implications for Conservation of Small and Declining Populations. Thesis. University of Montana, Missoula, MT. USA.
- U. S. Fish and Wildlife Service. 2010. Black-footed ferret website
<http://www.fws.gov/mountain-prairie/species/mammals/blackfootedferret/>
- U. S. Fish and Wildlife Service. 2012. Threatened, Endangered, or Candidate Species list by county
 (http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species.html)
- U.S. Fish and Wildlife Service (USFWS) 2010. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service,

- Washington, DC. FWS/OBS-79/31. <http://www.fws.gov/wetlands/> USGS 2009. National Hydrography Dataset (NHD). <http://nhd.usgs.gov/> accessed 11/2009.
- U.S. Fish and Wildlife Service (USFWS) 2010. Pallid Sturgeon species description and ESA status and review. http://www.fws.gov/mountain-prairie/missouririver/moriver_pallidsturgeon.htm
- U.S. Fish and Wildlife Service. 1989. Black footed ferret survey guidelines for compliance with the Endangered Species Act. 15 pgs.
- U.S. Fish and Wildlife Service. 2002. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Northern Great Plains Breeding Population of the Piping Plover; Final Rule 50 CFR Part 17. 57638 Federal Register / Vol. 67, No. 176. <http://www.fws.gov/mountain-prairie/species/birds/pipingplover/>.
- U.S. Fish and Wildlife Service. 2010. Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List Sprague's Pipit as Endangered or Threatened throughout Its Range.
- US Census, Montana 2000
- USDA, NRCS. 2010. The PLANTS Database. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. (<http://plants.usda.gov>, 9 November 2010)
- USDI (United States Department of the Interior) and USDA (United States Department of Agriculture). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST-06/021+3071/REV 07. Bureau of Land Management. Denver, Colorado. 84 pp.
- USDI (United States Department of the Interior) and USDA (United States Department of Agriculture). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST-06/021+3071/REV 07. Bureau of Land Management. Denver, Colorado. 84 pp.
- USDI BLM November 1982, Heffern E.L., Cormier G.P., Hansen D., Geology, Minerals and Paleontology of the Powder River Resource Area Southeastern Montana, Regional Paper.
- USDI BLM. 2009. Instruction Memorandum No. MT-2009-039. 2009 Montana/Dakota's Special Status Species List.
- USDI Bureau of Land Management. 1984. Powder River Resource Area Resource Management Plan/Environmental Impact Statement for the Powder River Resource Area of the Miles City District. Final. U.S. Department of the Interior, Bureau of Land Management.

- USDI Bureau of Land Management. 1992. *Final Oil and Gas RMP/EIS Amendment for the Billings, Powder River and South Dakota Resource Areas*. U.S. Department of the Interior, Bureau of Land Management, Miles City District.
- USDI BLM. 2008. Final Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Proposed Amendment of the Powder River and Billings Resource Management Plans. U.S. Department of the Interior, Bureau of Land Management, Miles City Field Office, MT
- USDI Bureau of Land Management. 1995. Big Dry Resource Management Plan/Environmental Impact Statement for the Big Dry Resource Area of the Miles City District. Final. U.S. Department of the Interior, Bureau of Land Management.
- USDI Bureau of Land Management. 2011. Instruction Memorandum No. 2012-043. Greater Sage Grouse Interim Management Policies and Procedures
- USEPA. 2010. Knowledge Building Series: Climate Change 101. EPA Climate Change Information, USEPA Region 8.
- Ward, S. 2012. Personal Communication Re. SO Intpr 221 PW Res 107 on Parcel FQ. Land Law Examiner, BLM MSO, March 14, 2012.
- Walker, B. L., D, E. Naugle, K.E. Doherty. 2007. Greater Sage Grouse Population Response to Energy Development and Habitat Loss. *Journal of Wildlife Management* 71(8):2644-2654; 2007).
- Werner, J. K., B.A. Maxwell, P. Hendricks, D.L. Flath. 2004. *Amphibians and Reptiles of Montana*. Missoula, MT.: Mountain Press Publishing Company.
- Wheaton et al. 2008. Wheaton, J.J., Reddish-Kuzara, S., Meredith, E., Donato, T. A. , 2007 Annual coalbed methane regional ground-water monitoring report: Northern portion of the Powder River Basin, Montana Bureau of Mines and Geology: Open-File Report 576, 99 p., 6 sheet(s).
- Wildlife Survey Protocol For Coal Bed Natural Gas Development, Powder River Basin Wildlife Taskforce. 2005. 41pgs.
- Youmans, H.B. and Swenson, J.E. 1982. Winter distribution of habitat use by mule deer and white-tailed deer in southeastern Montana. Appendix to Big Game Survey and Inventory (Deer).
- Zelt et al. 1999 Environmental Setting of the Yellowstone River Basin, Montana, North Dakota, and Wyoming, Water-Resources Investigations Report 98-4269 <http://pubs.usgs.gov/wri/wri984269/> accessed 7/15/10.

7.0 DEFINITIONS

The North American Industry Classification System (NAICS) is the standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. NAICS was developed under the auspices of the Office of Management and Budget (OMB), and adopted in 1997 to replace the Standard Industrial Classification (SIC) system and to allow for a high level of comparability in business statistics among the North American countries.

IMPLAN: The IMPLAN Model is the most flexible, detailed and widely used input-output impact model system in the U.S. It provides users with the ability to define industries, economic relationships and projects to be analyzed. It can be customized for any county, region or state, and used to assess "multiplier effects" caused by increasing or decreasing spending in various parts of the economy. This can be used to assess the economic impacts of resource management decisions, facilities, industries, or changes in their level of activity in a given area. The current IMPLAN input-output database and model is maintained and sold by MIG, Inc. (Minnesota IMPLAN Group). The 2007 data set was used in this analysis is.

