

**COYOTE FED 0397-14 PAD  
ALTERNATE LOCATION ANALYSIS SUMMARY  
COGCC RULE 304.b.(2)**

**Prepared for:**

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**July 26, 2022**

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## INTRODUCTION

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Pursuant to Rule 304.b.(2), an Alternate Location Analysis is required with the submittal of the Location Assessment, Form 2A. Included is a summary of each location analyzed, maps of the locations with an aerial background (Rule 304.b.C.1) and a data table identifying all requirements set forth by Rules 304.b.(3).A&B.

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## ALTERNATE LOCATION ANALYSIS SUMMARY

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### *Proposed Coyote Fed 0397-14 Pad*

**Legal Description:** NWNW of Section 14, T03N-R97W, 6<sup>th</sup> P.M

**Location Coordinates:** 40.235181, -108.253523 (NAD 83)

**Elevation:** 5,897 feet

### *Summary for Proposed Coyote Fed 0397-14 Pad*

This project consists of the development of the Proposed Coyote Fed 0397-14 Pad which will accommodate six horizontal wells: Coyote Fed 0397-14-3-1 NH, Coyote Fed 0397-14-2-3 NH, Coyote Fed 0397-14-2-4 NH, Coyote Fed 0397-14-23-13 NH, Coyote Fed 0397-14-23-14 NH, and Coyote Fed 0397-14-2-3 WNH. The Coyote Fed 0397-14 Pad will be a new location developed on private land owned and managed by the Pierce, John R. Revocable Trust and the access is on private land owned and managed by Buffalo Horn Properties, LLC.

The Coyote Fed 0397-14 Pad will have an initial short-term disturbance of 6.82 acres. Interim reclamation will reduce this disturbance by approximately 2.49 acres resulting in a long-term disturbance of 4.33 acres for the working pad surface. Interim reclamation will begin after all wells are drilled and completed and production facilities installed at the pad. During interim reclamation, the cut and fill slopes will be reshaped and contoured. The access road to the well pad will be graveled to allow for all weather travel and increase human safety. The long-term disturbance of this access will be approximately 6.65 acres.

On May 17, 2022, an onsite was completed for the Proposed Coyote Fed 0397-14 Pad and Coyote Alt 1 Pad with representatives from the Bureau of Land Management – White River Field Office (BLM), Colorado Parks & Wildlife (CPW) and Anschutz Exploration Corporation. The purpose of the onsite was to obtain feedback from the permitting agencies and to streamline the efforts to approve the Oil and Gas Development Plan (OGDP) and Federal Application for Permit to Drill (APD).

The site is located within Moffat County, Colorado approximately 21 miles northwest of Meeker, Colorado. The location is situated on a flat bench with minimal cut and fills associated with the construction of the well pad. There is evidence of livestock grazing and an existing barbed-wire fence just north of the pad location. The edge of the proposed pad working surface is situated 164 feet north of an intermittent tributary of Deep Channel Creek and 478 feet south of Deep Channel Creek (intermittent); vegetated buffer exists between the pad disturbance and the drainages.

The northern edge of the pad is 78 feet from the BLM property line.

No changes to the location were suggested by either agency during the onsite.

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**Location's setting and potentially impacted receptors:**

*(Land use, density of RBUs, HOBUs, proximity to urban development, etc.)*

- There are no RBUs, HOBUs, DIC and the location is 21 miles from Meeker, CO.
- Surface use agreements are in place for the pad and associated roads.
- The current land use is dry land grazing for open range livestock and the future use is the same.

**Potential Impacts to health, safety, welfare, wildlife, and the environment:**

*(Proximity to floodplains, wetlands, Surface Water Supply Areas, wildlife, distance to BUs, BU ownership, right to construct, DIC, current and future land use, etc.)*

- There is potential riparian wetland associated with the Deep Channel Creek intermittent stream channel to the north and the intermittent tributary of Deep Channel Creek to the south of the proposed disturbance, however, the pad sits on a flat bench that would allow for a vegetative buffer from the edges of the drainage.
- High Priority Habitat (HPH) areas located within the proposed disturbance footprint include the following:
  - o Sportfish Management Waters
  - o Greater Sage-grouse Priority Habitat
  - o Greater Sage-grouse General Habitat
  - o Elk Severe Winter Range
  - o Elk Winter Concentration Area
  - o Mule Deer Winter Concentration Area
  - o Pronghorn Winter Concentration Area

**Advantages of this location:**

- Allows for drilling, completing, and producing of all (six proposed) 2-mile lateral wells and meeting requirements of the Federal Exploratory Unit
- Pad fits in topography; does not have excessive cut and fills associated with construction of pad
- Allows multiple wells on pad and drilling in both directions, avoiding additional pads and disturbances
- Surface Owners approve of the pad location and location does not hinder day to day ranch operations
- Can tie into other existing Oil and Gas Developments, consolidating traffic and flowlines
- Not located in Disproportionately Impacted Communities
- Does not impact land use, RBUs, HOBUs, etc.
- BLM and CPW did not foresee any concerns with the location as staked
- Although located in Greater Sage-grouse Priority Habitat, the location is sited in unfavorable sage-grouse habitat.