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-E3	T. 21 N, R. 45 E, PMM, MT SEC. 1 LOTS 1,2; MCCONE COUNTY 79.95 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOT 2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOT 2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-E4	T. 21 N, R. 45 E, PMM, MT SEC. 2 SWSW; SEC. 3 SWNW,SW,S2SE; SEC. 10 NE,NENW,S2SE; SEC. 11 NWNW,S2NW,W2SW; MCCONE COUNTY 800.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 SWSW; SEC. 3 S2S2; SEC. 10 N2NE,SENE,NENW,S2SE; SEC. 11 NWNW,S2NW,W2SW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 SWNW,S2S2,NESW; SEC. 10 NWNE; SEC. 11 SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 10 NE,NENW,S2SE; SEC. 11 NWNW,S2NW,W2SW;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 SWSW; SEC. 3 S2S2; SEC. 10 N2NE,SENE,NENW,S2SE; SEC. 11 NWNW,S2NW,W2SW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 SWNW,S2S2,NESW; SEC. 10 NWNE; SEC. 11 SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 10 NE,NENW,S2SE; SEC. 11 NWNW,S2NW,W2SW;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-E6</p>	<p>T. 21 N, R. 45 E, PMM, MT SEC. 4 LOT 4; SEC. 4 SWNW; SEC. 5 LOTS 1-4; SEC. 5 SENE,S2NW,N2SW,SWSW; SEC. 6 LOTS 1-6; SEC. 6 S2NE,SE,SENW,NESW,SE; SEC. 7 NWNE; MCCONE COUNTY 1077.63 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 LOT 4; SEC. 4 SWNW; SEC. 5 LOTS 1-4; SEC. 5 SENE,SWNW,NESW; SEC. 6 LOTS 1-5; SEC. 6 S2NE,SE,SENW,NESW,SE; SEC. 7 NWNE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 LOT 1; SEC. 5 S2NW,SWSW; SEC. 6 LOT 6; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 4 LOT 4; SEC. 4 SWNW; SEC. 5 LOTS 1-4; SEC. 5 SENE,S2NW,N2SW; SEC. 6 LOTS 1-6; SEC. 6 S2NE,SE,SENW,NESW,N2SE;</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 LOT 4; SEC. 4 SWNW; SEC. 5 LOTS 1-4; SEC. 5 SENE,SWNW,NESW; SEC. 6 LOTS 1-5; SEC. 6 S2NE,SE,SENW,NESW,SE; SEC. 7 NWNE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 LOT 1; SEC. 5 S2NW,SWSW; SEC. 6 LOT 6; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 4 LOT 4; SEC. 4 SWNW; SEC. 5 LOTS 1-4; SEC. 5 SENE,S2NW,N2SW; SEC. 6 LOTS 1-6; SEC. 6 S2NE,SE,SENW,NESW,N2SE;</p>	<p>NONE</p>
<p>MTM 102757-E7</p>	<p>T. 21 N, R. 45 E, PMM, MT SEC. 7 NWSE; SEC. 8 SENW,NWSW; MCCONE COUNTY 120.00 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 NWSE; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 8 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 NWSE; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 8 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-E8	T. 21 N, R. 45 E, PMM, MT SEC. 9 SENE,N2SE; SEC. 10 NWSW; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 9 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 9 NESE; SEC. 10 NWSW;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 9 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 9 NESE; SEC. 10 NWSW;	NONE
MTM 102757-E9	T. 21 N, R. 45 E, PMM, MT SEC. 11 NE,NENW; SEC. 12 S2; MCCONE COUNTY 520.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 11 NE,NENW; SEC. 12 NESW,SWSW,SE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 N2NE; SEC. 12 SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 11 NE,NENW; SEC. 12 NESW,SWSW,SE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 N2NE; SEC. 12 SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-FB	T. 21 N, R. 45 E, PMM, MT SEC. 20 NENE,NWNW,S2N2; MCCONE COUNTY 240.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 20 NWNW,SENW; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 20 SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 20 NWNW,SENW; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 20 SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FC	T. 21 N, R. 45 E, PMM, MT SEC. 22 N2NW,NWSW,S2S2,NWSE; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 NENW,W2SW,SESE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 N2NW,SESE; NSO 11-8 SEC. 22 W2SW, SESW TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 NENW,W2SW,SESE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 N2NW,SESE; NSO 11-8 SEC. 22 W2SW, SESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-FD	T. 21 N, R. 45 E, PMM, MT SEC. 24 N2NW; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 24 NENW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 24 NENW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-FE	T. 21 N, R. 45 E, PMM, MT SEC. 30 LOTS 3,4; SEC. 30 E2SW,SE; SEC. 32 NWNW; MCCONE COUNTY 359.50 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 LOT 3; SEC. 30 SESW,NESE,SWSE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 30 SESW,S2SE,NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 30 SESW,SE; SEC. 32 NWNW;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 LOT 3; SEC. 30 SESW,NESE,SWSE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 30 SESW,S2SE,NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 30 SESW,SE; SEC. 32 NWNW;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FF	T. 22 N, R. 45 E, PMM, MT SEC. 1 LOT 2; MCCONE COUNTY 39.63 AC PD	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-FG	T. 22 N, R. 45 E, PMM, MT SEC. 5 SW; SEC. 6 LOTS 3-7; SEC. 6 SENW,E2SW,SE; SEC. 7 LOTS 1,2; SEC. 7 N2NE,E2NW; SEC. 8 NW,W2SW,SESW,SWSE; MCCONE COUNTY 1175.14 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 5 SW; SEC. 6 LOTS 3, 5-7; SEC. 6 SENW,E2SW,SE; SEC. 7 LOTS 1,2; SEC. 7 N2NE,E2NW; SEC. 8 N2NW,SESW,SWSE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 SW; SEC. 8 S2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 7 LOTS 2; SEC. 7 SENW; SEC. 8 S2NW,W2SW,SESW,SWSE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 5 SW; SEC. 6 LOTS 3, 5-7; SEC. 6 SENW,E2SW,SE; SEC. 7 LOTS 1,2; SEC. 7 N2NE,E2NW; SEC. 8 N2NW,SESW,SWSE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 SW; SEC. 8 S2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 7 LOTS 2; SEC. 7 SENW; SEC. 8 S2NW,W2SW,SESW,SWSE;	NONE
MTM 102757-FH	T. 22 N, R. 45 E, PMM, MT SEC. 7 LOTS 3,4; SEC. 7 S2NE,E2SW,N2SE; MCCONE COUNTY 311.83 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOT 3; SEC. 7 S2NE,E2SW,N2SE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SENE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOT 3; SEC. 7 S2NE,E2SW,N2SE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SENE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FJ	T. 22 N, R. 45 E, PMM, MT SEC. 13 SENE,NWNW,SWSW,NESE; SEC. 14 S2NE,NW; MCCONE COUNTY 400.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 13 SENE; SEC. 14 SWNE,S2NW; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 SWSW; SEC. 14 SWNE,SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 13 SENE; SEC. 14 SWNE,S2NW; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 SWSW; SEC. 14 SWNE,SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-FL	T. 22 N, R. 45 E, PMM, MT SEC. 15 SWNW,S2; SEC. 21 ALL; SEC. 22 ALL; SEC. 28 N2NW,SWNW,NWSW; MCCONE COUNTY 1800.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 15 SWNW,S2; SEC. 21 N2N2,S2NE,SWNW,S2; SEC. 22 ALL; SEC. 28 N2NW,SWNW,NWSW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 15 SWNW,W2SW,SESW, E2SE,SWSE; SEC. 21 E2E2,NENW,SWSW,W2SE; SEC. 22 S2NE,W2NW,S2SW, NESW,W2SE; NSO 11-4 SEC. 21 S2S2; SEC. 28 N2NW,SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 15 SWNW,S2; SEC. 21 N2N2,S2NE,SWNW,S2; SEC. 22 ALL; SEC. 28 N2NW,SWNW,NWSW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 15 SWNW,W2SW,SESW, E2SE,SWSE; SEC. 21 E2E2,NENW,SWSW,W2SE; SEC. 22 S2NE,W2NW,S2SW, NESW,W2SE; NSO 11-4 SEC. 21 S2S2; SEC. 28 N2NW,SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FK	T. 22 N, R. 45 E, PMM, MT SEC. 17 N2,W2SW; SEC. 18 LOTS 2-4; SEC. 18 SENW,E2SW,SE; SEC. 19 LOTS 1-4; SEC. 19 E2,E2W2; SEC. 20 S2NE,NW,S2; MCCONE COUNTY 1978.17 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 E2NE,NENW,S2NW,W2SW; SEC. 18 SENW,E2SW,SE; SEC. 19 LOTS 3,4; SEC. 19 E2E2,E2W2,W2SE; SEC. 20 S2NE,NW,S2; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-4 SEC. 19 E2; SEC. 20 W2NW,W2SW,S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 E2NE,NENW,S2NW,W2SW; SEC. 18 SENW,E2SW,SE; SEC. 19 LOTS 3,4; SEC. 19 E2E2,E2W2,W2SE; SEC. 20 S2NE,NW,S2; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-4 SEC. 19 E2; SEC. 20 W2NW,W2SW,S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-FM	T. 22 N, R. 45 E, PMM, MT SEC. 26 N2NE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 26 NWNE;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 26 NWNE;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FN	T. 22 N, R. 45 E, PMM, MT SEC. 27 W2SW; SEC. 28 NENE,NESW,SE; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 W2SW; SEC. 28 NENE,NESW,N2SE,SESE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 SWSW; SEC. 28 NESW,SE; NSO 11-4 SEC. 28 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 W2SW; SEC. 28 NENE,NESW,N2SE,SESE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 SWSW; SEC. 28 NESW,SE; NSO 11-4 SEC. 28 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-FP	T. 22 N, R. 45 E, PMM, MT SEC. 28 S2SW; SEC. 29 NESW,NWSE,S2SE; SEC. 32 N2NE; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 NESW,NWSE,S2SE; SEC. 32 NENE; NSO 11-4 SEC. 29 NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 NESW,NWSE,S2SE; SEC. 32 NENE; NSO 11-4 SEC. 29 NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FQ	T. 22 N, R. 45 E, PMM, MT SEC. 29 N2,NWSW,S2SW,NESE; SEC. 30 LOTS 1-4; SEC. 30 E2,E2W2; SEC. 31 LOTS 1-4; SEC. 31 E2,E2W2; SEC. 32 SWNE,W2,W2SE; MCCONE COUNTY 2186.40 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 29 N2,NWSW,S2SW,NESE; SEC. 30 LOTS 2,3; SEC. 30 N2NE,SWNE,E2W2, N2SE,SWSE; SEC. 31 LOTS 1-4; SEC. 31 E2,E2W2; SEC. 32 SWNE,W2,W2SE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 N2N2,SWNE,S2NW,S2SW; SEC. 31 LOT 3; SEC. 31 SWNE,NESW; SEC. 32 SWNE,NENW; NSO 11-4 SEC. 29 E2NE,NWNE,S2NW,W2SW; SEC. 30 LOTS 2-4; SEC. 30 S2NE,SENE,E2SW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 29 N2,NWSW,S2SW,NESE; SEC. 30 LOTS 2,3; SEC. 30 N2NE,SWNE,E2W2, N2SE,SWSE; SEC. 31 LOTS 1-4; SEC. 31 E2,E2W2; SEC. 32 SWNE,W2,W2SE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 N2N2,SWNE,S2NW,S2SW; SEC. 31 LOT 3; SEC. 31 SWNE,NESW; SEC. 32 SWNE,NENW; NSO 11-4 SEC. 29 E2NE,NWNE,S2NW,W2SW; SEC. 30 LOTS 2-4; SEC. 30 S2NE,SENE,E2SW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-FR	T. 23 N, R. 45 E, PMM, MT SEC. 1 LOTS 1-4; SEC. 1 S2N2; SEC. 2 LOT 1; SEC. 2 SENE; MCCONE COUNTY 401.83 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOT 1,2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOT 1,2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-FT</p>	<p>T. 23 N, R. 45 E, PMM, MT SEC. 2 LOTS 2,3; SEC. 2 SWNE,SENW,NESW,NWSE, E2SE; MCCONE COUNTY 321.40 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 LOT 3; SEC. 2 SWNE,SENW,N2SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 2 LOT 3; SEC. 2 SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 LOT 3; SEC. 2 SWNE,SENW,N2SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 2 LOT 3; SEC. 2 SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)</p>	<p>NONE</p>
<p>MTM 102757-FU</p>	<p>T. 23 N, R. 45 E, PMM, MT SEC. 2 LOT 4; SEC. 2 SWNW,W2SW,SESW; SEC. 3 SENE,E2SE; SEC. 10 N2NE; SEC. 11 NWNW; MCCONE COUNTY 440.77 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 LOT 4; SEC. 2 SWNW,S2SW; SEC. 3 SESE; SEC. 10 N2NE; SEC. 11 NWNW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 LOT 4; SEC. 2 SWNW,S2SW; SEC. 3 SESE; SEC. 10 N2NE; SEC. 11 NWNW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FV	T. 23 N, R. 45 E, PMM, MT SEC. 4 N2SW, SESW, SE; SEC. 8 NESE, S2SE; SEC. 9 E2, E2NW, SW; SEC. 17 NE, E2SE; SEC. 20 N2NE; SEC. 21 N2NW; MCCONE COUNTY 1360.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 N2SW, SESW, W2SE; SEC. 8 NESE, S2SE; SEC. 9 N2NE, E2NW, W2SW, SE; SEC. 17 NE, E2SE; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 4 NWSW; SEC. 9 SENE, NESE; SEC. 17 N2NE, SESE; SEC. 20 NENE; NSO 11-4 SEC. 4 N2SW, SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 N2SW, SESW, W2SE; SEC. 8 NESE, S2SE; SEC. 9 N2NE, E2NW, W2SW, SE; SEC. 17 NE, E2SE; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 4 NWSW; SEC. 9 SENE, NESE; SEC. 17 N2NE, SESE; SEC. 20 NENE; NSO 11-4 SEC. 4 N2SW, SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-FW	T. 23 N, R. 45 E, PMM, MT SEC. 5 SW; SEC. 7 LOTS 1,2; SEC. 7 NE, E2NW; SEC. 8 N2NW; MCCONE COUNTY 547.37 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 N2SW, SESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 5 SW; SEC. 7 NE, NENW; SEC. 8 N2NW;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 N2SW, SESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 5 SW; SEC. 7 NE, NENW; SEC. 8 N2NW;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-FX	T. 23 N, R. 45 E, PMM, MT SEC. 6 LOTS 1,2; MCCONE COUNTY 81.48 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-FY	T. 23 N, R. 45 E, PMM, MT SEC. 6 LOT 3; SEC. 6 SENE,SE; MCCONE COUNTY 240.35 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 6 LOT 3; SEC. 6 SENE,NESE,S2SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 6 NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 6 LOT 3; SEC. 6 SENE,NESE,S2SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 6 NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-F3	T. 23 N, R. 45 E, PMM, MT SEC. 7 SWSE; SEC. 17 NW,NESW; SEC. 18 N2NE; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SWSE; SEC. 17 NWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 NW,NESW;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SWSE; SEC. 17 NWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 NW,NESW;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-F4	T. 23 N, R. 45 E, PMM, MT SEC. 10 W2NW,SW,W2SE; SEC. 14 SENW,W2NW,N2SW; SEC. 15 N2,N2S2; MCCONE COUNTY 1000.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 10 W2NW,SW,W2SE; SEC. 14 S2NW,NWSW; SEC. 15 N2,N2S2; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 10 N2SW,NWSE; SEC. 14 SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 10 W2NW,SW,W2SE; SEC. 14 S2NW,NWSW; SEC. 15 N2,N2S2; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 10 N2SW,NWSE; SEC. 14 SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-F6	T. 23 N, R. 45 E, PMM, MT SEC. 11 SWNE,N2SE; MCCONE COUNTY 120.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 11 SWNE,NESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 SWNE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 11 SWNE,NWSE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 11 SWNE,NESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 SWNE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 11 SWNE,NWSE;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-F8	T. 23 N, R. 45 E, PMM, MT SEC. 12 NE,E2NW,N2SW; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 12 NE,SE,SW,N2SW; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 12 NENE,SE,SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 12 NE,E2NW,NESW;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 12 NE,SE,SW,N2SW; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 12 NENE,SE,SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 12 NE,E2NW,NESW;	NONE
MTM 102757-F9	T. 23 N, R. 45 E, PMM, MT SEC. 13 NENW,N2SW,SWSW; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 13 W2SW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 NENW,N2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 13 W2SW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 NENW,N2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-KR	T. 23 N, R. 45 E, PMM, MT SEC. 17 NWSW; SEC. 18 S2NE,E2NW,N2SE; MCCONE COUNTY 280.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 NWSW;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 NWSW;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-KG	T. 23 N, R. 45 E, PMM, MT SEC. 17 S2SW,W2SE; SEC. 18 LOTS 3,4; SEC. 18 E2SW,S2SE; SEC. 19 N2NE,E2NW; SEC. 20 N2NW; MCCONE COUNTY 629.20 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 S2SW,W2SE; SEC. 18 LOT 4; SEC. 18 E2SW,S2SE; SEC. 19 N2NE,E2NW; SEC. 20 N2NW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 SESE; SEC. 19 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 S2SW,W2SE; SEC. 18 SESE; SEC. 19 NENE; SEC. 20 N2NW;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 S2SW,W2SE; SEC. 18 LOT 4; SEC. 18 E2SW,S2SE; SEC. 19 N2NE,E2NW; SEC. 20 N2NW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 SESE; SEC. 19 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 S2SW,W2SE; SEC. 18 SESE; SEC. 19 NENE; SEC. 20 N2NW;	NONE
MTM 102757-KH	T. 23 N, R. 45 E, PMM, MT SEC. 19 LOTS 1,2; MCCONE COUNTY 69.29 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 19 LOT 1; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 19 LOT 1; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-KJ	T. 23 N, R. 45 E, PMM, MT SEC. 20 S2SE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-KK	T. 23 N, R. 45 E, PMM, MT SEC. 23 E2NE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-KQ	T. 23N, R. 45 E, PMM, MT SEC. 26 S2SW; SEC. 35 NE,N2NW; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 S2SW; SEC. 35 N2NE,SENE,N2NW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 SESW; SEC. 35 NWNE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 26 S2SW; SEC. 35 NWNW; TL 13-4 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 S2SW; SEC. 35 N2NE,SENE,N2NW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 SESW; SEC. 35 NWNE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 26 S2SW; SEC. 35 NWNW; TL 13-4 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-KL	T. 23 N, R. 45 E, PMM, MT SEC. 27 W2E2,E2W2,SWNW, SWSW,E2SE; SEC. 28 S2S2; SEC. 33 N2,SW,NWSE; SEC. 34 N2N2,SWNE,SWNW; MCCONE COUNTY 1400.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 NENW,S2SE; SEC. 28 SESW,S2SE; SEC. 33 NE,NENW,S2NW, SW,NWSE; SEC. 34 N2NE,SWNE,N2NW,SWNW; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 W2E2,S2SW,SESE; SEC. 34 SWNE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 27 W2E2,E2W2,SWNW, SWSW,E2SE; SEC. 28 S2S2; SEC. 33 N2; SEC. 34 N2N2,SWNE,SWNW; TL 13-4 SEC. 27 E2SE; SEC. 34 NENE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 NENW,S2SE; SEC. 28 SESW,S2SE; SEC. 33 NE,NENW,S2NW, SW,NWSE; SEC. 34 N2NE,SWNE,N2NW, SWNW; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 W2E2,S2SW,SESE; SEC. 34 SWNE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 27 W2E2,E2W2,SWNW, SWSW,E2SE; SEC. 28 S2S2; SEC. 33 N2; SEC. 34 N2N2,SWNE,SWNW; TL 13-4 SEC. 27 E2SE; SEC. 34 NENE;	NONE
MTM 102757-KT	T. 23 N, R. 45 E, PMM, MT SEC. 30 LOTS 3,4; SEC. 30 E2SW; MCCONE COUNTY 150.07 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 E2SW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 E2SW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-KM	T. 23 N, R. 45 E, PMM, MT SEC. 31 E2SW; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 31 SESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 31 SESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-KP	T. 23 N, R. 45 E, PMM, MT SEC. 32 E2,S2NW; MCCONE COUNTY 400.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 S2NW,SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 32 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 32 N2NE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 S2NW,SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 32 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 32 N2NE;	NONE
MTM 102757-KU	T. 24 N, R. 45 E, PMM, MT SEC. 1 LOTS 1,2,5-8; SEC. 12 W2E2,W2,SESE; SEC. 13 N2N2; MCCONE COUNTY 900.08 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 12 W2E2,S2NW,SW,SESE; SEC. 13 N2NE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 13 N2NE;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 12 W2E2,S2NW,SW,SESE; SEC. 13 N2NE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 13 N2NE;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-KV	T. 24 N, R. 45 E, PMM, MT SEC. 1 LOTS 3,4; SEC. 2 LOTS 1,2,7,8; SEC. 11 E2E2,SWNE,NWSE; SEC. 13 S2NW,N2SW; SEC. 14 E2; MCCONE COUNTY 922.09 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 11 E2E2,SWNE,NWSE; SEC. 13 S2NW,N2SW; SEC. 14 E2;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 11 E2E2,SWNE,NWSE; SEC. 13 S2NW,N2SW; SEC. 14 E2;	NONE
MTM 102757-KW	T. 24 N, R. 45 E, PMM, MT SEC. 5 LOT 5; SEC. 6 LOT 8; SEC. 8 NWNW,S2NW,N2SW, W2SE,SESE; MCCONE COUNTY 400.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-3 SEC. 6 LOT 8; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 8 S2SE;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-3 SEC. 6 LOT 8; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 8 S2SE;	NONE
MTM 102757-KX	T. 24 N, R. 45 E, PMM, MT SEC. 6 LOTS 3,6; SEC. 7 S2NE,E2NW,N2SE; MCCONE COUNTY 309.71 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-3 SEC. 6 LOTS 3,6; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-3 SEC. 6 LOTS 3,6; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-KY	T. 24 N, R. 45 E, PMM, MT SEC. 7 SESW,S2SE; SEC. 8 S2SW; SEC. 17 ALL; SEC. 18 N2NE,NENW; MCCONE COUNTY 960.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 S2NE,SENE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 8 S2SW; SEC. 17 ALL; SEC. 18 N2NE;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 S2NE,SENE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 8 S2SW; SEC. 17 ALL; SEC. 18 N2NE;	NONE
MTM 102757-K3	T. 24 N, R. 45 E, PMM, MT SEC. 9 S2NE,SENE,E2SW, SWSW,SE; SEC. 10 SW,W2SE; SEC. 15 W2NE,SENE,W2; MCCONE COUNTY 1160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 9 S2NE,SENE,E2SW, SWSW,SE; SEC. 10 SW,W2SE; SEC. 15 W2NE,SENE,W2,NWSE; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 10 W2SE; SEC. 15 S2NW,SW,W2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 9 S2SW,SWSE; SEC. 15 W2NW,SENE,SW,W2SE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 9 S2NE,SENE,E2SW, SWSW,SE; SEC. 10 SW,W2SE; SEC. 15 W2NE,SENE,W2,NWSE; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 10 W2SE; SEC. 15 S2NW,SW,W2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 9 S2SW,SWSE; SEC. 15 W2NW,SENE,SW,W2SE;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-K4	T. 24 N, R. 45 E, PMM, MT SEC. 11 NWNE; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-K6	T. 24 N, R. 45 E, PMM, MT SEC. 13 S2SW; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-K7	T. 24 N, R. 45 E, PMM, MT SEC. 14 NWSW; SEC. 15 NENE,E2SE; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 14 NWSW; SEC. 15 NENE,SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 15 E2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 14 NWSW; SEC. 15 NENE,SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 15 E2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-K8	T. 24 N, R. 45 E, PMM, MT SEC. 18 LOTS 3,4; SEC. 18 SESW; MCCONE COUNTY 104.51 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 SESW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 SESW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-K9	T. 24 N, R. 45 E, PMM, MT SEC. 19 LOT 2; SEC. 19 SENW; MCCONE COUNTY 72.51 AC PD	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NB	T. 24 N, R. 45 E, PMM, MT SEC. 22 W2NE,E2SW,SE; SEC. 23 W2SW; SEC. 27 E2,S2NW,SW; MCCONE COUNTY 960.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 W2NE,E2SW,SE; SEC. 23 W2SW; SEC. 27 NE,S2NW,SW,N2SE,SESE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 NWNE; SEC. 27 W2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 W2NE,E2SW,SE; SEC. 23 W2SW; SEC. 27 NE,S2NW,SW,N2SE,SESE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 NWNE; SEC. 27 W2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NA	T. 24 N, R. 45 E, PMM, MT SEC. 22 SENE; SEC. 23 NENE,S2NE,SESW, E2SW,SE; SEC. 24 NW,W2SW,SESW, NESE,SWSE; MCCONE COUNTY 800.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 SENE; SEC. 23 E2NE,SESW,E2SW,SE; SEC. 24 NW,S2SW,SWSE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 SENE; SEC. 23 S2NE,SESW,N2SE,SESE; SEC. 24 S2NW,W2SW,SESW, SWSE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 SENE; SEC. 23 E2NE,SESW,E2SW,SE; SEC. 24 NW,S2SW,SWSE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 SENE; SEC. 23 S2NE,SESW,N2SE,SESE; SEC. 24 S2NW,W2SW,SESW, SWSE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-ND	T. 24 N, R. 45 E, PMM, MT SEC. 25 SWSW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NC	T. 24 N, R. 45 E, PMM, MT SEC. 25 E2SE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 25 SESE; NSO 11-4 SEC. 25 NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 25 SESE; NSO 11-4 SEC. 25 NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NE	T. 24 N, R. 45 E, PMM, MT SEC. 26 NENE,W2E2,W2; SEC. 35 S2NE,NW,S2; MCCONE COUNTY 1080.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 N2N2,SWNE,S2NW, N2SW,SWSW; SEC. 35 S2NE,W2NW,SW,W2SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 NENE,NESW; SEC. 35 S2NE,SW,W2SE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 N2N2,SWNE,S2NW, N2SW,SWSW; SEC. 35 S2NE,W2NW,SW,W2SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 NENE,NESW; SEC. 35 S2NE,SW,W2SE,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NF	T. 24 N, R. 45 E, PMM, MT SEC. 28 ALL; SEC. 29 NWSW,S2S2,NESE; SEC. 30 LOT 4; SEC. 30 E2SW,SE; SEC. 31 LOTS 1-4; SEC. 31 E2,E2W2; MCCONE COUNTY 1767.34 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 E2,W2W2,SESW; SEC. 29 NWSW,S2S2,NESE; SEC. 30 E2SW,SE; SEC. 31 LOTS 1-4; SEC. 31 E2,E2W2; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 NWNW,NESW; SEC. 29 NWSW; SEC. 30 NESE; SEC. 31 NWSE; NSO 11-4 SEC. 28 NWNW; NSO 11-8 SEC. 30 LOT 4; SEC. 30 E2SW,SE; SEC. 31 LOTS 1,2; SEC. 31 NE,E2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 28 ALL; SEC. 29 NWSW,S2S2,NESE; SEC. 30 LOT 4;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 E2,W2W2,SESW; SEC. 29 NWSW,S2S2,NESE; SEC. 30 E2SW,SE; SEC. 31 LOTS 1-4; SEC. 31 E2,E2W2; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 NWNW,NESW; SEC. 29 NWSW; SEC. 30 NESE; SEC. 31 NWSE; NSO 11-4 SEC. 28 NWNW; NSO 11-8 SEC. 30 LOT 4; SEC. 30 E2SW,SE; SEC. 31 LOTS 1,2; SEC. 31 NE,E2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 28 ALL; SEC. 29 NWSW,S2S2,NESE; SEC. 30 LOT 4;	NONE
		SEC. 31 LOT 1; SEC. 31 E2W2; TL 13-4 SEC. 31 LOTS 2-4;	SEC. 31 LOT 1; SEC. 31 E2W2; TL 13-4 SEC. 31 LOTS 2-4;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-N6	T. 24 N, R. 45 E, PMM, MT SEC. 32 N2,N2S2; SEC. 33 N2; SEC. 34 ALL; MCCONE COUNTY 1440.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 N2,NWSW,NWSE; SEC. 33 N2; SEC. 34 N2N2,S2NE,SWNW,S2; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 32 S2NE,E2NW,NESW,NWSE; SEC. 33 SENE; SEC. 34 SWNW,E2SW,SWSW,S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 N2,NWSW,NWSE; SEC. 33 N2; SEC. 34 N2N2,S2NE,SWNW,S2; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 32 S2NE,E2NW,NESW,NWSE; SEC. 33 SENE; SEC. 34 SWNW,E2SW,SWSW,S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NG	T. 25 N, R. 45 E, PMM, MT SEC. 1 SWSE; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NH	T. 25 N, R. 45 E, PMM, MT SEC. 2 LOTS 3,4; SEC. 2 SWNW; MCCONE COUNTY 118.48 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 SWNW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 2 SWNW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NJ	T. 25 N, R. 45 E, PMM, MT SEC. 6 LOTS 4,6,7; SEC. 6 E2SE; MCCONE COUNTY 196.33 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-4 SEC. 6 LOTS 6,7; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-4 SEC. 6 LOTS 6,7; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NK	T. 25 N, R. 45 E, PMM, MT SEC. 7 LOTS 1,2,4; SEC. 7 NE,E2NW,NESW; SEC. 8 SWNW,NESW,NWSE; MCCONE COUNTY 518.17 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 LOT 2; SEC. 7 SWNE,SENE,NESW; NSO 11-4 SEC. 7 LOTS 1,2; SEC. 7 W2NE,E2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 LOT 2; SEC. 7 SWNE,SENE,NESW; NSO 11-4 SEC. 7 LOTS 1,2; SEC. 7 W2NE,E2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NL	T. 25 N, R. 45 E, PMM, MT SEC. 8 N2NE,SESE; SEC. 9 NWNW,S2SW,SWSE; MCCONE COUNTY 280.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 8 N2NE; SEC. 9 NWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 8 N2NE; SEC. 9 NWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NM	T. 25 N, R. 45 E, PMM, MT SEC. 9 E2SE; SEC. 10 SWSW; MCCONE COUNTY 120.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NN	T. 25 N, R. 45 E, PMM, MT SEC. 11 SE; SEC. 12 SENE,W2SW; SEC. 14 NENE; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 N2SE,SESE; SEC. 12 SENE,W2SW; SEC. 14 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 N2SE,SESE; SEC. 12 SENE,W2SW; SEC. 14 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NP	T. 25 N, R. 45 E, PMM, MT SEC. 13 SESW; SEC. 24 NENW,S2N2,W2SW; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 S2NE,NENW,W2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 S2NE,NENW,W2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NQ	T. 25 N, R. 45 E, PMM, MT SEC. 14 SWSW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-4 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS) TL 13-4 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-4 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS) TL 13-4 (ALL LANDS)	NONE
MTM 102757-NR	T. 25 N, R. 45 E, PMM, MT SEC. 15 S2NW,N2S2,SESE; SEC. 22 NENE,S2NE,SENE; MCCONE COUNTY 440.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-3 SEC. 15 N2SE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 15 S2NW,N2S2,SESE; SEC. 22 NENE; NSO 11-4 SEC. 15 N2SE,SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS) TL 13-4 SEC. 15 N2SE,SESE	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-3 SEC. 15 N2SE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 15 S2NW,N2S2,SESE; SEC. 22 NENE; NSO 11-4 SEC. 15 N2SE,SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS) TL 13-4 SEC. 15 N2SE,SESE	NONE
MTM 102757-NU	T. 25 N, R. 45 E, PMM, MT SEC. 17 SWNE,NWNW,SENE, NESW,N2SE; SEC. 18 N2NE; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 SWNE,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 SWNE,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NT	T. 25 N, R. 45 E, PMM, MT SEC. 17 SENE,S2S2; MCCONE COUNTY 200.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 SENE,S2SW,SESE;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 17 SENE,S2SW,SESE;	NONE
MTM 102757-NY	T. 25 N, R. 45 E, PMM, MT SEC. 24 NWNW,NESW; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-NV	T. 25 N, R. 45 E, PMM, MT SEC. 26 E2NE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-NW	T. 25 N, R. 45 E, PMM, MT SEC. 27 NENE,S2 ; SEC. 28 NWNE,S2NE,NW,NESW, N2SE,SESE; SEC. 34 W2NE,W2,SE; SEC. 35 SW; MCCONE COUNTY 1520.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 NENE,S2; SEC. 28 NWNE,S2NE,NW,NESW, NWSE; SEC. 34 W2NE,NENW,S2NW,S2; SEC. 35 SW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 SE; SEC. 28 SWNW; SEC. 34 S2NW,N2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 27 NENE,N2SE; SEC. 28 SENE,NWNE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 NENE,S2; SEC. 28 NWNE,S2NE,NW,NESW, NWSE; SEC. 34 W2NE,NENW,S2NW,S2; SEC. 35 SW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 SE; SEC. 28 SWNW; SEC. 34 S2NW,N2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 27 NENE,N2SE; SEC. 28 SENE,NWNE;	NONE
MTM 102757-NX	T. 25 N, R. 45 E, PMM, MT SEC. 28 W2SW; SEC. 33 W2NW; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-N3	T. 26 N, R. 45 E, PMM, MT SEC. 19 LOTS 2-4; SEC. 19 S2NE,SENE,E2SW, N2SE,SWSE; SEC. 20 NWSW; MCCONE COUNTY 452.07 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 19 S2NE,E2SW; SEC. 20 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 19 S2NE,E2SW; SEC. 20 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-N4	T. 26 N, R. 45 E, PMM, MT SEC. 20 NESW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-N7	T. 26 N, R. 45 E, PMM, MT SEC. 26 NENE,E2SE; SEC. 35 E2NE,SE; MCCONE COUNTY 360.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 E2SE; SEC. 35 E2NE,SE; LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 E2SE; SEC. 35 E2NE,SE; LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-N8	T. 26 N, R. 45 E, PMM, MT SEC. 31 LOTS 1,3,4; MCCONE COUNTY 95.14 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 31 LOTS 1,4; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 31 LOT 4; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 31 LOTS 1,4; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 31 LOT 4; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-N9	T. 26 N, R. 45 E, PMM, MT SEC. 32 SESW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-PC	T. 26 N, R. 45 E, PMM, MT SEC. 32 SE; SEC. 33 S2N2,S2; MCCONE COUNTY 640.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 32 SE; SEC. 33 S2N2,N2S2,S2SW,SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 32 SE; SEC. 33 SWNE,S2;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 32 SE; SEC. 33 S2N2,N2S2,S2SW,SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 32 SE; SEC. 33 SWNE,S2;	NONE
MTM 102757-PF	T. 21 N, R. 46 E, PMM, MT SEC. 5 LOTS 1-4; SEC. 5 S2N2; SEC. 6 LOTS 1-5; SEC. 6 S2NE,SENE; MCCONE COUNTY 637.59 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 5 LOTS 1-4; SEC. 5 S2N2; SEC. 6 LOTS 1-4; SEC. 6 S2NE,SENE; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 LOTS 1,2,4; SEC. 5 SWNE,S2NW; SEC. 6 LOTS 2,3,5; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 5 LOTS 1-4; SEC. 5 S2N2; SEC. 6 LOTS 1-4; SEC. 6 S2NE,SENE; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 5 LOTS 1,2,4; SEC. 5 SWNE,S2NW; SEC. 6 LOTS 2,3,5; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-PG	T. 21 N, R. 46 E, PMM, MT SEC. 18 LOTS 1,2; SEC. 18 NE,E2NW; MCCONE COUNTY 317.65 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOT 1; SEC. 18 N2NE,SENE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 18 LOTS 1,2; TL 13-4 SEC. 18 SENE	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOT 1; SEC. 18 N2NE,SENE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 18 LOTS 1,2; TL 13-4 SEC. 18 SENE	NONE
MTM 102757-PH	T. 21 N, R. 46 E, PMM, MT SEC. 18 LOTS 3,4; SEC. 18 E2SW,SE; MCCONE COUNTY 317.75 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 NESW,N2SE,SESE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOT 4; SEC. 18 SESW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 18 LOTS 3,4; SEC. 18 E2SW;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 NESW,N2SE,SESE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOT 4; SEC. 18 SESW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 18 LOTS 3,4; SEC. 18 E2SW;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-PJ	T. 21 N, R. 46 E, PMM, MT SEC. 30 LOTS 1-4; SEC. 30 NENW,E2SW,SWSE; MCCONE COUNTY 318.60 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 LOTS 1,3; SEC. 30 E2SW,SWSE; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 30 LOT 2,3,4; SEC. 30 E2SW,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 LOTS 1,3; SEC. 30 E2SW,SWSE; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 30 LOT 2,3,4; SEC. 30 E2SW,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-PK	T. 22 N, R. 46 E, PMM, MT SEC. 1 LOTS 1-4; SEC. 1 S2NE,SENE,E2SW,SE; SEC. 2 LOTS 1,2; SEC. 2 SWSE; SEC. 12 E2,NENW,SESW; MCCONE COUNTY 1039.94 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 SEC. 1 LOTS 1-4; SEC. 1 SENE,SESW,SE; SEC. 2 LOTS 1,2; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOT 1; SEC. 1 S2NE,SENE,E2SW,SE; SEC. 2 SWSE; SEC. 12 N2NE,SWNE,NENW, SESW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 SEC. 1 LOTS 1-4; SEC. 1 SENE,SESW,SE; SEC. 2 LOTS 1,2; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOT 1; SEC. 1 S2NE,SENE,E2SW,SE; SEC. 2 SWSE; SEC. 12 N2NE,SWNE,NENW, SESW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-PL	T. 22 N, R. 46 E, PMM, MT SEC. 1 SWNW,NWSW; SEC. 2 S2NE,SENW,NESW,N2SE; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 1 NWSW; SEC. 2 N2SE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 SWNW,NWSW; SEC. 2 SWNE,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 1 NWSW; SEC. 2 N2SE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 SWNW,NWSW; SEC. 2 SWNE,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-PM	T. 22 N, R. 46 E, PMM, MT SEC. 4 LOTS 1-4; SEC. 4 S2N2; MCCONE COUNTY 319.44 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 LOTS 1,4; SEC. 4 S2N2; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 4 LOTS 1,2,4; SEC. 4 S2N2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 LOTS 1,4; SEC. 4 S2N2; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 4 LOTS 1,2,4; SEC. 4 S2N2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-PN	T. 22 N, R. 46 E, PMM, MT SEC. 7 E2NE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-PP	T. 22 N, R. 46 E, PMM, MT SEC. 8 N2NE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 8 NENE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 8 NWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 8 NENE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 8 NWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-PQ	T. 22 N, R. 46 E, PMM, MT SEC. 13 N2,SW; SEC. 14 E2NE,SWNE,S2; SEC. 15 SWNE,SE; MCCONE COUNTY 1120.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 N2,N2SW,SWSW; SEC. 14 E2NE,SWNE,N2SW, SWSW,SE; SEC. 15 SWNE,E2SE; NSO 11-4 SEC. 13 NWNW; SEC. 14 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 N2,N2SW,SWSW; SEC. 14 E2NE,SWNE,N2SW, SWSW,SE; SEC. 15 SWNE,E2SE; NSO 11-4 SEC. 13 NWNW; SEC. 14 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-PR	T. 22 N, R. 46 E, PMM, MT SEC. 18 LOTS 1-4; SEC. 18 SENW; SEC. 19 LOTS 1,2; SEC. 19 E2,E2NW; SEC. 20 W2; MCCONE COUNTY 983.69 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOTS 3,4; SEC. 19 LOTS 1,2; SEC. 19 E2,E2NW; SEC. 20 W2; CSU 12-4 SEC. 19 SENE,SE; SEC. 20 W2; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOTS 1-4; SEC. 19 LOT 2; SEC. 19 E2SE; SEC. 20 SENW,W2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOTS 3,4; SEC. 19 LOTS 1,2; SEC. 19 E2,E2NW; SEC. 20 W2; CSU 12-4 SEC. 19 SENE,SE; SEC. 20 W2; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOTS 1-4; SEC. 19 LOT 2; SEC. 19 E2SE; SEC. 20 SENW,W2SW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-PT</p>	<p>T. 22 N, R. 46 E, PMM, MT SEC. 21 N2NE,SENE,NENW,N2SW, SESW,SE; SEC. 22 ALL; SEC. 27 NWNE,NENW,W2NW; SEC. 28 NE,N2SE; MCCONE COUNTY 1480.00 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 21 N2NE,SENE,NENW,N2SW, SESW,SE; SEC. 22 E2,E2W2,SWNW,W2SW; SEC. 27 NWNE,N2NW,SWNW; SEC. 28 NE,N2SE; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 21 NENW,N2SW,SESW,SE; SEC. 22 NENE,SWNE,NW,S2SW, N2SE,SESE; SEC. 27 NWNE,NENW,W2NW; SEC. 28 S2NE,NENE,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 22 NE,E2NW,NWNW,N2SE; TL 13-4 SEC. 21 N2NE,SENE,NENW,N2SW, SESW,NWSE;</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 21 N2NE,SENE,NENW,N2SW, SESW,SE; SEC. 22 E2,E2W2,SWNW,W2SW; SEC. 27 NWNE,N2NW,SWNW; SEC. 28 NE,N2SE; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 21 NENW,N2SW,SESW,SE; SEC. 22 NENE,SWNE,NW,S2SW, N2SE,SESE; SEC. 27 NWNE,NENW,W2NW; SEC. 28 S2NE,NENE,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 22 NE,E2NW,NWNW,N2SE; TL 13-4 SEC. 21 N2NE,SENE,NENW,N2SW, SESW,NWSE;</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-PX</p>	<p>T. 22N, R. 46 E, PMM, MT SEC. 23 N2,N2SW,NWSE; SEC. 24 W2NW,SWSE; MCCONE COUNTY 560.00 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 23 N2,N2SW,NWSE; SEC. 24 W2NW; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 23 N2NE,SENE,N2SW,NWSE; SEC. 24 SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 23 N2,N2SW,NWSE; SEC. 24 W2NW; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 23 N2NE,SENE,N2SW,NWSE; SEC. 24 SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)</p>	<p>NONE</p>
<p>MTM 102757-PU</p>	<p>T. 22 N, R. 46 E, PMM, MT SEC. 26 NWNW,W2SW,S2SE; SEC. 34 NENE,S2N2; SEC. 35 N2; MCCONE COUNTY 720.00 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 SEC. 26 NWNW,W2SW,S2SE; SEC. 34 NENE,S2N2; SEC. 35 N2NW,NWNE,SWNW; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 NWNW,W2SW,S2SE; SEC. 34 NENE,S2N2; SEC. 35 S2NE,NWNE,NW; NSO 11-8 SEC. 26 SWSW; SEC. 34 E2NE,SWNE,SENE; SEC. 35 NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 SEC. 26 NWNW,W2SW,S2SE; SEC. 34 NENE,S2N2; SEC. 35 N2NW,NWNE,SWNW; LN 14-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 NWNW,W2SW,S2SE; SEC. 34 NENE,S2N2; SEC. 35 S2NE,NWNE,NW; NSO 11-8 SEC. 26 SWSW; SEC. 34 E2NE,SWNE,SENE; SEC. 35 NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-PV</p>	<p>T. 22 N, R. 46 E, PMM, MT SEC. 28 W2SW; SEC. 29 SENE,W2,SE; SEC. 30 E2,E2SW; SEC. 31 LOTS 1-4; SEC. 31 E2,E2W2; SEC. 32 NWNE,W2SE; MCCONE COUNTY 1753.04 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 W2SW; SEC. 29 SENE,W2,SE; SEC. 30 E2,SESW; SEC. 31 LOTS 1-4; SEC. 31 NE,E2W2,N2SE,SWSE; SEC. 32 NWNE,W2SE; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 W2SW; SEC. 29 SENE,N2NW,E2SW,SWSW, W2SE; SEC. 30 SENE,E2SE; SEC. 31 LOT 1,3; SEC. 31 E2NE,SWNE,N2SE,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 W2SW; SEC. 29 SENE,W2,SE; SEC. 30 E2,SESW; SEC. 31 LOTS 1-4; SEC. 31 NE,E2W2,N2SE,SWSE; SEC. 32 NWNE,W2SE; CSU 12-4 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 W2SW; SEC. 29 SENE,N2NW,E2SW,SWSW, W2SE; SEC. 30 SENE,E2SE; SEC. 31 LOT 1,3; SEC. 31 E2NE,SWNE,N2SE,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>NONE</p>
<p>MTM 102757-PW</p>	<p>T. 22 N, R. 46 E, PMM, MT SEC. 32 NENE,SWNE; SEC. 33 S2SW,SE; MCCONE COUNTY 320.00 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 NENE,SWNE; SEC. 33 SESW,SE; CSU 12-4 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 33 S2SW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 NENE,SWNE; SEC. 33 SESW,SE; CSU 12-4 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 33 S2SW,SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-F7	T. 23 N, R. 46 E, PMM, MT SEC. 1 NWSE; SEC. 12 S2NE,SENW; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 12 SENE,SENW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 NWSE; SEC. 12 SENE,SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 12 SENE,SENW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 NWSE; SEC. 12 SENE,SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-MG	T. 23 N, R. 46 E, PMM, MT SEC. 3 LOTS 3,4; SEC. 3 S2NW,N2SW,SWSW; SEC. 4 LOTS 1-3; SEC. 4 S2NE,SWNW; MCCONE COUNTY 520.25 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 LOTS 3,4; SEC. 3 S2NW,N2SW,SWSW; SEC. 4 LOTS 1-3; SEC. 4 SENE; NSO 11-4 SEC. 3 LOT 4; SEC. 3 SWNW,NWSW; SEC. 4 LOTS 1,2; SEC. 4 S2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 LOTS 3,4; SEC. 3 S2NW,N2SW,SWSW; SEC. 4 LOTS 1-3; SEC. 4 SENE; NSO 11-4 SEC. 3 LOT 4; SEC. 3 SWNW,NWSW; SEC. 4 LOTS 1,2; SEC. 4 S2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-U3	T. 23 N, R. 46 E, PMM, MT SEC. 4 LOT 4; SEC. 4 SENW; MCCONE COUNTY 80.01 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-PY	T. 23 N, R. 46 E, PMM, MT SEC. 5 LOT 3; SEC. 5 S2NW,N2SW; SEC. 8 SWNE; MCCONE COUNTY 240.15 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 5 LOT 3; SEC. 5 S2NW,NESW; SEC. 8 SWNE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 5 LOT 3; SEC. 5 S2NW,NESW; SEC. 8 SWNE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-P3	T. 23 N, R. 46 E, PMM, MT SEC. 7 LOTS 2,3; SEC. 7 SWNE,SEnw,E2SW,NWSE; MCCONE COUNTY 272.10 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOTS 2,3; SEC. 7 SWNE,NESW,NWSE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SWNE,SEnw,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 7 LOTS 2,3; SEC. 7 SWNE,SEnw,E2SW;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOTS 2,3; SEC. 7 SWNE,NESW,NWSE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SWNE,SEnw,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 7 LOTS 2,3; SEC. 7 SWNE,SEnw,E2SW;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-P4</p>	<p>T. 23 N, R. 46 E, PMM, MT SEC. 10 E2,E2SW; SEC. 11 SWSW; SEC. 13 W2SW; SEC. 14 W2W2,NESE,S2SE; SEC. 15 E2,S2SW; SEC. 22 N2NE; SEC. 23 N2; MCCONE COUNTY 1600.00 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 10 E2,E2SW; SEC. 11 SWSW; SEC. 13 W2SW; SEC. 14 W2W2,NESE,S2SE; SEC. 15 E2; SEC. 22 N2NE; SEC. 23 N2; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 10 E2,E2SW; SEC. 11 SWSW; SEC. 13 W2SW; SEC. 14 W2W2,E2SE; SEC. 15 E2,S2SW; SEC. 22 N2NE; SEC. 23 N2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 10 E2,E2SW; SEC. 11 SWSW; SEC. 14 NWNW; SEC. 15 N2NE,SWNE;</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 10 E2,E2SW; SEC. 11 SWSW; SEC. 13 W2SW; SEC. 14 W2W2,NESE,S2SE; SEC. 15 E2; SEC. 22 N2NE; SEC. 23 N2; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 10 E2,E2SW; SEC. 11 SWSW; SEC. 13 W2SW; SEC. 14 W2W2,E2SE; SEC. 15 E2,S2SW; SEC. 22 N2NE; SEC. 23 N2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 10 E2,E2SW; SEC. 11 SWSW; SEC. 14 NWNW; SEC. 15 N2NE,SWNE;</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-P9	T. 23 N, R. 46 E, PMM, MT SEC. 13 S2SE; SEC. 24 E2E2,NWNE; SEC. 25 E2E2,SWSE; MCCONE COUNTY 480.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 13 S2SE; SEC. 24 NWNE,SENE,E2SE; SEC. 25 E2E2,SWSE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 SWSE; SEC. 24 E2E2,NWNE; SEC. 25 E2E2,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 13 S2SE; SEC. 24 NWNE,SENE,E2SE; SEC. 25 E2E2,SWSE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 13 SWSE; SEC. 24 E2E2,NWNE; SEC. 25 E2E2,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-P6	T. 23 N, R. 46 E, PMM, MT SEC. 17 E2SE; SEC. 19 LOTS 2,3; SEC. 19 NESW; SEC. 20 SESW; MCCONE COUNTY 233.56 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 SESE; SEC. 20 SESW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 E2SE; SEC. 19 LOTS 2,3; SEC. 19 NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 SESE; SEC. 20 SESW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 E2SE; SEC. 19 LOTS 2,3; SEC. 19 NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-P7	T. 23 N, R. 46 E, PMM, MT SEC. 18 LOTS 2,3; SEC. 18 SWNE,SENW; MCCONE COUNTY 152.90 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOTS 2,3; SEC. 18 SENW; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOT 2; SEC. 18 SWNE,SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOTS 2,3; SEC. 18 SENW; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 18 LOT 2; SEC. 18 SWNE,SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-P8	T. 23 N, R. 46 E, PMM, MT SEC. 21 NE; SEC. 22 S2NE,NW,N2SE; SEC. 23 NWSW; MCCONE COUNTY 520.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 21 NE; SEC. 22 S2NE,NW,NESE; SEC. 23 NWSW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 21 NE; SEC. 22 NW,N2SE; SEC. 23 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 21 NE; SEC. 22 S2NE,NW,NESE; SEC. 23 NWSW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 21 NE; SEC. 22 NW,N2SE; SEC. 23 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-T6	T. 23 N, R. 46 E, PMM, MT SEC. 24 SWSE; SEC. 25 W2NE,N2NW,SESW,NWSE; MCCONE COUNTY 280.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 25 W2NE,N2NW,SESW,NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 25 W2NE,N2NW,SESW,NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-T7	T. 23 N, R. 46 E, PMM, MT SEC. 27 SESW,SWSE; SEC. 34 N2NE,NWNW,NESE; SEC. 35 NWNW,S2SE; MCCONE COUNTY 360.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 SWSE; SEC. 34 N2NE,NWNW,NESE; SEC. 35 NWNW,S2SE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 SWSE; SEC. 34 NWNE,NWNW,NESE; SEC. 35 S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 35 S2SE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 SWSE; SEC. 34 N2NE,NWNW,NESE; SEC. 35 NWNW,S2SE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 27 SWSE; SEC. 34 NWNE,NWNW,NESE; SEC. 35 S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 35 S2SE;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-T8	T. 23 N, R. 46 E, PMM, MT SEC. 28 SWSW; SEC. 29 NWSE; SEC. 32 SESE; SEC. 33 NW,NESW; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 NWSE; SEC. 32 SESE; SEC. 33 S2NW,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 NWSE; SEC. 32 SESE; SEC. 33 S2NW,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-T9	T. 23 N, R. 46 E, PMM, MT SEC. 31 SWNE; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-UA	T. 24 N, R. 46 E, PMM, MT SEC. 1 LOTS 1-4; SEC. 2 LOTS 1-4; SEC. 2 SESE; MCCONE COUNTY 277.84 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOTS 1-3; SEC. 2 LOTS 1-4; SEC. 2 SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOTS 1-3; SEC. 2 LOTS 1-4; SEC. 2 SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-UB</p>	<p>T. 24 N, R. 46 E, PMM, MT SEC. 3 LOT 4; SEC. 3 S2SW; SEC. 4 LOTS 1-3; SEC. 4 S2S2; SEC. 8 E2E2; SEC. 9 ALL; SEC. 10 W2,SE; SEC. 11 SWSW; SEC. 17 E2NE; MCCONE COUNTY 1760.17 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 3 LOT 4; SEC. 3 S2SW; SEC. 4 LOTS 1-3; SEC. 4 S2S2; SEC. 8 E2E2; SEC. 9 E2,NENW,SW; SEC. 10 W2,SE; SEC. 11 SWSW; SEC. 17 E2NE; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 LOT 4; SEC. 3 S2SW; SEC. 4 LOTS 1-3; SEC. 4 SESE; SEC. 8 E2E2; SEC. 9 S2NE,NWNW,S2; SEC. 10 E2NW,S2; SEC. 11 SWSW; SEC. 17 E2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 3 LOT 4; SEC. 3 S2SW; SEC. 4 LOTS 1-3; SEC. 4 S2S2; SEC. 8 E2E2; SEC. 9 E2,NENW,SW; SEC. 10 W2,SE; SEC. 11 SWSW; SEC. 17 E2NE; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 LOT 4; SEC. 3 S2SW; SEC. 4 LOTS 1-3; SEC. 4 SESE; SEC. 8 E2E2; SEC. 9 S2NE,NWNW,S2; SEC. 10 E2NW,S2; SEC. 11 SWSW; SEC. 17 E2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>NONE</p>
		<p>TL 13-3 SEC. 8 E2E2; SEC. 9 SWNW,W2SW,SESW; SEC. 17 E2NE;</p>	<p>TL 13-3 SEC. 8 E2E2; SEC. 9 SWNW,W2SW,SESW; SEC. 17 E2NE;</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UC	T. 24 N, R. 46 E, PMM, MT SEC. 6 LOT 4; SEC. 7 NENW; MCCONE COUNTY 64.94 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UD	T. 24 N, R. 46 E, PMM, MT SEC. 7 SENE,NESE; SEC. 8 W2NE,S2NW,N2SW,NWSE; MCCONE COUNTY 360.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 8 W2NE,S2NW,NESW, NWSE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SENE,NESE; SEC. 8 SWNE,S2NW,NESW, NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 8 W2NE,S2NW,NESW, NWSE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 SENE,NESE; SEC. 8 SWNE,S2NW,NESW, NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UE	T. 24 N, R. 46 E, PMM, MT SEC. 11 NESE; SEC. 12 SWNW,N2SW,W2SE,SESE; MCCONE COUNTY 280.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 11 NESE; SEC. 12 SWNW,N2SW,SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 11 NESE; SEC. 12 SWNW,N2SW,SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UF	T. 24 N, R. 46 E, PMM, MT SEC. 14 SWNW,N2SW; SEC. 15 N2,N2S2; MCCONE COUNTY 600.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 SWNW,NWSW; SEC. 15 N2,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 SWNW,NWSW; SEC. 15 N2,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-UG	T. 24 N, R. 46 E, PMM, MT SEC. 15 SWSW; SEC. 22 NWNW; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 NWNW; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 NWNW; LN 14-2 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UH	T. 24 N, R. 46 E, PMM, MT SEC. 18 LOTS 1-3; SEC. 18 SENW; MCCONE COUNTY 143.78 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOT 1; LN 14-11 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-4 SEC. 18 LOTS 2,3; SEC. 18 SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOT 1; LN 14-11 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-4 SEC. 18 LOTS 2,3; SEC. 18 SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UJ	T. 24 N, R. 46 E, PMM, MT SEC. 19 LOT 3; SEC. 19 NWNE,S2NE; SEC. 20 S2NW,N2SW; MCCONE COUNTY 314.97 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 19 W2NE; SEC. 20 S2NW,N2SW; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 19 W2NE; SEC. 20 S2NW,N2SW; LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UK	T. 24 N, R. 46 E, PMM, MT SEC. 20 S2NE,N2SE; SEC. 21 NENE,W2NW,SW; SEC. 22 SWNW,N2SW,NWSE; SEC. 28 NWNW; MCCONE COUNTY 640.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 20 S2NE,N2SE; SEC. 21 W2NW,SW; SEC. 22 SWNW,N2SW,NWSE; SEC. 28 NWNW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 20 S2NE,N2SE; SEC. 21 W2NW,NWSW; SEC. 22 SWNW,N2SW,NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 20 S2NE,N2SE; SEC. 21 W2NW,SW; SEC. 22 SWNW,N2SW,NWSE; SEC. 28 NWNW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 20 S2NE,N2SE; SEC. 21 W2NW,NWSW; SEC. 22 SWNW,N2SW,NWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UL	T. 24 N, R. 46 E, PMM, MT SEC. 22 S2S2; SEC. 27 W2E2,W2; MCCONE COUNTY 640.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 S2S2; SEC. 27 W2E2,W2W2,E2SW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 S2S2; SEC. 27 W2E2,NW,N2SW,SESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 S2S2; SEC. 27 W2E2,W2W2,E2SW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 S2S2; SEC. 27 W2E2,NW,N2SW,SESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UM	T. 24 N, R. 46 E, PMM, MT SEC. 24 S2NW; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-UN	T. 24 N, R. 46 E, PMM, MT SEC. 26 SESE; SEC. 35 NWSE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 35 NWSE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 35 NWSE;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UP	T. 24 N, R. 46 E, PMM, MT SEC. 29 S2NW,SW,NESE; SEC. 30 SENE; SEC. 32 NWNW,NW; MCCONE COUNTY 520.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 SENW,NWSW,NESE; SEC. 30 SENE; SEC. 32 NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 29 SENW,NWSW,NESE; SEC. 30 SENE; SEC. 32 NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UQ	T. 24 N, R. 46 E, PMM, MT SEC. 30 LOTS 3,4; SEC. 30 N2NE,SWNE,SE, E2SW,SE; MCCONE COUNTY 469.95 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 LOT 3; SEC. 30 NENE,SWNE,NESW,NESE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 30 LOTS 3,4; SEC. 30 W2NE,SE, N2SE,SESE; NSO 11-4 SEC. 30 LOT 3; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 30 LOT 3; SEC. 30 NENE,SWNE,NESW,NESE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 30 LOTS 3,4; SEC. 30 W2NE,SE, N2SE,SESE; NSO 11-4 SEC. 30 LOT 3; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UR	T. 24 N, R. 46 E, PMM, MT SEC. 31 NESE; SEC. 32 E2NE,SWNE,N2SW, SES,SE; MCCONE COUNTY 440.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 E2NE,SWNE,N2SW,SES, SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 31 NESE; SEC. 32 SENE,NESE,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 32 E2NE,SWNE,N2SW,SES, SE; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 31 NESE; SEC. 32 SENE,NESE,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UT	T. 24 N, R. 46 E, PMM, MT SEC. 33 W2SW,SES; MCCONE COUNTY 120.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 33 W2SW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 33 NWSW,SES; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 33 W2SW; LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 33 NWSW,SES; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UU	T. 24 N, R. 46 E, PMM, MT SEC. 34 NE,E2NW,NESW,N2SE; MCCONE COUNTY 360.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UV	T. 24 N, R. 46 E, PMM, MT SEC. 34 S2SW,SWSE; MCCONE COUNTY 120.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-UW	T. 25 N, R. 46 E, PMM, MT SEC. 1 W2SW; SEC. 2 S2N2,S2; SEC. 3 SENE,S2NW,S2; SEC. 4 S2NE,SEW,S2; SEC. 5 SENE,NESW,N2SE; SEC. 6 LOT 4; SEC. 11 N2NE,NENW; SEC. 12 W2NE,NWNW; MCCONE COUNTY 1878.52 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 W2SW; SEC. 2 S2NE,SEW,N2SW, W2SE,SESE; SEC. 3 SENE,S2NW,S2; SEC. 4 SWNE,E2SW,SWSW,NESE; SEC. 5 NESW,N2SE; SEC. 6 LOT 4; SEC. 11 N2NE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 2 SWNE,S2NW; SEC. 3 SENE; SEC. 5 SENE,NESW,NWSE; SEC. 6 LOT 4;	T. 25 N, R. 46 E, PMM, MT SEC. 1 W2SW; SEC. 6 LOT 4; SEC. 12 W2NE,NWNW; MCCONE COUNTY 238.52 AC PD CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 W2SW; SEC. 6 LOT 4; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 6 LOT 4;	DEFER T. 25 N, R. 46 E, PMM, MT SEC. 2 S2N2,S2 SEC. 3 SENE,S2NW,S2 SEC. 4 S2NE,SEW,S2; SEC. 5 SENE,NESW,N2SE SEC. 11 N2NE,NENW MCCONE COUNTY 1,640.00 AC PD PENDING FURTHER REVIEW OF RESOURCE VALUES BEING ANALYZED IN THE CURRENT MCFO RMP

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-UX	T. 25 N, R. 46 E, PMM, MT SEC. 9 E2,N2NW,S2SW; SEC. 10 NENW,W2W2,SESW; SEC. 15 N2; MCCONE COUNTY 1040.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-12 SEC. 9 NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	DEFER ALL LANDS	DEFER ALL LANDS PENDING FURTHER REVIEW OF RESOURCE VALUES BEING ANALYZED IN THE CURRENT MCFO RMP
MTM 102757-UY	T. 25 N, R. 46 E, PMM, MT SEC. 12 SESW,S2SE; SEC. 13 N2NE,SENE,NENW; MCCONE COUNTY 280.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-U4	T. 25 N, R. 46 E, PMM, MT SEC. 14 SW,S2SE; SEC. 23 N2NE; SEC. 24 NWNE,SENE,N2NW; MCCONE COUNTY 480.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 W2SW,SESW,S2SE; SEC. 23 N2NE; SEC. 24 SENE,N2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	T. 25 N, R. 46 E, PMM, MT SEC. 14 NESW,S2S2; SEC. 23 N2NE; SEC. 24 NWNE,SENE,N2NW; MCCONE COUNTY 440.00 AC PD CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 S2S2; SEC. 23 N2NE; SEC. 24 SENE,N2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	DEFER T. 25 N, R. 46 E, PMM, MT SEC. 14 NWSW MCCONE COUNTY 40.00 AC PD PENDING FURTHER REVIEW OF RESOURCE VALUES BEING ANALYZED IN THE CURRENT MCFO RMP
MTM 102757-U6	T. 25 N, R. 46 E, PMM, MT SEC. 20 SWNW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-U7	T. 25 N, R. 46 E, PMM, MT SEC. 22 NESE; SEC. 23 SW,S2SE; SEC. 24 S2SW,SWSE; SEC. 25 N2N2,S2S2; MCCONE COUNTY 720.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 NESE; SEC. 23 SW,S2SE; SEC. 24 S2SW,SWSE; SEC. 25 N2NE,NWNW,S2SW,SESE; LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 NESE; SEC. 23 SW,SWSE; SEC. 24 SESW,SWSE; SEC. 25 N2N2,S2S2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 22 NESE; SEC. 23 SW,S2SE; SEC. 24 S2SW,SWSE; SEC. 25 N2NE,NWNW,S2SW,SESE; LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 NESE; SEC. 23 SW,SWSE; SEC. 24 SESW,SWSE; SEC. 25 N2N2,S2S2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-U8</p>	<p>T. 25 N, R. 46 E, PMM, MT SEC. 26 SWNW,SW; SEC. 27 S2S2; SEC. 28 E2SW,SE; SEC. 32 N2,SW; SEC. 33 E2,N2NW,SWNW,SESW; SEC. 34 N2N2,SWNE,SWNW, NWSW,S2S2; SEC. 35 N2NW,SWNW,S2S2; MCCONE COUNTY 2280.00 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 SWNW,SW; SEC. 27 S2S2; SEC. 28 E2SW,SE; SEC. 32 N2,SW; SEC. 33 E2,N2NW,SWNW,SESW; SEC. 34 N2N2,SWNE,SWNW,S2S2; SEC. 35 N2NW,SWNW,S2S2; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 SWNW,SW; SEC. 27 S2S2; SEC. 28 E2SW,SE; SEC. 32 N2N2,S2NE,W2SW,SESW; SEC. 33 E2,N2NW,SWNW,SESW; SEC. 34 N2N2,SWNE,SWNW, NWSW,S2S2; SEC. 35 N2NW,SWNW,S2S2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 26 SWNW,SW; SEC. 27 S2S2; SEC. 28 E2SW,SE; SEC. 32 N2,SW; SEC. 33 E2,N2NW,SWNW,SESW; SEC. 34 N2N2,SWNE,SWNW,S2S2; SEC. 35 N2NW,SWNW,S2S2; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 26 SWNW,SW; SEC. 27 S2S2; SEC. 28 E2SW,SE; SEC. 32 N2N2,S2NE,W2SW,SESW; SEC. 33 E2,N2NW,SWNW,SESW; SEC. 34 N2N2,SWNE,SWNW, NWSW,S2S2; SEC. 35 N2NW,SWNW,S2S2; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>NONE</p>
<p>MTM 102757-U9</p>	<p>T. 26 N, R. 46 E, PMM, MT SEC. 13 E2NE,SESW,N2SE,SWSE; MCCONE COUNTY 240.00 AC 50% U.S. MINERAL INTEREST ACQ</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 13 SESW,SWSE;</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 13 SESW,SWSE;</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-VB	T. 26 N, R. 46 E, PMM, MT SEC. 13 NESW,SWSW,SESE; MCCONE COUNTY 120.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 13 SWSW;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 13 SWSW;	NONE
MTM 102757-VC	T. 26 N, R. 46 E, PMM, MT SEC. 19 LOTS 3,4,9,10; MCCONE COUNTY 111.52 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 SEC. 19 LOTS 3,4; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-13 SEC. 19 LOT 3; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 SEC. 19 LOTS 3,4; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-13 SEC. 19 LOT 3; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-VD	T. 26 N, R. 46 E, PMM, MT SEC. 19 N2SE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-VE	T. 26 N, R. 46 E, PMM, MT SEC. 21 NENW,SWNW,SE; SEC. 22 N2NE,W2SW; MCCONE COUNTY 400.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-VF	T. 26 N, R. 46 E, PMM, MT SEC. 29 NWNW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-VG	T. 26 N, R. 46 E, PMM, MT SEC. 31 LOT 12; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-VH	T. 26 N, R. 46 E, PMM, MT SEC. 33 SENE; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11- 2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	DEFER ALL LANDS	DEFER ALL LANDS PENDING FURTHER REVIEW OF RESOURCE VALUES BEING ANALYZED IN THE CURRENT MCFO RMP
MTM 102757-RN	T. 22 N, R. 47 E, PMM, MT SEC. 5 SWSE; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11- 2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11- 2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-RP	T. 22 N, R. 47 E, PMM, MT SEC. 6 LOTS 4-7; SEC. 6 S2NE,E2SW; SEC. 7 LOTS 1-4; SEC. 7 E2W2; SEC. 18 LOTS 1,2; SEC. 18 NWNE,E2NW; MCCONE COUNTY 817.11 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 6 LOTS 4-7; SEC. 6 S2NE,E2SW; SEC. 7 LOTS 1-4; SEC. 7 E2W2; SEC. 18 LOT 2; SEC. 18 NWNE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 6 LOTS 4-7; SEC. 6 E2SW; SEC. 7 LOTS 1-4; SEC. 7 E2W2; SEC. 18 LOTS 1,2; SEC. 18 NWNE,E2NW;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) CSU 12-4 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 6 LOTS 4-7; SEC. 6 S2NE,E2SW; SEC. 7 LOTS 1-4; SEC. 7 E2W2; SEC. 18 LOT 2; SEC. 18 NWNE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 6 LOTS 4-7; SEC. 6 E2SW; SEC. 7 LOTS 1-4; SEC. 7 E2W2; SEC. 18 LOTS 1,2; SEC. 18 NWNE,E2NW;	NONE
MTM 102757-RQ	T. 22 N, R. 47 E, PMM, MT SEC. 10 SWNW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-RR	T. 23 N, R. 47 E, PMM, MT SEC. 2 NESW; SEC. 4 LOT 1; SEC. 4 NESE; SEC. 9 NWNE; SEC. 10 NWNE; MCCONE COUNTY 199.26 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 NESE; SEC. 9 NWNE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 2 NESW; SEC. 4 LOT 1; SEC. 9 NWNE; SEC. 10 NWNE; TES 16-2 (ALL LANDS) TL 13-1 SEC. 4 LOT 1; SEC. 4 NESE; SEC. 9 NWNE;	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 4 NESE; SEC. 9 NWNE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 2 NESW; SEC. 4 LOT 1; SEC. 9 NWNE; SEC. 10 NWNE; TES 16-2 (ALL LANDS) TL 13-1 SEC. 4 LOT 1; SEC. 4 NESE; SEC. 9 NWNE;	NONE
MTM 102757-RT	T. 23 N, R. 47 E, PMM, MT SEC. 5 SWNE; SEC. 7 LOTS 3,4; SEC. 7 E2SW,SE; SEC. 8 SWNW; SEC. 9 SWSW; MCCONE COUNTY 433.64 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOT 4; SEC. 7 SESW,N2SE; SEC. 8 SWNW; SEC. 9 SWSW; LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOT 4; SEC. 7 SESW,N2SE; SEC. 8 SWNW; SEC. 9 SWSW; LN 14-15 (ALL LANDS) NSO 11-2 ALL LANDS TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-RU	T. 23 N, R. 47 E, PMM, MT SEC. 14 SWNW,NWSW; SEC. 15 E2E2,SWSE; SEC. 23 NWNW; MCCONE COUNTY 320.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 SWNW,NWSW; SEC. 15 E2E2,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 SWNW,NWSW; SEC. 15 E2E2,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-RV	T. 23 N, R. 47 E, PMM, MT SEC. 19 NWNE,SENW,NESW, NWSE,S2SE; SEC. 20 SWSW; SEC. 30 N2NE,SWNE; MCCONE COUNTY 400.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 19 NWNE,SENW,NESW, NWSE,SESE; SEC. 20 SWSW; SEC. 30 N2NE,SWNE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 19 NWNE,SENW,NESW, NWSE,S2SE; SEC. 30 N2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 19 NWNE,SENW,NESW, NWSE,SESE; SEC. 20 SWSW; SEC. 30 N2NE,SWNE; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 19 NWNE,SENW,NESW, NWSE,S2SE; SEC. 30 N2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-RW	T. 23 N, R. 47 E, PMM, MT SEC. 21 N2NW,NESE; SEC. 22 SWSW; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-RX	T. 23 N, R. 47 E, PMM, MT SEC. 28 N2S2; SEC. 29 NWSE; MCCONE COUNTY 200.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 N2SW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 NESW,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 N2SW; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 NESW,N2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-RY	T. 23 N, R. 47 E, PMM, MT SEC. 30 LOTS 2-4; SEC. 30 SENW,NESW; SEC. 31 LOTS 1-4; SEC. 31 NENE; MCCONE COUNTY 383.72 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-R3	T. 24 N, R. 47 E, PMM, MT SEC. 3 LOTS 2-4; SEC. 4 LOTS 1-3; SEC. 4 SESW,S2SE; SEC. 9 N2N2,NWSW,SESE; MCCONE COUNTY 533.05 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 3 LOT 2; SEC. 4 LOTS 1-3; SEC. 4 SESW,S2SE; SEC. 9 N2N2,NWSW,SESE; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 3 LOT 2; SEC. 4 LOTS 1-3; SEC. 4 SESW,S2SE; SEC. 9 N2N2,NWSW,SESE; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-R4	T. 24 N, R. 47 E, PMM, MT SEC. 6 LOTS 1-4; MCCONE COUNTY 116.87 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 6 LOT 1,3,4; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 6 LOT 1,3,4; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-R6	T. 24 N, R. 47 E, PMM, MT SEC. 7 SE; SEC. 17 NW; SEC. 18 N2NE,SENE,NENW; MCCONE COUNTY 480.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 NESE,S2SE; SEC. 17 NW; SEC. 18 N2NE,SENE,NENW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 S2SE,NESE; SEC. 17 NW; SEC. 18 N2NE,SENE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 NESE,S2SE; SEC. 17 NW; SEC. 18 N2NE,SENE,NENW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 S2SE,NESE; SEC. 17 NW; SEC. 18 N2NE,SENE,NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-R7	T. 24 N, R. 47 E, PMM, MT SEC. 11 SENE; SEC. 12 SWSW; SEC. 14 NESW; MCCONE COUNTY 120.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-R8	T. 24 N, R. 47 E, PMM, MT SEC. 21 NENE; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-R9	T. 24 N, R. 47 E, PMM, MT SEC. 24 S2NE,N2S2,SESW,S2SE; MCCONE COUNTY 360.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 24 SENE,N2SW,SESW,W2SE, SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 SENE,N2S2,SESW,S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 24 SENE,N2SW,SESW,W2SE, SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 SENE,N2S2,SESW,S2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TA	T. 24 N, R. 47 E, PMM, MT SEC. 31 SESE; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TB	T. 24 N, R. 47 E, PMM, MT SEC. 35 SWNE,NENW,S2NW, NWSE; MCCONE COUNTY 200.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 35 SWNE,NENW,SENW, NWSE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 35 NENW,S2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 35 SWNE,NENW,SENW, NWSE; LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 35 NENW,S2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TC	T. 25 N, R. 47 E, PMM, MT SEC. 1 LOTS 1-4; SEC. 1 S2SW,NESE; SEC. 12 NWNE,SENE,NW, NWSW,E2SE; MCCONE COUNTY 644.96 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOTS 1,4; SEC. 1 NESE; SEC. 12 SENE,NWNE,E2NW, SWNW,NWSW,E2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 1 LOTS 1,4; SEC. 1 NESE; SEC. 12 SENE,NWNE,E2NW, SWNW,NWSW,E2SE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TD	T. 25 N, R. 47 E, PMM, MT SEC. 3 NWSW; SEC. 4 NESW,NESE; SEC. 5 SWNW,NESE; SEC. 6 SENE; MCCONE COUNTY 240.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 3 NWSW; SEC. 4 NESW; SEC. 5 NESE; SEC. 6 SENE; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 NWSW; SEC. 4 NESW,NESE; SEC. 5 SWNW,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 3 NWSW; SEC. 4 NESW; SEC. 5 NESE; SEC. 6 SENE; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 3 NWSW; SEC. 4 NESW,NESE; SEC. 5 SWNW,NESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TE	T. 25 N, R. 47 E, PMM, MT SEC. 7 SWNE,SWSE; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TF	T. 25 N, R. 47 E, PMM, MT SEC. 9 SESE; SEC. 10 E2E2,SWSE; SEC. 11 NENE,S2NE,W2,N2SE, SWSE; MCCONE COUNTY 800.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 10 E2E2,SWSE; SEC. 11 NENE,S2NE,W2,N2SE, SWSE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 10 E2E2,SWSE; SEC. 11 NENE,S2NE,W2,N2SE, SWSE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TG	T. 25 N, R. 47 E, PMM, MT SEC. 14 NWNE,S2NE,W2; SEC. 15 NE,E2NW; MCCONE COUNTY 680.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 S2NE,NWNE,N2NW,SW; SEC. 15 SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 14 S2NE,NWNE,N2NW,SW; SEC. 15 SENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TH	T. 25 N, R. 47 E, PMM, MT SEC. 17 SESW,S2SE; SEC. 19 LOTS 1-4; SEC. 19 W2E2,E2W2,NESE; SEC. 20 N2NE,SENE,NENW,NWSW; SEC. 21 W2NW; SEC. 30 LOTS 1,2; SEC. 30 E2NW; MCCONE COUNTY 1076.03 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 SESW,S2SE; SEC. 19 LOTS 1-4; SEC. 19 W2NE,E2NW,NESW,N2SE; SEC. 20 N2NE,SENE,NWSW; SEC. 21 SWNW; SEC. 30 LOTS 1,2; SEC. 30 E2NW; CSU 12-3 SEC. 17 SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 SESW SEC. 19 LOTS 1-4; SEC. 19 W2E2,E2NW,SESW; SEC. 20 NENW; SEC. 21 NWNW; SEC. 30 LOTS 1,2; SEC. 30 E2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 17 SESW,S2SE; SEC. 19 LOTS 1-4; SEC. 19 W2NE,E2NW,NESW,N2SE; SEC. 20 N2NE,SENE,NWSW; SEC. 21 SWNW; SEC. 30 LOTS 1,2; SEC. 30 E2NW; CSU 12-3 SEC. 17 SESE; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 17 SESW SEC. 19 LOTS 1-4; SEC. 19 W2E2,E2NW,SESW; SEC. 20 NENW; SEC. 21 NWNW; SEC. 30 LOTS 1,2; SEC. 30 E2NW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TJ	T. 25 N, R. 47 E, PMM, MT SEC. 21 SESE; SEC. 22 NENW,S2NW,S2; SEC. 23 SWNW,SW; SEC. 27 N2N2,SWNW,NESE; SEC. 35 N2NW; MCCONE COUNTY 1000.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 21 SESE; SEC. 22 NENW,S2NW,SW,NWSE, SESE; SEC. 23 SWNW,N2SW; SEC. 27 N2N2,SWNW; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 21 SESE; SEC. 22 E2W2,NWSE,SESE; SEC. 23 SWNW,SW; SEC. 27 NWNE,N2NW,SWNW; SEC. 35 NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 21 SESE; SEC. 22 NENW,S2NW,SW,NWSE, SESE; SEC. 23 SWNW,N2SW; SEC. 27 N2N2,SWNW; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 21 SESE; SEC. 22 E2W2,NWSE,SESE; SEC. 23 SWNW,SW; SEC. 27 NWNE,N2NW,SWNW; SEC. 35 NENW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TK	T. 25 N, R. 47 E, PMM, MT SEC. 23 SENE; SEC. 24 N2NW,SEW,NESW; MCCONE COUNTY 200.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 N2NW,SEW,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 24 N2NW,SEW,NESW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TL	T. 25 N, R. 47 E, PMM, MT SEC. 28 N2SW; SEC. 29 NE,SE,SW,SWSW,NESE; SEC. 31 S2NE; SEC. 32 W2NW,NWSW; MCCONE COUNTY 560.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 N2SW; SEC. 29 NE,SE,SW,SWSW,NESE; SEC. 31 SENE; SEC. 32 W2NW; LN 14-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 N2SW; SEC. 29 S2NE,SWSW,NESE; SEC. 31 S2NE; SEC. 32 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 28 N2SW; SEC. 29 NE,SE,SW,SWSW,NESE; SEC. 31 SENE; SEC. 32 W2NW; LN 14-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 28 N2SW; SEC. 29 S2NE,SWSW,NESE; SEC. 31 S2NE; SEC. 32 NWSW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TM	T. 25 N, R. 47 E, PMM, MT SEC. 32 E2NE,SE; SEC. 33 NWSW; MCCONE COUNTY 280.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TN	T. 25 N, R. 47 E, PMM, MT SEC. 34 SE; SEC. 35 NE,S2; MCCONE COUNTY 640.00 AC 50% U.S. MINERAL INTEREST ACQ	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 34 W2SE; SEC. 35 SWSW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 34 S2SE,NWSE; SEC. 35 S2SW,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 34 W2SE; SEC. 35 SWSW; LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 34 S2SE,NWSE; SEC. 35 S2SW,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TP	T. 26 N, R. 47 E, PMM, MT SEC. 1 SENW; MCCONE COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TQ	T. 26 N, R. 47 E, PMM, MT SEC. 3 SESE; SEC. 10 NWNE; SEC. 11 S2NE,NWNW,SEW,SW, N2SE,SWSE; SEC. 14 NWNE,NW; SEC. 15 NENE; MCCONE COUNTY 760.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 SEC. 3 SESE; SEC. 10 NWNE; SEC. 11 S2NE,NWNW,SEW,N2SW, SESW,N2SE,SWSE; SEC. 15 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 SEC. 3 SESE; SEC. 10 NWNE; SEC. 11 S2NE,NWNW,SEW,N2SW, SESW,N2SE,SWSE; SEC. 15 NENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TR	T. 26 N, R. 47 E, PMM, MT SEC. 7 LOT 1; SEC. 7 E2NE; MCCONE COUNTY 117.35 AC PD	CR 16-1 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 SEC. 7 LOT 1; NSO 11-13 SEC. 7 LOT 1; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 SEC. 7 LOT 1; NSO 11-13 SEC. 7 LOT 1; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TT	T. 26 N, R. 47 E, PMM, MT SEC. 9 SE; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TU	T. 26 N, R. 47 E, PMM, MT SEC. 18 LOT 1; SEC. 18 NENW; MCCONE COUNTY 77.69 AC 50% U.S. MINERAL INTEREST ACQ	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TV	T. 26 N, R. 47 E, PMM, MT SEC. 19 LOT 1; SEC. 19 SENW; MCCONE COUNTY 77.64 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-TW	T. 26 N, R. 47 E, PMM, MT SEC. 25 N2NE,SENE,NESE; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 25 N2NE,SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 25 N2NE,SENE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TX	T. 26 N, R. 47 E, PMM, MT SEC. 27 NWSW; SEC. 34 SWNW; MCCONE COUNTY 80.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 NWSW; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 27 NWSW; LN 14-2 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-TY	T. 26 N, R. 47 E, PMM, MT SEC. 29 SWSW; SEC. 31 E2SE; SEC. 32 NWNW,W2SW; MCCONE COUNTY 240.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-T3	T. 26 N, R. 47 E, PMM, MT SEC. 30 LOT 2; SEC. 30 N2NE,E2NW; MCCONE COUNTY 197.96 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 30 LOT 2;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-11 (ALL LANDS) LN 14-12 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 30 LOT 2;	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-T4	T. 26 N, R. 47 E, PMM, MT SEC. 35 SENE,NENW,NESW,N2SE, SESE; MCCONE COUNTY 240.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 35 SENE,NENW,NESW, NWSE,SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 35 SENE,NENW,NESW, NWSE,SESE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-C7	T. 27 N, R. 48 E, PMM, MT SEC. 27 S2NW; SEC. 28 S2NE; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 SEC. 28 S2NE; NSO 11-10 SEC. 28 S2NE; NSO 11-13 SEC. 27 SWNW; SEC. 28 S2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 SEC. 28 S2NE; NSO 11-10 SEC. 28 S2NE; NSO 11-13 SEC. 27 SWNW; SEC. 28 S2NE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-C8	T. 27 N, R. 48 E, PMM, MT SEC. 32 E2E2; MCCONE COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
<p>MTM 102757-DP</p>	<p>T. 27 N, R. 49 E, PMM, MT SEC. 18 LOTS 1-4; SEC. 19 E2SW,S2SE; SEC. 20 E2NE,S2; SEC. 21 NWNE,S2N2,SW,W2SE; SEC. 22 SWNW; MCCONE COUNTY 1167.66 AC PD</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOTS 1-4; SEC. 19 E2SW,S2SE; SEC. 20 E2NE,S2; SEC. 21 NWNE,SENE,S2NW,SW, W2SE; SEC. 22 SWNW; CSU 12-4 SEC. 18 LOTS 1-4; SEC. 19 E2SW,S2SE; SEC. 20 E2NE,S2; SEC. 21 NWNE,S2N2,N2SW; SEC. 22 SWNW; LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 SEC. 18 LOTS 1-4; NSO 11-10 SEC. 18 LOTS 1-4;</p>	<p>CR 16-1 (ALL LANDS) CSU 12-1 SEC. 18 LOTS 1-4; SEC. 19 E2SW,S2SE; SEC. 20 E2NE,S2; SEC. 21 NWNE,SENE,S2NW,SW, W2SE; SEC. 22 SWNW; CSU 12-4 SEC. 18 LOTS 1-4; SEC. 19 E2SW,S2SE; SEC. 20 E2NE,S2; SEC. 21 NWNE,S2N2,N2SW; SEC. 22 SWNW; LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 SEC. 18 LOTS 1-4; NSO 11-10 SEC. 18 LOTS 1-4;</p>	<p>NONE</p>
		<p>SEC. 21 NWNE,SWNE,S2NW; SEC. 22 SWNW; NSO 11-13; SEC. 18 LOTS 1-4; SEC. 20 E2NE; SEC. 21 S2N2; SEC. 22 SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>SEC. 21 NWNE,SWNE,S2NW; SEC. 22 SWNW; NSO 11-13; SEC. 18 LOTS 1-4; SEC. 20 E2NE; SEC. 21 S2N2; SEC. 22 SWNW; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)</p>	<p>NONE</p>

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-DQ	T. 27 N, R. 49 E, PMM, MT SEC. 23 SWNE; MCCONE COUNTY 40. 00 AC PD	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-13 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-12 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-13 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-DT	T. 27 N, R. 49 E, PMM, MT SEC. 24 LOT 4; SEC. 24 SWSE; MCCONE COUNTY 85. 65 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 24 LOT 4; LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 SEC. 24 LOT 4; NSO 11-10 SEC. 24 LOT 4; NSO 11-13 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 24 LOT 4; LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 SEC. 24 LOT 4; NSO 11-10 SEC. 24 LOT 4; NSO 11-13 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-DR	T. 27 N, R. 51 E, PMM, MT SEC. 25 LOT 4; RICHLAND COUNTY 11.35 AC PD	CR 16-1 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-9 SEC. 25 LOT 4; NSO 11-10 SEC. 25 LOT 4; NSO 11-13 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-14 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-9 SEC. 25 LOT 4; NSO 11-10 SEC. 25 LOT 4; NSO 11-13 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-GA	T. 33 N, R. 51 E, PMM, MT SEC. 2 LOT 2; DANIELS COUNTY 41.64 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS)	NONE
MTM 102757-ME	T. 23 N, R. 52 E, PMM, MT SEC. 2 SENW; RICHLAND COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-GB	T. 33 N, R. 52 E, PMM, MT SEC. 7 LOTS 7-10; SHERIDAN COUNTY 133.35 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOTS 9,10; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 LOTS 7,9,10; TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 SEC. 7 LOTS 9,10; LN 14-15 (ALL LANDS) NSO 11-2 SEC. 7 LOTS 7,9,10; TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-QA	T. 34 N, R. 52 E, PMM, MT SEC. 1 LOT 1; SHERIDAN COUNTY 39.97 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-QB	T. 34 N, R. 52 E, PMM, MT SEC. 8 NENW; SHERIDAN COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-QC	T. 34 N, R. 52 E, PMM, MT SEC. 9 N2NE,SWNE,W2SE; SEC. 10 NENW; SHERIDAN COUNTY 240.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 9 W2NE,W2SE; SEC. 10 NENW; NSO 11-8 SEC. 9 N2NE,NWSE SEC. 10 NENW TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 9 N2NE;	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 9 W2NE,W2SE; SEC. 10 NENW; NSO 11-8 SEC. 9 N2NE,NWSE SEC. 10 NENW TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 SEC. 9 N2NE;	NONE
MTM 102757-EA	T. 34 N, R. 52 E, PMM, MT SEC. 22 SWSW,S2SE; SEC. 27 NENE; SHERIDAN COUNTY 160.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 SWSW; TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 22 SWSW; TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-QD	T. 34 N, R. 52 E, PMM, MT SEC. 25 SWSE; SHERIDAN COUNTY 40.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE
MTM 102757-QE	T. 34 N, R. 53 E, PMM, MT SEC. 11 NE,N2SE; SEC. 12 NW,NWSW,SWSE; SHERIDAN COUNTY 480.00 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 N2NE,SENE,NWSE; SEC. 12 NW,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 SEC. 11 N2NE,SENE,NWSE; SEC. 12 NW,SWSE; TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

APPENDIX A - MILES CITY FIELD OFFICE

PARCEL NUMBER	PARCEL DESCRIPTION	PROPOSED FOR LEASING ALTERNATIVE B	PROPOSED FOR LEASING ALTERNATIVE C (ONLY IF EA INCLUDES ALTERNATIVE C)	PROPOSED FOR DEFERRAL-NO LEASING
MTM 102757-QF	T. 34 N, R. 54 E, PMM, MT SEC. 7 LOT 3; SHERIDAN COUNTY 37.08 AC PD	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	CR 16-1 (ALL LANDS) CSU 12-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS)	NONE
MTM 102757-FA	T. 33 N, R. 58 E, PMM, MT SEC. 27 LAKEBED RIPAR TO LOT 5 DESC BY M&B (38.69 AC) (M&B DESC INCL POR SEC. 26); SEC. 27 LOT 5; SHERIDAN COUNTY 51.62 AC PD	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	CR 16-1 (ALL LANDS) LN 14-15 (ALL LANDS) NSO 11-2 (ALL LANDS) NSO 11-9 (ALL LANDS) TES 16-2 (ALL LANDS) TL 13-1 (ALL LANDS) TL 13-3 (ALL LANDS)	NONE

Appendix B – Miles City Field Office Stipulation Descriptions

Stipulation Number	Stipulation Name/Brief Description
CR 16-1	<p>CULTURAL RESOURCES LEASE STIPULATION This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities.</p>
CSU 12-1	<p>CONTROLLED SURFACE USE STIPULATION Surface occupancy or use is subject to the following special operating constraint: Prior to surface disturbance on slopes over 30 percent, an engineering/reclamation plan must be approved by the authorized officer.</p>
CSU 12-3	<p>CONTROLLED SURFACE USE STIPULATION Surface occupancy or use is subject to the following special operating constraint: Prior to surface disturbance, prairie dog colonies and complexes 80 acres or more in size will be examined to determine the absence or presence of black-footed ferrets. The findings of this examination may result in some restrictions to the operator's plans or may even preclude use and occupancy that would be in violation of the Endangered Species Act of 1973.</p>
CSU 12-4	<p>CONTROLLED SURFACE USE STIPULATION Surface occupancy or use is subject to the following special operating constraint: Prior to surface disturbance, a surface use plan of operations (SUPO) for oil and gas activities must be approved for black-footed ferret reintroduction areas by the authorized officer in consultation with the U.S. Fish and Wildlife Service (FWS).</p>
LN 14-1	<p>LEASE NOTICE Land Use Authorizations incorporate specific surface land uses allowed on Bureau of Land Management (BLM) administered lands by authorized officers and those surface uses acquired by BLM on lands administered by other entities. These BLM authorizations include rights-of-way, leases, permits, conservation easements, and recreation and public purpose leases and patents.</p>
LN 14-2	<p>LEASE NOTICE CULTURAL RESOURCES The Surface Management Agency is responsible for assuring that the leased lands are examined to determine if cultural resources are present and to specify mitigation measures.</p>
LN 14-11	<p>LEASE NOTICE GREATER SAGE-GROUSE HABITAT The lease may in part, or in total contain important Greater Sage-Grouse habitats as identified by the BLM, either currently or prospectively. The operator may be required to implement specific measures to reduce impacts of oil and gas operations on the Greater Sage-Grouse populations and habitat quality. Such measures shall be developed during the application for permit to drill on-site and environmental review process and will be consistent with the lease rights granted.</p>
LN 14-12	<p>LEASE NOTICE PALEONTOLOGICAL RESOURCE INVENTORY REQUIREMENT This lease has been identified as being located within geologic units rated as being moderate to very high potential for containing significant paleontological resources. The locations meet the criteria for class 3, 4 and/or 5 as set forth in the Potential Fossil Yield Classification System, WO IM 2008-009, Attachment 2-2. The BLM is responsible for assuring that the leased lands are examined to determine if paleontological resources are present and to specify mitigation measures. Guidance for application of this requirement can be found in WO IM 2008-009 dated October 15, 2007, and WO IM 2009-011 dated October 10, 2008. Prior to undertaking any surface-disturbing activities on the lands covered by this lease, the lessee or project proponent shall contact the BLM to determine if a paleontological resource inventory is required. If an inventory is required, the lessee or project proponent</p>

Stipulation Number	Stipulation Name/Brief Description
	<p>will complete the inventory subject to the following: the project proponent must engage the services of a qualified paleontologist, acceptable to the BLM, to conduct the inventory. the project proponent will, at a minimum, inventory a 10-acre area or larger to incorporate possible project relocation which may result from environmental or other resource considerations. paleontological inventory may identify resources that may require mitigation to the satisfaction of the BLM as directed by WO IM 2009-011.</p>
LN 14-14	<p>LEASE NOTICE The lease is located adjacent to known historic properties that are or may be eligible for listing on the National Register of Historic Places (NRHP). The lease may in part or whole contribute to the importance of the historic properties and values, and listing on the NRHP. The operator may be required to implement specific measures to reduce impacts of oil and gas operations on historic properties and values. These measures may include, but are not limited to, project design, location, painting and camouflage. Such measures shall be developed during the on-site inspection and environmental review of the application for permit to drill (APD), and shall be consistent with lease rights.</p>
LN 14-15	<p>LEASE NOTICE SPRAGUE’S PIPIT The lease area may contain habitat for the federal candidate Sprague’s pipit. The operator may be required to implement specific measures to reduce impacts of oil and gas operations on Sprague’s pipits, their habitat, and overall population. Such measures would be developed during the application for permit to drill and environmental review processes, consistent with lease rights. If the US Fish and Wildlife Service lists the Sprague’s pipit as threatened or endangered under Endangered Species Act, the BLM would enter into formal consultation on proposed permits that may affect the Sprague’s pipit and its habitat. Restrictions, modifications, or denial of permits could result from the consultation process.</p>
NSO 11-2	<p>NO SURFACE OCCUPANCY STIPULATION No surface occupancy or use is allowed within riparian areas, 100-year flood plains of major rivers, and on water bodies and streams.</p>
NSO 11-4	<p>NO SURFACE OCCUPANCY STIPULATION No surface occupancy or use is allowed within one-quarter mile of grouse leks.</p>
NSO 11-8	<p>NO SURFACE OCCUPANCY STIPULATION No surface occupancy or use is allowed within one-half mile of known ferruginous hawk nest sites which have been active within the past 2 years.</p>
NSO 11-9	<p>NO SURFACE OCCUPANCY STIPULATION No surface occupancy or use is allowed within one-quarter mile of wetlands identified as piping plover habitat.</p>
NSO 11-10	<p>NO SURFACE OCCUPANCY STIPULATION No surface occupancy or use is allowed within one-quarter mile of wetlands identified as interior least tern habitat.</p>
NSO 11-12	<p>NO SURFACE OCCUPANCY STIPULATION No surface occupancy or use is allowed within designated paleontological sites.</p>
NSO 11-13	<p>NO SURFACE OCCUPANCY STIPULATION No surface occupancy or use is allowed within developed recreation areas and undeveloped recreation areas receiving concentrated public use.</p>
TES 16-2	<p>ENDANGERED SPECIES ACT SECTION 7 CONSULTATION STIPULATION The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development, and require modifications to or disapprove proposed activity that is likely to result in jeopardy to proposed or listed threatened or endangered species or designated or proposed critical habitat.</p>

Stipulation Number	Stipulation Name/Brief Description
TL 13-1	<p>TIMING LIMITATION STIPULATION</p> <p>No surface use is allowed within crucial winter range for wildlife for the time period December 1 to March 31 to protect crucial white-tailed deer, mule deer, elk, antelope, moose, bighorn sheep, and sage grouse winter range from disturbance during the winter use season, and to facilitate long-term maintenance of wildlife populations. This stipulation does not apply to operation and maintenance of production facilities.</p>
TL 13-3	<p>TIMING LIMITATION STIPULATION</p> <p>No surface use is allowed from March 1 to June 15 in grouse nesting habitat within two miles of a lek. This stipulation does not apply to operation and maintenance of production facilities.</p>
TL 13-4	<p>TIMING LIMITATION STIPULATION</p> <p>No surface use is allowed within one-half mile of raptor nest sites which have been active within the past 2 years during the time period March 1 - August 1 to protect nest sites of raptors which have been identified as species of special concern. This stipulation does not apply to operation and maintenance of production facilities.</p>

Appendix C – Reasonably Foreseeable Development (RFD) Scenario Forecast for Area of Analysis

The RFD for this EA is based on information contained in the RFD developed in 2005 and revised in 2012 for the MCFO RMP. The RFD prepared for the MCFO RMP contains the number of possible oil and gas wells that could be drilled and produced in the MCFO area and used to analyze the possible number of well drilled for the 203 nominated lease parcels. These well numbers are only an estimate based on historical drilling and geologic data. The actual number of wells drilled and produced, if any, is influenced by many factors such as additional geologic data, technology, economics, and regulations. The 203 lease parcels are not identified within potential development for coal bed methane.

The RFD for this EA contains the number of possible oil and gas wells that could be drilled in each of the three development potential areas with lease parcels. These development potential areas are defined as high, moderate, and low potential areas. Based on the development potential area boundaries some of the parcels may fall in more than one development area and have two different potential development scenarios.

High Potential

Of the 86,924 lease parcel acres located in whole or in part in Daniels, McCone, Richland, and Sheridan Counties, 5,282 parcel acres (0.087 percent) are in an area of High Development Potential. The RFD scenario forecasts a range of 711 to 1426 oil wells and 834 to 1674 gas wells could be drilled in this development area. The range for federal wells is 165 to 331 oil wells and 194 to 388 gas wells.

Moderate Potential

Of the 86,237 lease parcels located in Daniels, McCone, Richland, and Sheridan Counties, 63,370 parcel acres (0.95 percent) are in whole or in part in the area of Moderate Development Potential. All lease parcels with moderate potential are located in McCone County. The RFD scenario forecasts a range of 367 to 922 oil wells and 431 to 1083 gas wells could be drilled in this development area. The range for federal wells is 85 to 214 oil wells and 100 to 251 gas wells.

Low Potential

Of the 86,237 lease parcels located in Daniels, McCone, Richland, and Sheridan Counties, 17,584 parcel acres (0.13 percent) are in whole or in part in the area of Low Development Potential. All lease parcels with Low Potential are located in McCone County. The RFD scenario forecasts a range of 296 to 595 oil wells and 348 to 699 gas wells could be drilled in this development area. The range for federal wells is 69 to 138 oil wells and 81 to 162 gas wells.

The MBOGC sets the spacing requirements for oil and gas wells in the state of Montana. Current well spacing for wildcat gas wells is 640 acres per well for each producing formation. Oil well spacing is based on the well depth. Currently, for oil wells at a depth between 0 and 6,000 feet the spacing is one well per 40 or 80 acres, for 6,001 to 11,000 feet the spacing is one well per 160 acres, and for wells deeper than 11,001 feet the spacing is one well per 320 acres. The MBOGC will review spacing when a new field is discovered and the exploration company

requests the establishment of permanent spacing that is different from the standard statewide spacing. Well spacing can be changed by the MBOGC after lease operators provide geologic, engineering, and economic data to the Board for review. A decision is generally rendered at a Board hearing and a Board Order is issued establishing the new spacing requirements. Board Orders for existing fields are available on the MBOGC website.

Appendix D - Potential Surface Disturbance Associated with Oil & Gas Exploration and Development

The potential number of acres disturbed by exploration and development activities is shown in Table D-2. The potential acres of disturbance reflect acres typically disturbed by construction, drilling, and production activities, including infrastructure installation throughout the MCFO. Typical exploration and development activities and associated acres of disturbance were used as assumptions for analysis purposes in this EA. The assumptions were not applied to Alternative A because the lease parcel would not be recommended for lease; therefore, no wells would be drilled or produced on the lease parcel and no surface disturbance would occur on those lands from exploration and development activities.

Table D-1. Total RFD Projected Disturbance for Oil and Gas Wells and Associated Production Facilities

Facilities		Exploratory Well Disturbance (acres/well)	Construction Disturbance (acres/well)	Operation/Production Disturbance (acres/well)
		Short-Term – 2 Years		Long-Term
Well Pad (360-foot by 360-foot pad during drilling and construction reduced to 200-foot by 200 foot pad during operation)		3	3	1
Access Roads and Routes to Well Sites	Two-track (12-foot wide by 0.21 miles long)	N/A	0.30	0.30
	Graveled (12-foot wide by 0.075 miles long)	0.5	0.10	0.10
	Bladed (12-foot wide by 0.05 miles)	0.5	0.075	0.075
Utility Lines	Water lines (15-foot by 0.20 miles)	N/A	0.35	1
	Overhead Electric (10-foot by 0.15 miles)	N/A	0.20	0.20
	Underground Electric (15-foot by 0.20 miles)	N/A	0.35	0
Transportation Lines	Intermediate Pressure Gas Line to and from field compressor (25-foot by 0.08 miles)	N/A	0.25	0.001
	High Pressure Gas or Crude Oil Gathering Line (25-foot by 0.3 miles)	N/A	0.9	0.2
Processing Area	Tank Battery (one 0.50-acre tank battery per 12.5 wells)	N/A	0.020	0.04
	Access Roads (25-foot by 0.05 miles)	N/A	0.15	0.15
	Field Compressor (0.5-acre pad per 12.5 wells)	N/A	0.2	0.04
	Sales Compressor (2-acre pad for 240 wells)	N/A	0.01	0.01
	Sales Line (25-foot by 6 miles per 240 wells)	N/A	0.075	0.075
Produced Water Management	Produced Water Pipeline (25-foot by 0.3 miles)	N/A	0.9	0.2

	Water Plant/Injection Well (6 acres site per 12.5 wells)	N/A	0.25	0.5
Total Disturbance per Conventional Oil or Gas Well (acres)		4	7.1	3

Appendix E - Additional Information on Long Medicine Wheel Site and Adjacent Area

Long Medicine Wheel has been nominated for important cultural resource values (179 BLM-administered acres). The Long Medicine Wheel area meets relevance criterion 1 for containing significant historic and cultural values. The cultural manifestations displayed at the Long Medicine Wheel site are rare. The Long Medicine Wheel archeological site also meets importance criterion 1 for possessing more than locally significant qualities. This site is regionally renowned, rare, and a sensitive site type of interest and concern to American Indians. The site possesses significant qualities that make it important and of interest to the region's archeological community. The site is considered eligible for nomination to the National Register of Historic Places (NRHP) and eligible for consideration as a traditional cultural property (TCP).

The Long Medicine Wheel site also meets importance criterion 2 for possessing values that are fragile, sensitive, fairly rare, irreplaceable, exemplary, unique, endangered, threatened, and vulnerable to adverse change. Although the site is not “one of a kind,” all medicine wheel type sites are considered rare and each has its own unique properties. The site and the information it contains are unique and irreplaceable. The fact that this site is a ceremonial site type makes it of particular interest to American Indians and eligible for designation as a TCP. The site is also threatened, endangered, and vulnerable to both erosion and the loss of the site's valuable information to artifact collectors.

The Long Medicine Wheel area is approximately 179 acres of BLM-administered surface located in northeastern Montana in north-central McCone County, about 6 miles south of the Missouri River and 12 miles southwest of Wolf Point, Montana.

The Long Medicine Wheel (Site 24MC148) is a large stone circle of over 25 meters in diameter with a central small stone cairn or rock pile. This site functioned as a prehistoric American Indian ceremonial circle and is located on top of a high prominent butte in northern McCone County. This site is significant because it is one of only five medicine wheels recorded in the Northern Plains, and it is the only known site to be recorded on BLM-administered lands within the MCFO planning area.

Ethnographic overview studies completed for the MCFO have identified this site type to be of interest and concern to American Indians. This historic property is also protected under the National Historic Preservation Act of 1966, American Indian Religious Freedom Act (42 U.S.C. 1996), Native American Graves Protection and Repatriation Act, Executive Order 13007 (May 24, 1996), and other statutes and executive orders. Because the Long Medicine Wheel site meets the relevance and importance criteria, it is recommended for ACEC designation.

In addition, the Long Medicine Wheel proposed ACEC contains a significant area of Paleontological importance. The Long Medicine Wheel Paleontological Area contains both Hell Creek Formation and Tullock member of the Fort Union Formation.

The Hell Creek Formation is significant for paleontological resources spanning the time at the end of the Cretaceous Period, while the Tullock member of the Fort Union is significant for paleontological resources spanning the time at the beginning of the age of mammals. The

outcrops of these beds are some of the few places in the world that preserve a continuous record just before the mass extinction of the dinosaurs and other forms of life and the succeeding rise and dominance of mammals . The Long Medicine Wheel Paleontological area is an example of this record, owing to the good exposures of the bedrock and the preservation of the fossils.

The Long Medicine Wheel Paleontological area is located in both Potential Fossil Yield Classification (PFYC) areas 5 and 4. The Hell Creek Formation is classified as PFYC-5 (very high potential for yielding significant fossil occurrences), while the Tullock member of the Fort Union is classified as PFYC-4 (high potential for yielding significant fossil occurrences). Due to the significance of the fossils in this area, the area is susceptible to vandalism and from unauthorized collection.

In 2011 BLM contracted a paleontological study of Long Medicine Wheel Paleontological area (320 acres) where 12 new paleo localities were located and recorded, two are extremely significant. All new localities occur within the upper portion of the late Cretaceous Hell Creek Formation. One of the two new significant localities includes a partial mammalian skeleton and both require immediate study and fossil salvage to preserve the extremely sensitive and scientifically important specimens. The other new locality contains the remains of a possible large ornithomimid dinosaur in close stratigraphic occurrence to the Cretaceous-Tertiary (TK) boundary, the highest (in the formation-most recent) ever located.

Already, at least one scientific paper has been written based on research done in this area and this paper recommends immediate additional research and salvage. The area will continue to provide information as new material weathers out of the rock. This area is recommended for designation as a Designated Paleontological Locality, the same as the Garbani, Harbicht Hill and Flat Creek localities.

Appendix F –Description of Lease Parcel ROW Encumbrances on BLM Surface

The following 35 lease parcels with BLM administered surface have the following authorized BLM Rights-of Way (ROWS) on them:

MTM-102757-E3 (79.95 Acres Public Domain (PD) Federal Surface – McCone County)

MTM-34858 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW

[T21N, R45E, Section 1, Lots 1 and 2]

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW

[T21N, R45E, Section 1, Lots 1 and 2]

MTM-85029 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW

[T21N, R45E, Section 1, Lots 1 and 2]

MTM-98647 – Mid Rivers Telephone Coop – 30’ Buried Telephone Cable ROW

[T21N, R45E, Section 1, Lots 1 and 2]

MTM-033135 – Montana Highway Commission – 400’ Circle or thwest Highway ROW

[T21N, R45E, Section 1, Lots 1 and 2]

MTM-102757-E7 (120.00 Acres Public Domain Federal (PD) Surface – McCone County)

MTM-34858 – Mid Rivers Telephone Coop – 30’ Buried Telephone Cable ROW

[T21N, R45E, Section 7, NWSE]

MTM-102757-FB (240 Acres Public Domain (PD) Surface - McCone County)

MTM-34858 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW

[T21N, R45E, Section 20, W2NW]

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW

[T21N, R45E, Section 20, SENW]

MTM-102757-FJ (400.00 Acres Public Domain Surface - McCone County)

MTM-34858 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW

[T22N, R45E, Section 13, NWNW, SWSW]

MTM-85029 – Mid Rivers Telephone Coop. - 20’ Buried Telephone Cable ROW

[T22N, R45E, Section 13, NWNW,SWSW]

MTM-102757-FK (1,978.17 Acres Public Domain Surface - McCone County)

MTM-046026 – Bureau of Reclamation – 125’ 230 kV Overhead Powerline ROW

[T22N, R45E, Section 19, Lots 3 and 4, SESW]

MTM-102757-FM (80.00 Acres Public Domain Surface - McCone County)

MTM-34858 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW

[T22N, R45E, Section 26, N2NE]

MTM-85029 – Mid Rivers Telephone Coop. - 20’ Buried Telephone Cable ROW

[T22N, R45E, Section 26, N2NE]

MTM-102757-FQ (2,186.40 Acres Public Domain Surface – McCone County)

MTM-046026 – Bureau of Reclamation – 125’ 230 kV Overhead Powerline ROW

[T22N, R45E, Section 29, W2SW, SESW;

Section 30, W2NE, SENE, NENW, NESE;

Section 32, SWNE, NENW]

MTM-102757-FV (1,360.00 Acres Public Domain Surface - McCone County)

MTM-98191 – TransCanada Pipelines LTD – 50’ Permanent & 60’ Temporary Work Area Keystone X Oil Pipeline Pending ROW and Temporary Use Permit (TUP) Application

[T23N, R45E, Section 8, SWSE;
Section 17, N2NE, SENE;
Section 21, NENW]

MTM-102757-FW (547.37 Acres Public Domain Surface - McCone County)

MTM-98191 – TransCanada Pipelines LTD – 50’ Permanent & 60’ Temporary Work Area Keystone X Oil Pipeline Pending ROW and Temporary Use Permit (TUP) Application

[T23N, R45E, Section 5, S2SW;
Section 8, NENW]

MTM-102757-F8 (320.00 Acres Public Domain Surface – McCone County)

MTM-34858 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW

[T23N, R45E, Section 12, E2NE]

MTM-102757-KL (1,400.00 Acres Public Domain Surface – McCone County)

MTM-98191 – TransCanada Pipelines LTD – 50’ Permanent & 60’ Temporary Work Area Keystone X Oil Pipeline Pending ROW and Temporary Use Permit (TUP) Application

[T23N, R45E, Section 27, W2NE, NENW, NESE]

MTM-102757-KX (309.71 Acres Public Domain Surface - McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW

[T24N, R45E, Section 6, Lot 3;
Section 7, SWNE, NWSE]

MTM-102757-K3 (1,160.00 Acres Public Domain Surface - McCone County)

MTM-34858 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW

[T25N, R45E, Section 15, S2SW, SWSE]

MTM-102757-NL (280.00 Acres Public Domain Surface – McCone County)

MTM-35927 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW

[T25N, R45E, Section 9, NWNW, SWSW]

MTM-102757-NQ (40.00 Acres Public Domain Surface - McCone County)

MTM-71919 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW

[T25N, R45E, Section 14, SWSW]

MTM-102757-PF (637.59 Acres Public Domain Surface – McCone County)

MTM-34858 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW

[T21N, R46E, Section 5, Lot 1, S2NE;
Section 6, Lot 5]

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW

[T21N, R46E, Section 5, Lots 3 and 4;
Section 6, Lots 1 and 5, S2NE, SENW]

MTM-85029 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW

[T21N, R46E, Section 6, Lots 4 and 5]

MTM-98647 – Mid Rivers Telephone Coop – 30’ Buried Telephone Cable ROW

[T21N, R46E, Section 6, Lot 5]

MTM-033135 – Montana Highway Commission – 400’ Circle or thwest Highway ROW

[T21N, R46E, Section 6, Lots 4 and 5]
MTM-033230 – Montana Highway Commission – Material Site ROW for Circle NW Highway
[T21N, R46E, Section 5, S2NW]

MTM-102757-PJ (318.60 Acres Public Domain Surface - McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T21N, R46E, Section 30, Lot 1, NENW]

MTM-102757-PT (1,480.00 Acres Public Domain Surface - McCone County)

MTM-34858 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW
[T22N, R46E, Section 22, W2NW]

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T22N, R46E, Section 21, NESE, S2SE;
Section 22, SWNW, SW, S2SE;
Section 28, E2NE, NESE]

MTM-98191 – TransCanada Pipelines LTD – 50’ Permanent & 60’ Temporary Work Area Keystone X
Oil Pipeline Pending ROW and Temporary Use Permit (TUP) Application
[T22N, R46E, Section 21, NWSW]

MTM-102757-PX (560.00 Acres Public Domain Surface - McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T22N, R46E, Section 24, SWSE]

MTM-102757-PU (720.00 Acres Public Domain Surface - McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T22N, R46E, Section 26, SWSW, S2SE;
Section 34, E2NE]

MTM-98191 – TransCanada Pipelines LTD – 50’ Permanent & 60’ Temporary Work Area Keystone X
Oil Pipeline Pending ROW and Temporary Use Permit (TUP) Application
[T22N, R46E, Section 34, S2NE, SENW]

MTM-102757-PV (1,753.04 Acres Public Domain Surface – McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T22N, R46E, Section 32, SWSE]

MTM-102757-P3 (272.10 Acres Public Domain Surface - McCone County)

MTM-34858 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW
[T23N, R46E, Section 7, Lot 3]

MTM-102757-P7 (152.90 Acres Public Domain Surface – McCone County)

MTM-34858 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW
[T23N, R46E, Section 18, Lots 2 and 3]

MTM-102757-T9 (40.00 Acres Public Domain Surface – McCone County)

MTM-94531 – Carlson, Robin – 20’ Road ROW
[T23N, R46E, Section 31, SWNE]

MTM-102757-UJ (34.97 Acres Public Domain Surface – McCone County)

(280.00 Acres Fee Surface – McCone County – Total 314.97 Acres)

MTM-34858 – Mid Rivers Telephone Coop – 20’ Buried Telephone Cable ROW
[T24N, R46E, Section 19, Lot 3]

MTM-102757-UW (1,878.52 Acres Public Domain Surface – McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T25N, R46E, Section 4, W2SW]

MTM-102757-UX (1,040.00 Acres Public Domain Surface – McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T25N, R46E, Section 9, NWNW]

MTM-102757-U6 (40.00 Acres Public Domain Surface – McCone County)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T25N, R46E, Section 20, SWNW]
MTM-71919 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T25N, R46E, Section 20, SWNW]

MTM-102757-VC (111.52 Acres Public Domain Surface – McCone County)

MTM-71919 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T26N, R46E, Section 19, Lots 3 and 4]

MTM-102757-RR (199.26 Acres Public Domain Surface – McCone County)

MTM-35927 - Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T23N, R47E, Section 2, NESW]
MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T23N, R47E, Section 4, NESE
Section 10, NWNE]

MTM-102757-R8 (40.00 Acres Public Domain Surface – McCone County)

MTM-71919 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T24N, R47E, Section 21, NENE]

MTM-102757-TB (200.00 Acres Public Domain Surface – McCone County)

MTM-35927 - Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T24N, R47E, Section 35, SWNW]
MTM-71919 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T24N, R47E, Section 35, SWNE, S2NW]

MTM-102757-TC (443.64 Acres Public Domain Surface – McCone County)
(201.32 Acres Fee Surface – McCone County – Total 644.96 Acres)

MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T25N, R47E, Section 1, Lots 2, 3, 4]

MTM-102757-TL (560.00 Acres Public Domain Surface – McCone County)

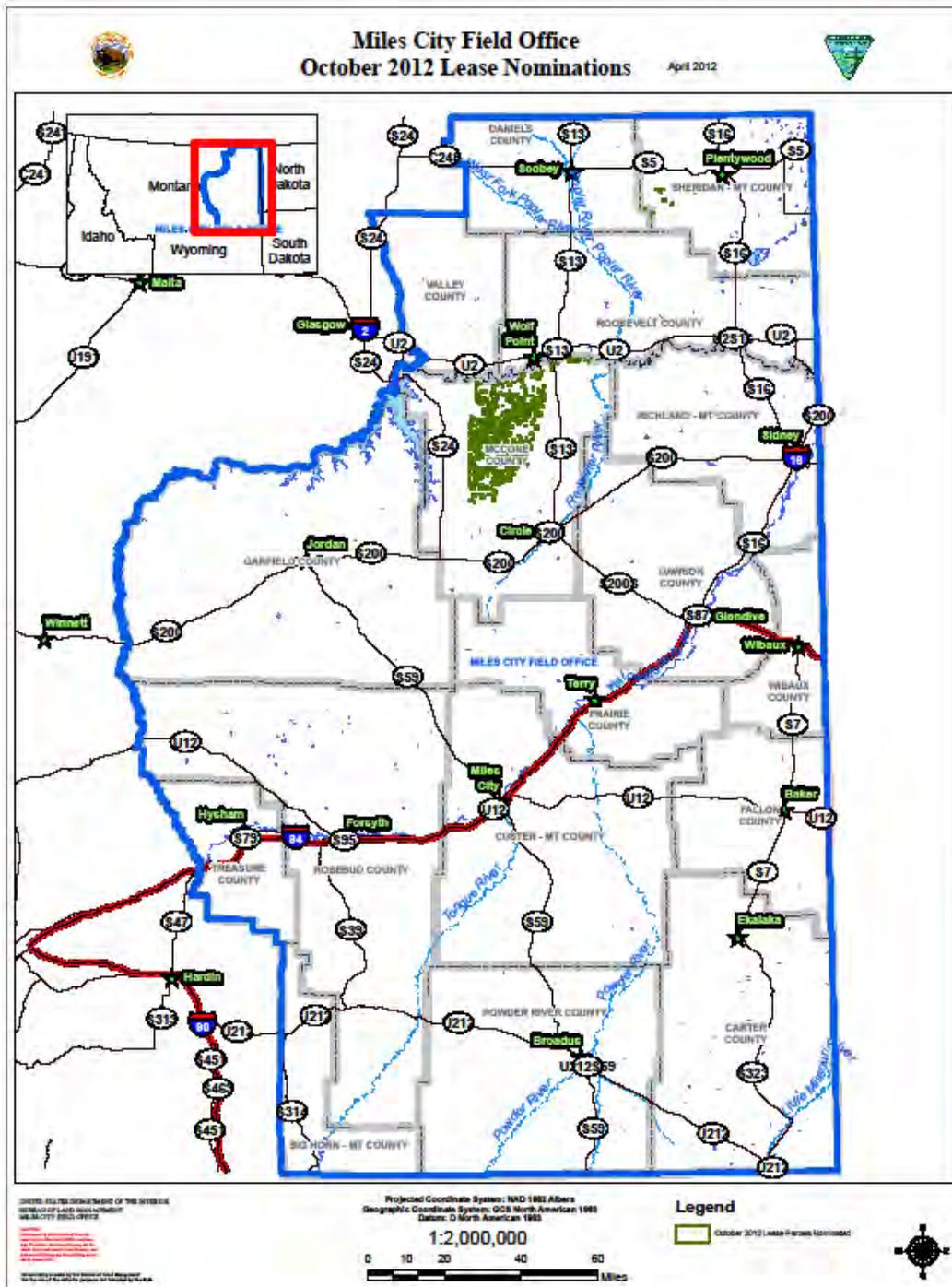
MTM-35927 - Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T25N, R47E, Section 28, N2SW]
MTM-55529 – McCone Electric Coop, Inc. – 20’ Overhead Power line ROW
[T25N, R47E, Section 31, SENE]

MTM-102757-TQ (440.00 Acres Public Domain Surface – McCone County)

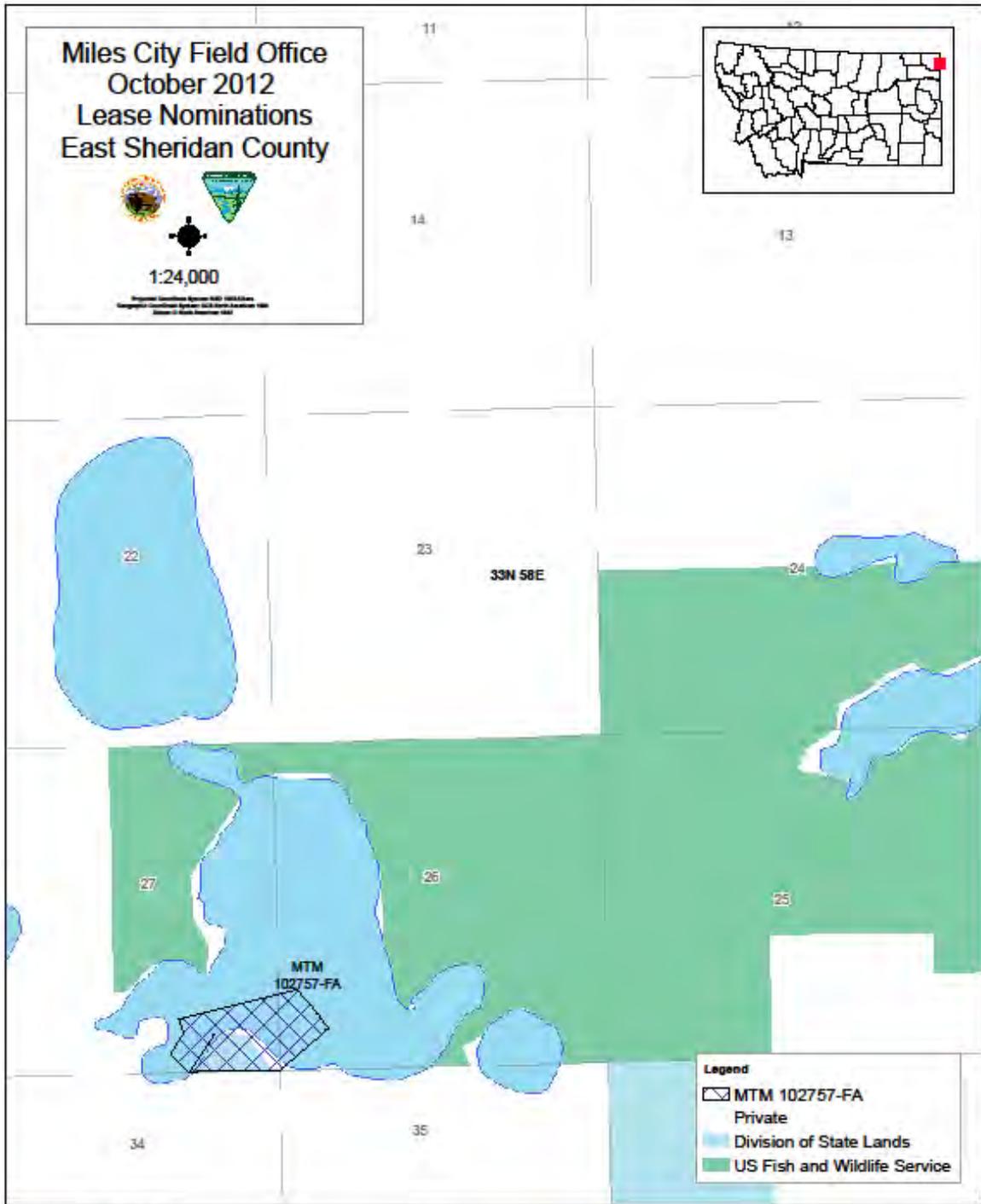
(320 Acres Fee Surface – McCone County – Total 760.00 Acres)
MTM-71919 – Mid Rivers Telephone Coop. – 20’ Buried Telephone Cable ROW
[T26N, R47E, Section 3, SESE]

TOTAL Affected Public Domain Federal Lease Parcel Surveyed Surface Acres	21,423.74
TOTAL Affected Fee Lease Parcel Surveyed Surface Acres	<u>801.32</u>
TOTAL Lease Parcel Surveyed Surface Acres	22,225.06

Map 1. All Nominated Lease Parcels



Map 2. East Sheridan County Lease Parcels

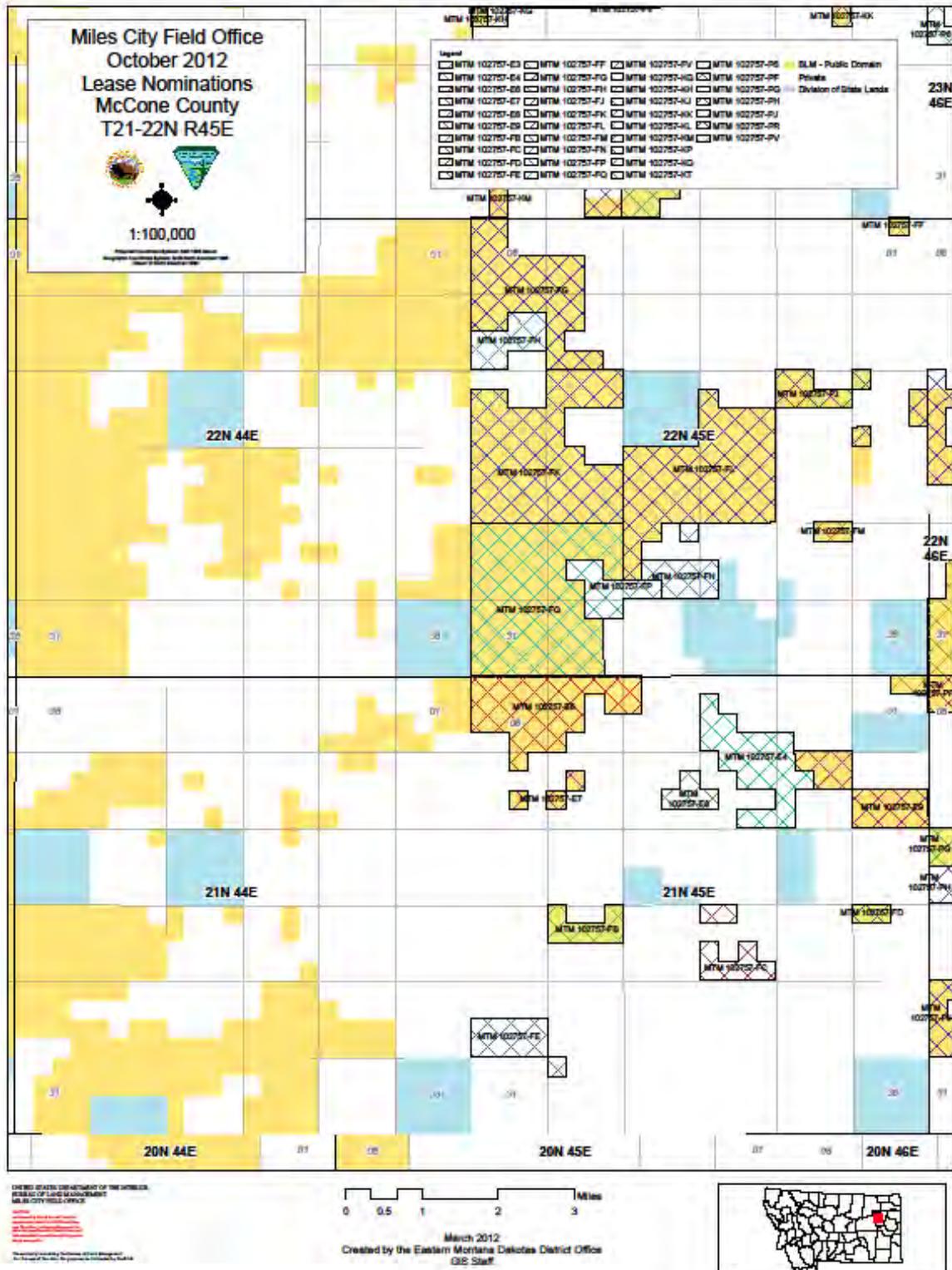


UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MILES CITY FIELD OFFICE

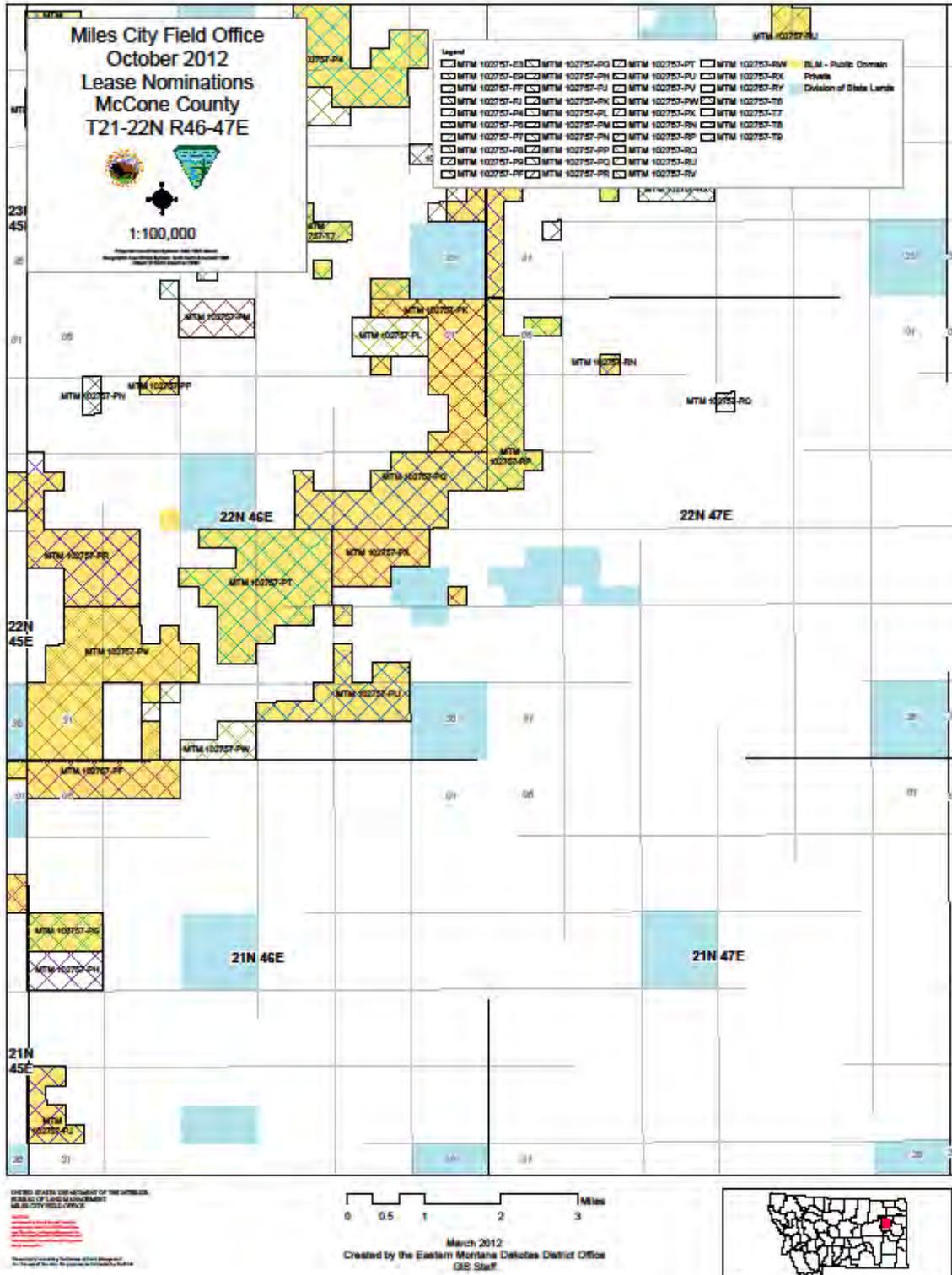


March 2012
Created by the Eastern Montana District Office
GIS Staff

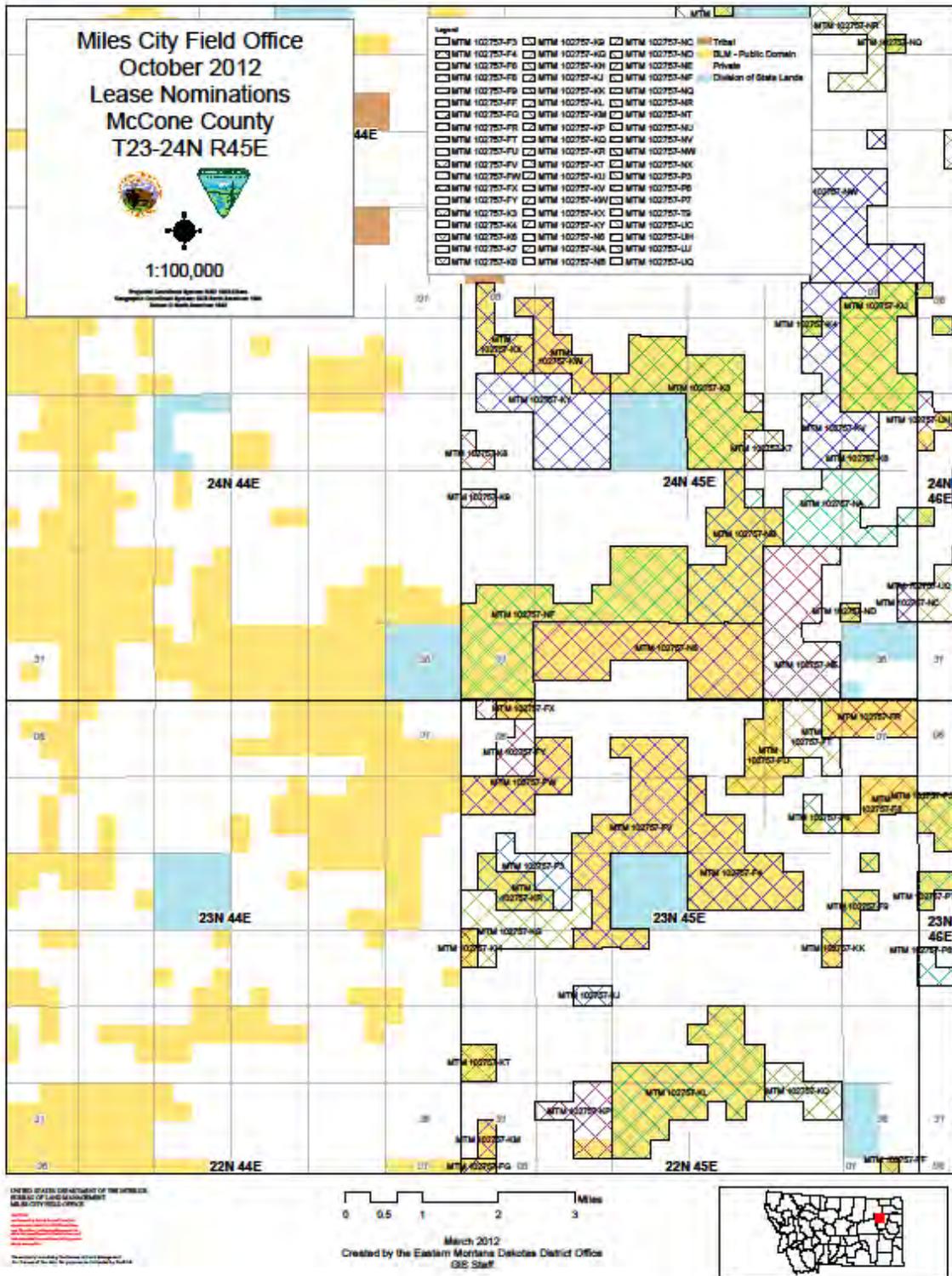
Map 3. McCone County Area 1 Lease Parcels



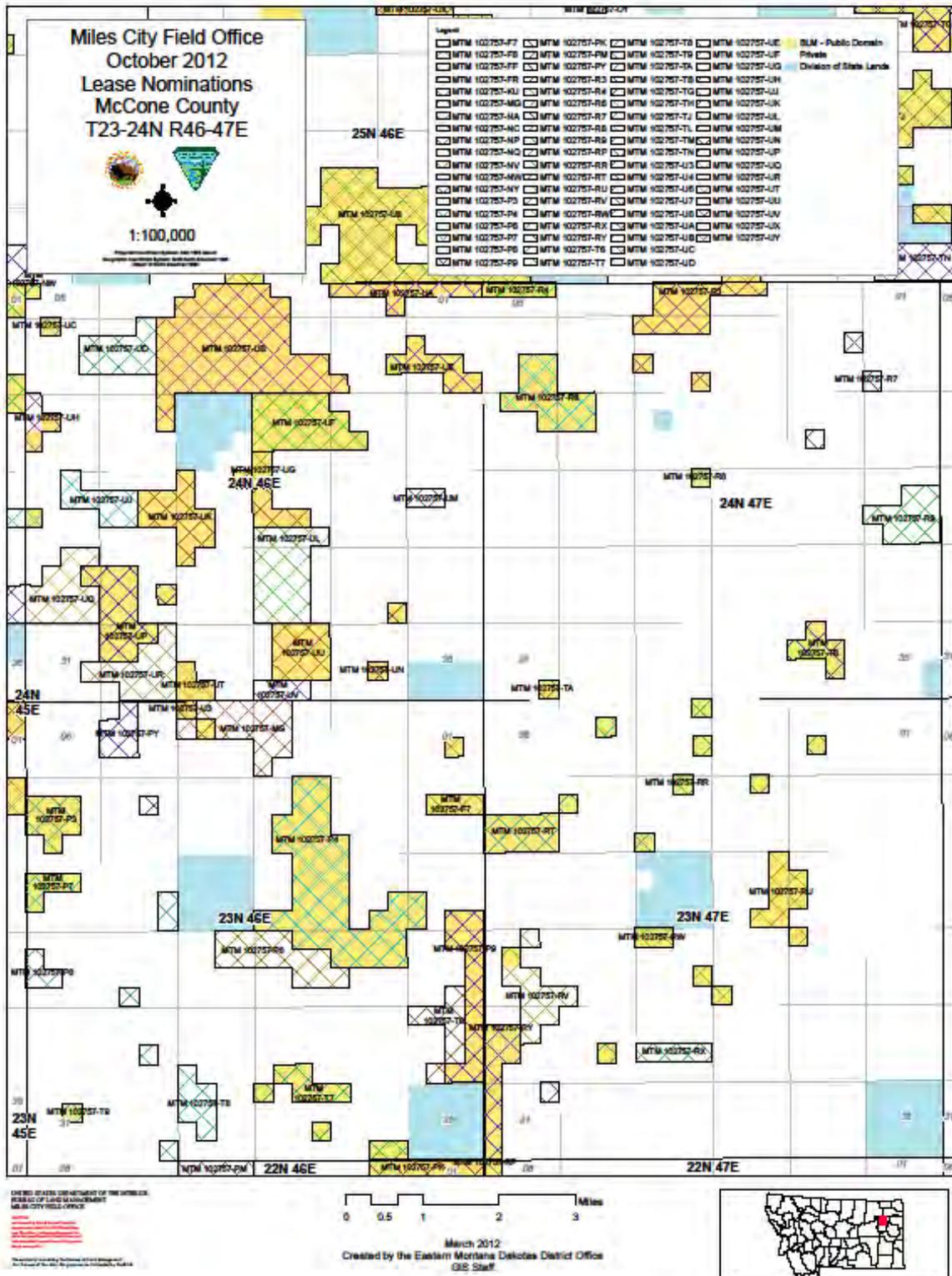
Map 4. McCone County Area 2 Lease Parcels



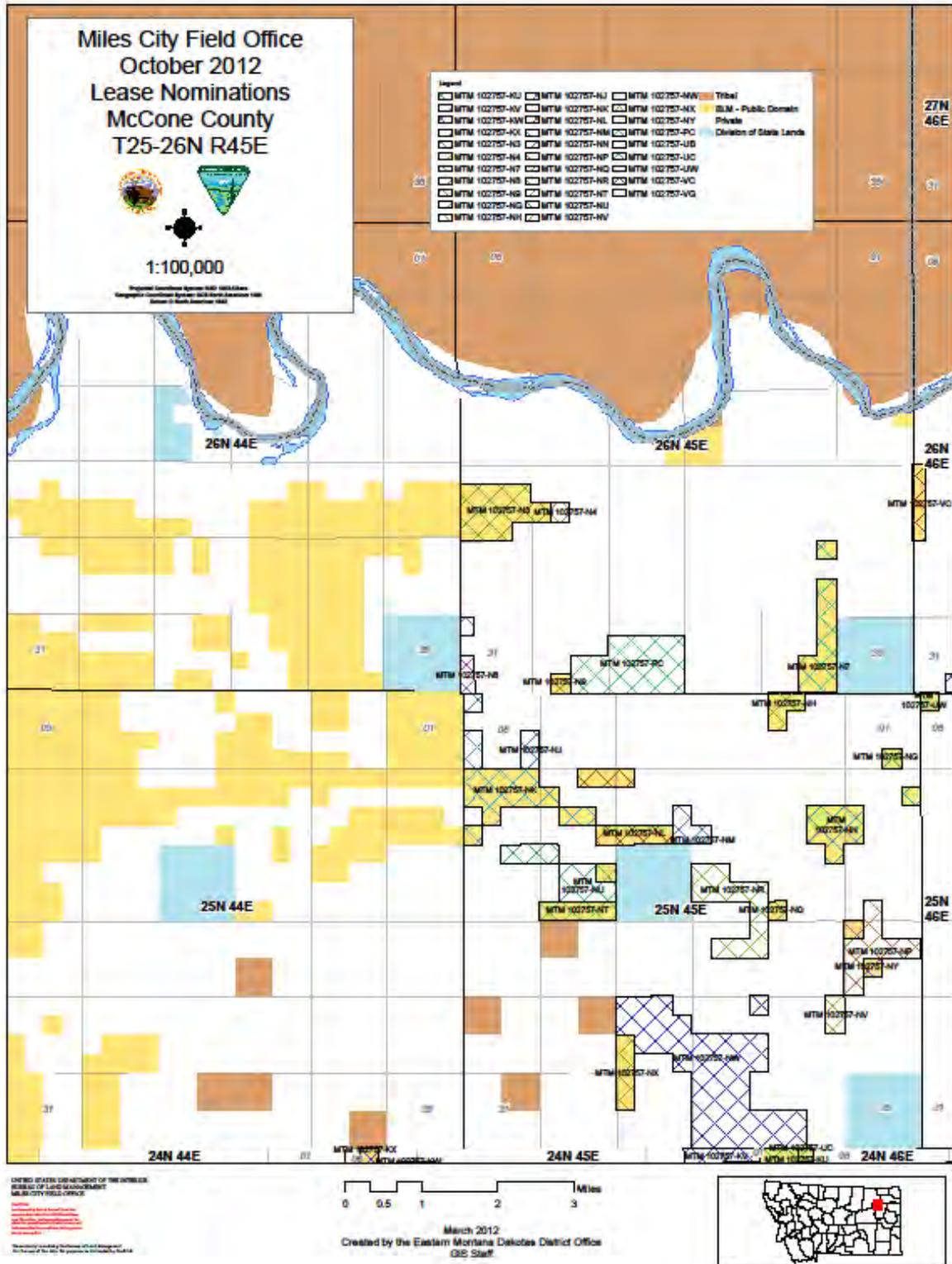
Map 5. McCone County Area 3 Lease Parcels



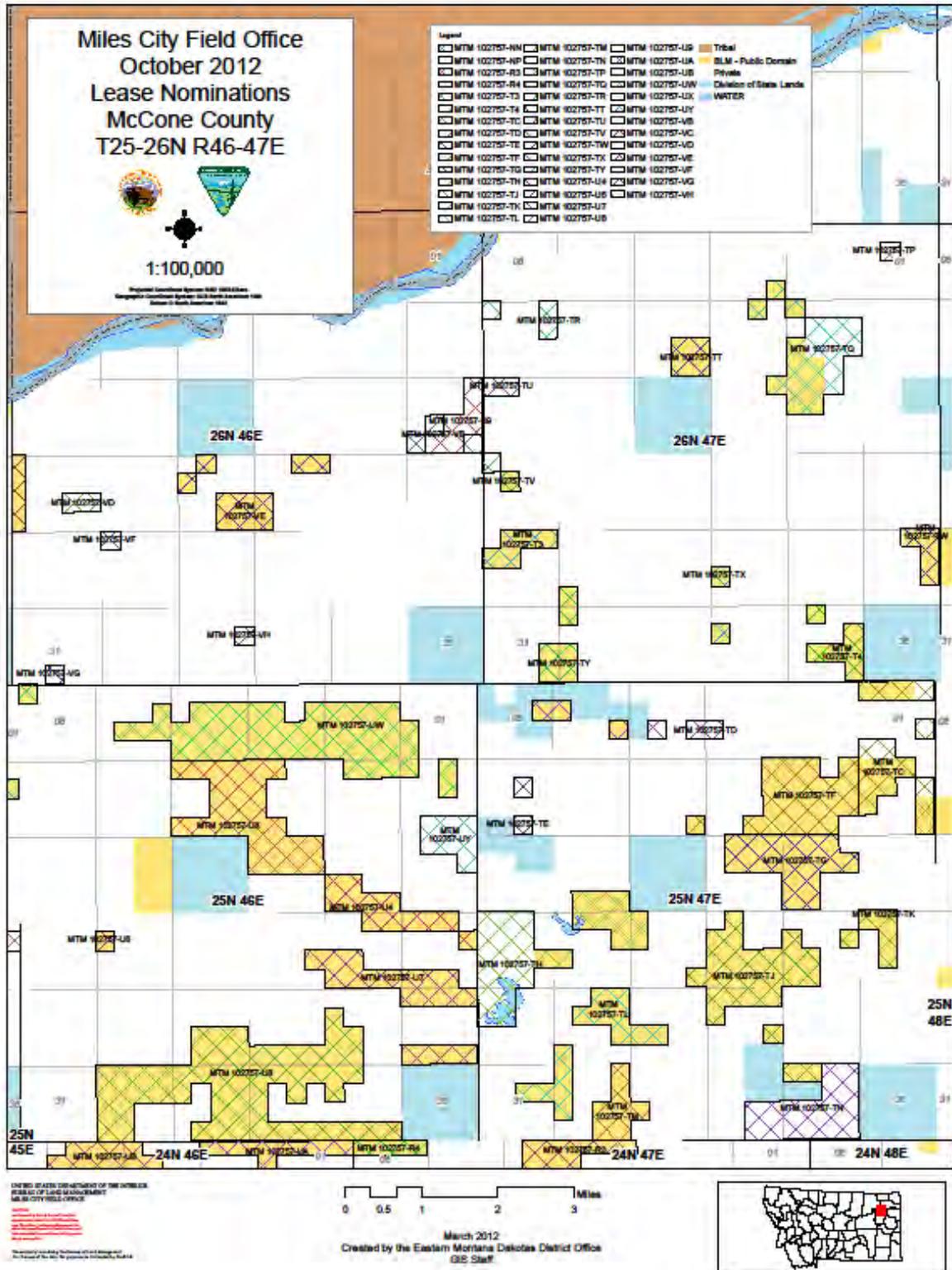
Map 6. McCone County Area 4 Lease Parcels



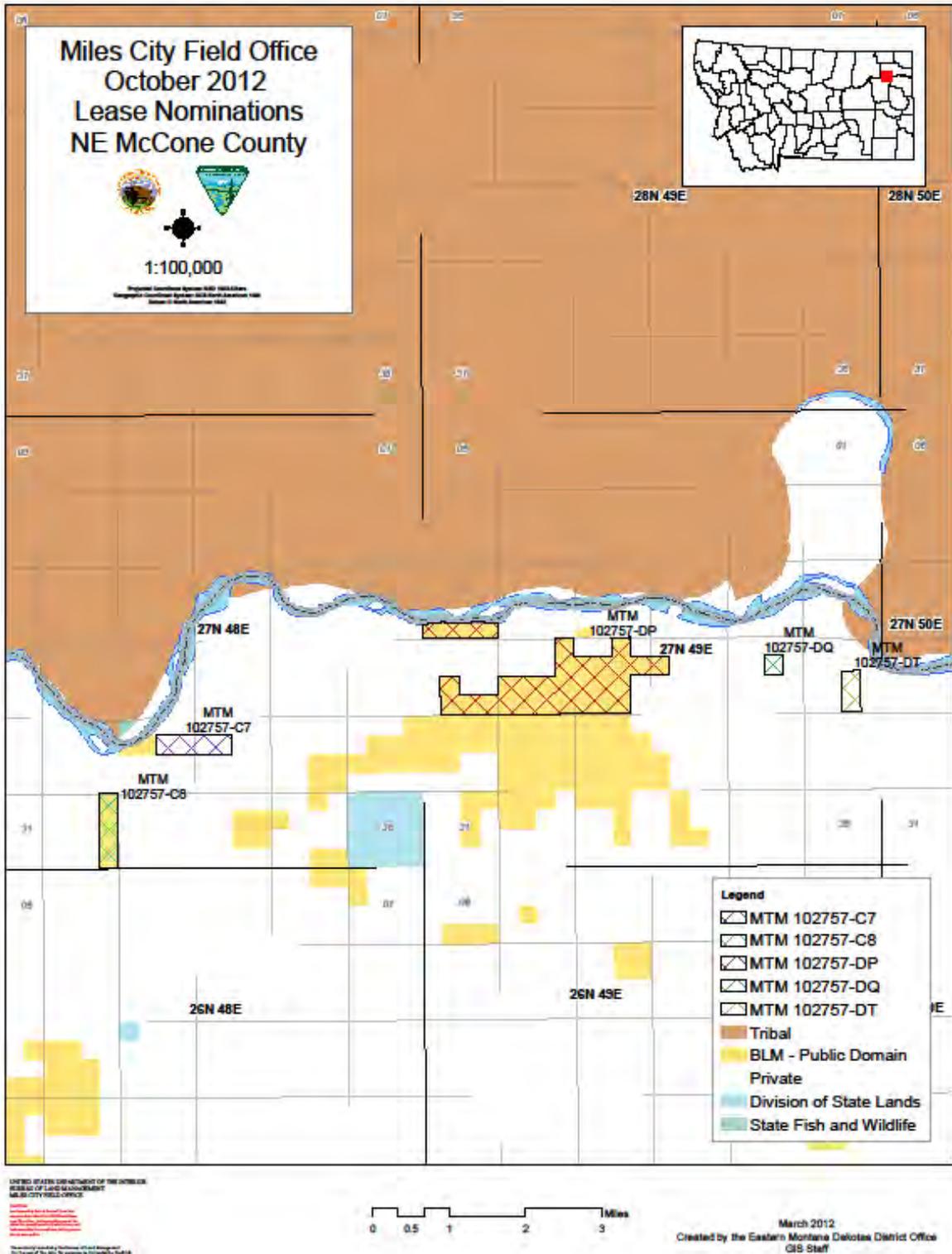
Map 7. McCone County Area 5 Lease Parcels



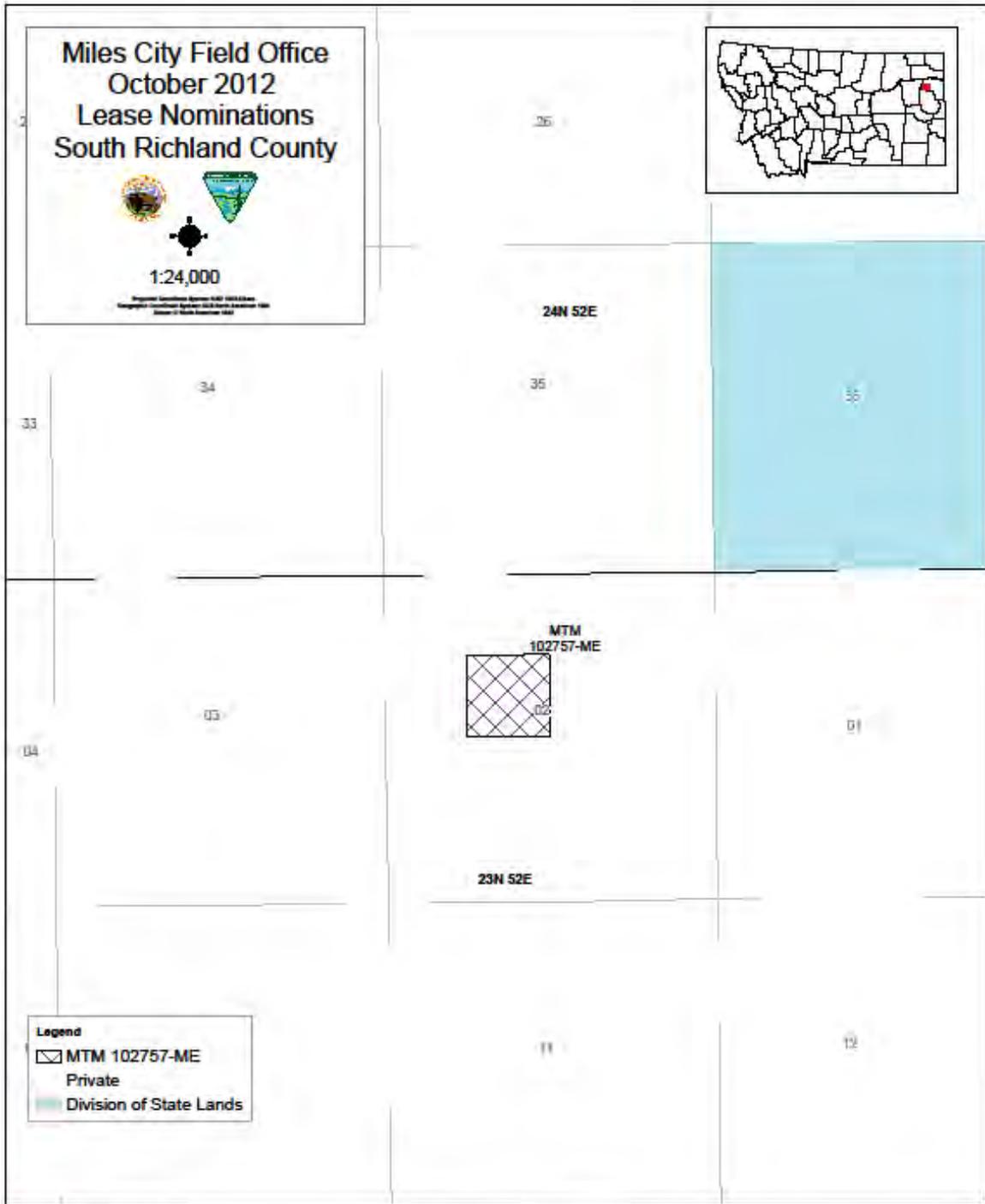
Map 8. McCone County Area 6 Lease Parcels



Map 9. McCone County Area 7 Lease Parcels



Map 10. South Richland County Lease Parcels

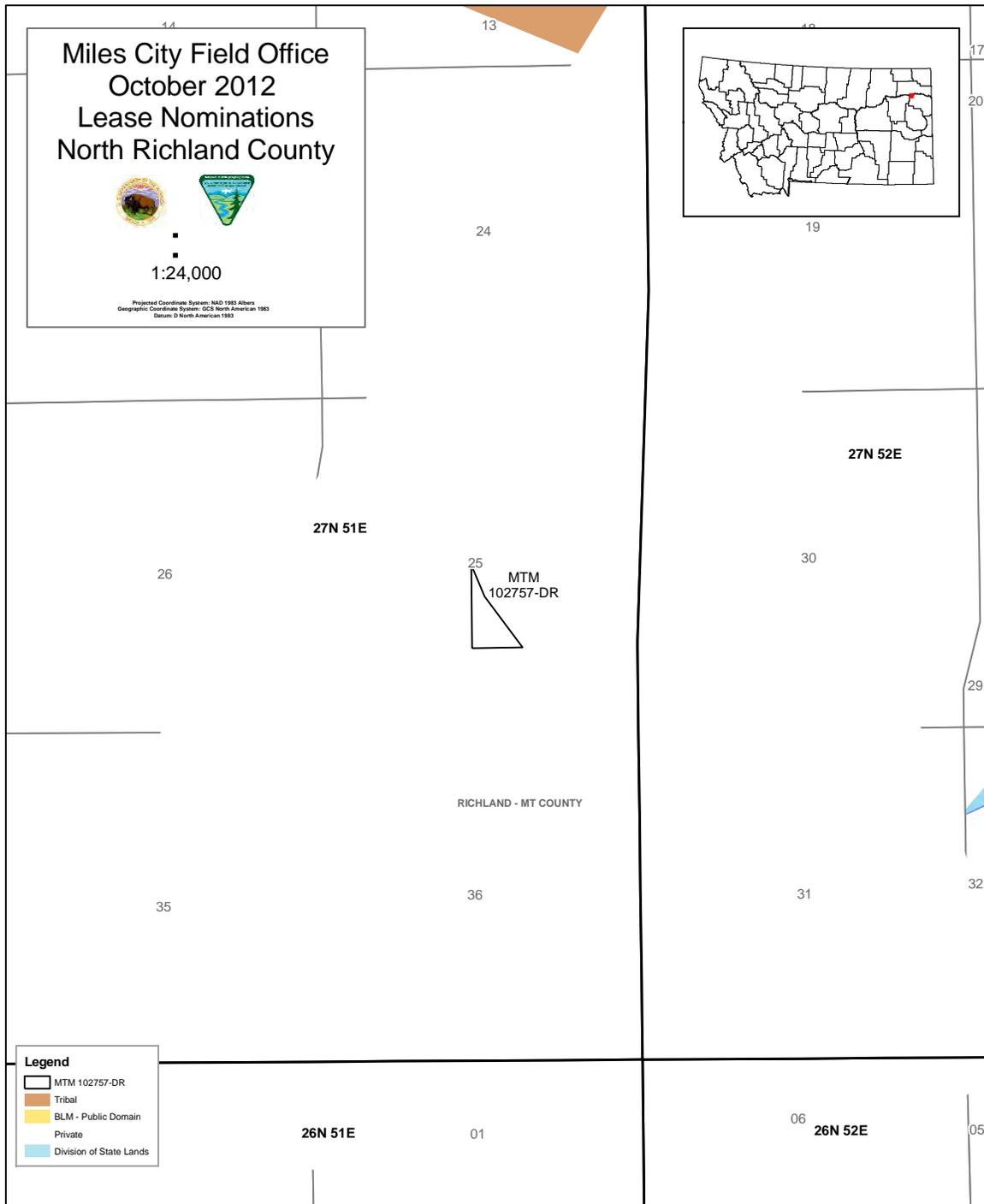


LEASING DIVISION
 DIVISION OF LAND MANAGEMENT
 MILES CITY FIELD OFFICE



March 2012
 Created by the Eastern Montana Deputies District Office
 GIS Staff

Map 11. North Richland County Lease Parcels



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MILES CITY FIELD OFFICE

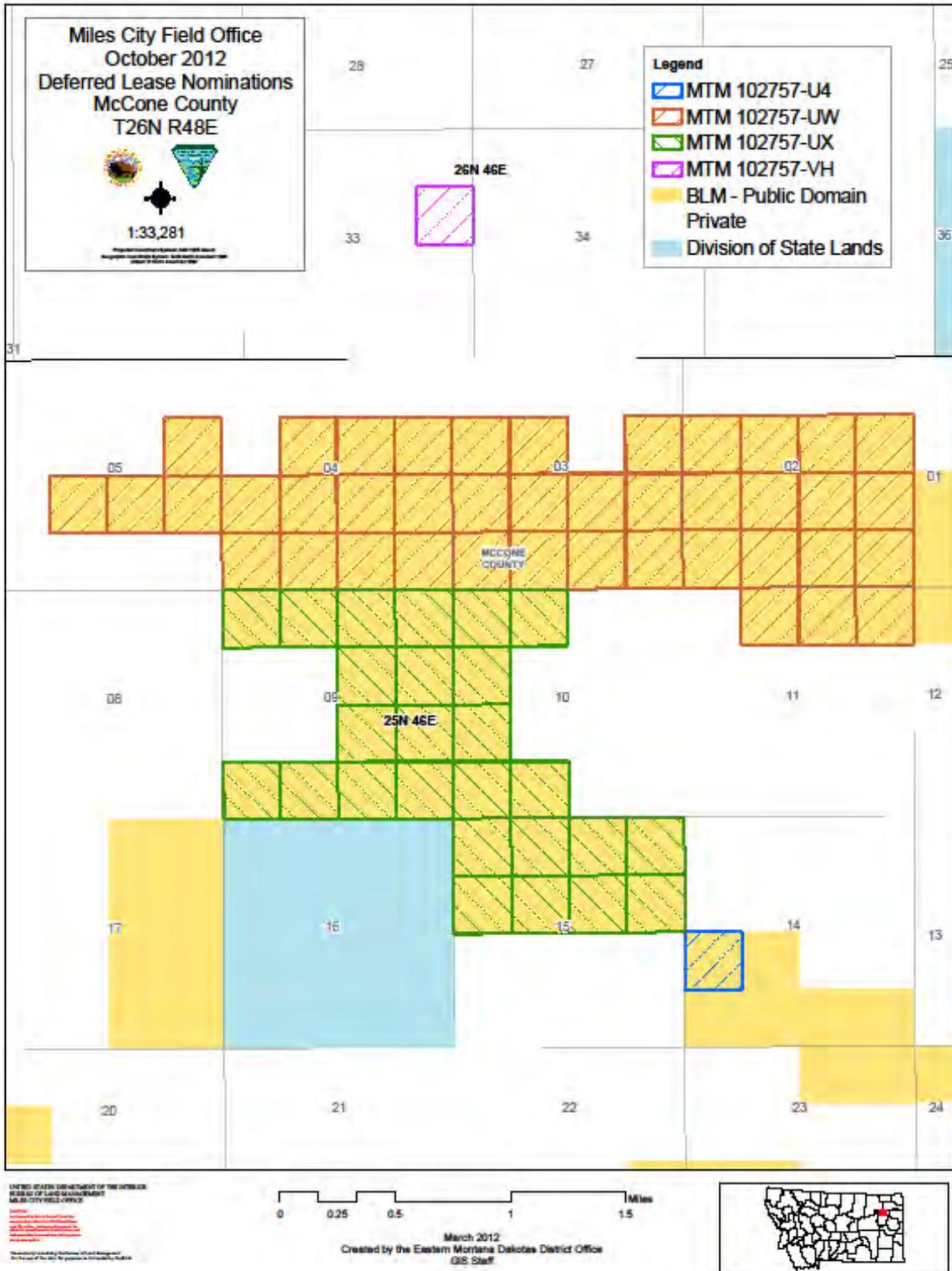
BLM-EMD
This document is a draft and is subject to change without notice. It is not intended for use as a legal document. The information contained herein is for informational purposes only and does not constitute a guarantee, warranty, or endorsement of the accuracy, completeness, or reliability of the information. The user assumes all responsibility for the use of this information.

No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.



April 2012
Created by the Eastern Montana Dakotas District Office GIS Staff

Map 13. Deferred Lease Parcels



**United States Department of the Interior
Bureau of Land Management
Miles City Field Office
111 Garryowen Road
Miles City, Montana 59301-7000**

**Finding of No Significant Impact
Environmental Assessment DOI-BLM-MT-C020-2012-159-EA**

INTRODUCTION:

This unsigned Finding of No Significant Impact and the attached DOI-BLM-MT-C020-2012-159-EA for the Miles City Field Office (MCFO) were available for public review and comment for 30 days beginning on May 21, 2012.

The Bureau of Land Management (BLM) has conducted an environmental analysis (DOI-BLM-MT-C020-2012-159-EA) to analyze the potential effects from offering 203 nominated lease parcels containing 85,758.14 surveyed acres of federal minerals for competitive oil and gas leasing in a sale tentatively scheduled to occur on October 23, 2012. The EA was prepared based on available information including inventory and monitoring data files.

Impact identification and analysis of the No Action Alternative, the Proposed Action Alternative (with BLM imposed mitigation measures), and the BLM Preferred Alternative (with BLM imposed mitigation measures and deferred parcel acres) has been completed. The No Action would be to not offer for lease the 203 parcels. The Proposed Action would be to offer for lease 203 parcels covering 85,758.14 surveyed acres of federal minerals administered by the BLM. The BLM preferred alternative would be to offer for lease 201 of the 203 lease parcels (199 whole, 2 partial) containing 82,998.14 federal surveyed mineral acres in whole or part with RMP lease stipulations and/or lease notices as necessary for competitive oil and gas lease sale and lease issuance. The remaining 4 parcels (2 whole, 2 partial) containing 2,760 federal surveyed mineral acres in whole or part would be deferred pending further review.

The 203 parcels are located in Daniels, McCone, Richland, and Sheridan counties. Standard federal lease terms and conditions, as well as the stipulations identified in Appendix A of the EA, would apply. Lease stipulations (as required by Title 43 Code of Federal Regulations 3131.3) were added as necessary to each parcel as identified by the BLM to address site specific resource concerns.

It is the policy of the BLM as derived from various laws, including the Mineral Leasing Act of 1920, as amended [30 U.S.C. 181 *et seq.*] and the Federal Land Policy and Management Act of 1976 [43 U.S.C. 1701 *et seq.*], to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs.

PLAN CONFORMANCE AND CONSISTENCY:

The proposed action and alternatives have been reviewed and found to be in conformance with the following BLM plans and associated Record of Decision(s):

Powder River Resource Management Plan and Record of Decision, March 1985 as amended by Miles City District Oil and Gas FEIS/Amendment, February 1994 and Montana Statewide Oil and Gas FEIS/Amendment of the Powder River and Billings RMPs, April 2003 and

Supplement to Montana Statewide Oil and Gas FEIS/Amendment of the Powder River and Billings RMPs, December 2008
Big Dry Resource Management Plan and Record of Decision, April 1996.

FINDING OF NO SIGNIFICANT IMPACT:

Based on my review of the updated EA and all other available information, I have determined that the BLM preferred alternative, including the implementation of required stipulations, is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. Therefore, an environmental impact statement (EIS) is not required. Any future proposed development on lease parcels would be subject to additional site-specific NEPA analysis and documentation.

With regard to the issue of impacts to global climate change (GCC) and/or levels of greenhouse gas (GHG) emissions that may contribute to GCC, as discussed in the EA, the current state of the science does not allow determinations to be made about the specific effects of specific actions. Therefore, while I find that the proposed action would result in no significant impacts, either individually or cumulatively, as described in more detail below in the FONSI, no similar finding is made with respect to GCC or GHG emissions. However, given the state of the science, preparation of an environmental impact statement is not warranted, as it would not further inform my decision, or the public, with respect to the significance or lack thereof, of this proposed action as to the issue of GCC or GHG.

This determination is based on the context and intensity of the project as described:

Context:

The Proposed Action would occur within the MCFO boundary. The project directly involves 85,758.14 surveyed acres of federal minerals administered by the BLM. The purpose of offering parcels for competitive oil and gas leasing is to provide opportunities for private individuals or companies to explore for and develop federal oil and gas resources after receipt of necessary approvals and to sell the oil and gas in public markets. Oil and gas produced from federal leases would be in addition to oil and gas produced from private and state owned leases.

By conducting lease sales, the BLM provides for the potential increase of energy reserves for the U.S., a steady source of income, and at the same time meets the requirement identified in the Energy Policy Act, Sec. 362(2), Federal Oil and Gas Leasing Reform Act of 1987, and the Mineral Leasing Act of 1920, Sec. 17.

Intensity:

The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and incorporated into resources and issues considered (includes supplemental authorities Appendix 1 H-1790-1) and supplemental Instruction Memorandum, Acts, regulations and Executive Orders.

The following have been considered in evaluating intensity for this proposal:

1. Impacts may be both beneficial and adverse:

Potential direct, indirect and cumulative environmental impacts have been disclosed in the EA. Measures and stipulations designed to mitigate impacts to the various resources and land uses were incorporated in the design of the BLM preferred alternative. The analysis indicated no significant

impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects typically would be limited to the leased Federal lands managed by BLM and adjacent land.

2. The degree to which the selected alternative will affect public health or safety:

The selected alternative does not authorize any lease exploration or development activities and is designed to minimize impacts to other resources as well as to public health and safety. Some of the land overlying the parcels is privately owned. An environmental analysis will be conducted for proposed exploration and development projects. The analysis will identify potential impacts to public health and safety as well as measures designed to minimize or eliminate impacts to public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas:

The historic and cultural resources of the analysis area have been reviewed by BLM. BLM has consulted with affected Tribes about the proposed action. The potential impacts have been mitigated with identified stipulations and mitigating measures in the preferred alternative. There are no impacts to park lands, prime farmlands, wilderness, wild and scenic rivers, or ecologically critical areas.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial:

No anticipated effects have been identified that are controversial. While the BLM Preferred alternative may be somewhat controversial to some members of the public, the BLM Preferred alternative conforms with current land use plan guidance which allocated federal mineral estate administered by the BLM as either available or administratively unavailable for oil and gas leasing. As a factor for determining (within the meaning of 40 CFR section 1508.27(b) (4)) whether or not to prepare a detailed environmental impact statement, “controversy is not equated with “the existence of opposition to a use.” *Northwest Environmental Defense Center v. Bonneville Power Administration*, 117 F.3d 1520, 1536 (9th Cir. 1997).

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks:

The proposed action of selling oil and gas leases is not unique or unusual. The State and private mineral owners also sell oil and gas leases. The EA describes typical exploration and development activities that could occur on a federal lease along with the potential impacts from those activities as well as mitigation measures designed to minimize or eliminate impacts. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:

This proposed action does not establish a precedent for future actions. The federal oil and gas lease does not authorize any exploration or development activities; however, the lease provides the lessee with the opportunity to explore for and develop oil and gas resources after receipt of necessary approvals. An environmental analysis will be conducted for exploration and development projects before approval of a project.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts – which include connected actions regardless of land ownership:

The proposed action by itself or in connection with other activities would not have significant impacts. Exploration and development projects will be analyzed to determine the significance of cumulative impacts.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:

The BLM Preferred alternative will not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places. Based on previous and ongoing cultural surveys and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no features within the analysis area listed or eligible for listing in the National Register of Historic Places that would be adversely affected by the proposed action.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, or the degree to which the action may adversely affect: 1) a proposed to be listed endangered or threatened species or its habitat, or 2) a species on BLM’s sensitive species list:

Stipulations designed to minimize impacts to listed or proposed to be listed threatened or endangered species or their habitat have been included with the BLM Preferred alternative. Nominated parcels within critical sage grouse habitat have been deferred.

10. Whether the action threatens a violation of a federal, state, local, or tribal law, regulation or policy imposed for the protection of the environment, where on-federal requirements are consistent with federal requirements:

The BLM Preferred alternative does not violate any known federal, state, local or tribal law or requirements imposed for the protection of the environment. State, local, and tribal interests were given the opportunity to participate in the environmental analysis process. Furthermore, the project is consistent with applicable land management plans, policies and programs.

Recommended by _____ Date _____
Todd D. Yeager, Acting Field Manager

Concurrence by _____ Date _____
Diane Friez, District Manager

Approved by _____ Date _____
Theresa M. Hanley, Deputy State Director Division of Resources