**Disadvantages of this location:**

- Located in HPH habitats
  - o Impacts can be mitigated by following timing stipulations guidance and best management planning guidelines set forth by BLM and CPW.
- Close proximity to drainages
  - o Stormwater BMPs will mitigate any impacts to the drainages.
  - o BMPs including secondary containment and placement of tanks 500 feet from drainages will be implemented.

**Permitting considerations:**

- Local government, Moffat County Natural Resource Department has been notified and a copy of the APDs will be simultaneously submitted to the Moffat County Commissioners and Colorado Oil and Gas Conservation Commission (COGCC).
- The BLM was notified through a Notice of Staking (NOS) process. A Federal APD is required for the federal minerals to be penetrated and the submittal of the APD package is planned to coincide with the submittal of the COGCC APDs.

**Tier Classification:**

IV-A – Classification is based on the following:

- 304.b.(2).B.vii: Location is upgradient of wetland
- 304.b.(2).B.viii: Location is in side of HPH

### ***Alternative Location 1: Coyote Alt 1 Pad***

**Legal Description:** NENE of Section 15, T03N-R97W, 6<sup>th</sup> P.M

**Location Coordinates:** 40.234301, -108.256896 (NAD 83)

**Elevation:** 5,920 feet (ungraded elevation)

### ***Summary for Coyote Alt 1 Pad***

The Coyote Alt 1 Pad accommodates three horizontal wells as the location topography limits the size of the well pad. The Coyote Alt 1 Pad would be a new location developed on private land owned and managed by Buffalo Horn Properties, LLC and the access would be on private land owned and managed by Buffalo Horn Properties, LLC with a portion crossing BLM surface.

The site is located within Moffat County, Colorado, approximately 22 miles northwest of Meeker, Colorado. The location is situated in on a ridge causing a cut of 16 feet and a maximum fill of 20 feet associated with the construction of the well pad. There is evidence of livestock grazing. An intermittent drainage occurs inside of the pad disturbance and Deep Channel Creek is north of the proposed disturbance.

The locations eastern edge of proposed disturbance is 304 feet from a private surface owner property line.

The Coyote Alt 1 Pad was evaluated on May 17, 2022. During the onsite both agencies suggested dropping this location and pursuing for the Coyote Fed 0397-14 Pad location.

### **Location's setting and potentially impacted receptors:**

*(Land use, density of RBUs, HOBUs, proximity to urban development, etc.)*

- There are no RBUs, HOBUs, DIC and the location is 22 miles from Meeker, CO.
- Surface use agreements would need to be pursued for the location.
- The current land use is dry land grazing for open range livestock and the future use is the same.

### **Potential Impacts to health, safety, welfare, wildlife, and the environment:**

*(Proximity to floodplains, wetlands, Surface Water Supply Areas, wildlife, distance to BUs, BU ownership, right to construct, DIC, current and future land use, etc.)*

- There is potential wetland associated with Deep Channel Creek and an intermittent stream which is off shoot of Deep Channel Creek near the proposed disturbance. The drainages proximately to the proposed location and the steep slopes of the ridge that the pad would be located on may cause direct affects to the drainages.
- HPH located within the proposed disturbance footprint include the following:
  - o Sportfish Management Waters
  - o Greater Sage-grouse Priority Habitat
  - o Greater Sage-grouse General Habitat
  - o Elk Severe Winter Range
  - o Elk Winter Concentration Area
  - o Mule Deer Winter Concentration Area
  - o Pronghorn Winter Concentration Area

### **Advantages of this location:**

- Surface Owners approve of the pad location and location does not hinder day to day ranch operations
- Can tie into other existing Oil and Gas Developments, consolidating traffic and flowlines
- Not located in Disproportionately Impacted Communities
- Does not impact land use, RBUs, HOBUs, etc.



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**Disadvantages of this location:**

- Cannot drill all the minerals and leases of interest
- Topography limits size of pad
- Pad could directly affect drainages
- Located in HPH habitats
  - o Impacts can be mitigated by following timing stipulations and best management planning guidelines set forth by BLM and CPW
  - o Habitat is more favorable for sage-grouse than the proposed Coyote Fed 0397-14 Pad location.

**Permitting considerations:**

- Local government, Moffat County Natural Resource Department has not been notified; a copy of the APDs would need to be submitted to the Moffat County Commissioners and COGCC.
- The BLM was notified through a Notice of Staking process. If the location was pursued, a Federal APD would be required for the federal minerals to be penetrated.

**Tier Classification:**

IV-B – Classification is based on the following:

- 304.b.(2).B.vii: Location is upgradient of wetland
- 304.b.(2).B.viii: Location is in side of HPH

### ***Alternative Location 2: Coyote Alt 2 Pad***

**Legal Description:** SENE of Section 10 & NWSW of Section 11, T03N-R97W, 6<sup>th</sup> P.M

**Location Coordinates:** 40.41406, -108.25511 (NAD 83)

**Elevation:** 5,948 feet (ungraded elevation)

### ***Summary for Coyote Alt 2 Pad***

The Coyote Alt 2 Pad accommodates three horizontal wells as the location topography limits the size of the well pad. The Coyote Alt 2 Pad would be a new location developed on both private owned land managed by Buffalo Horn Properties, LLC and BLM surfaces. Access is also on private owned land managed by Buffalo Horn Properties, LLC and BLM surfaces.

The site is located within Moffat County, Colorado approximately 22 miles northwest of Meeker, Colorado. The location is situated on a steep rock outcrop causing disproportionate cut and fills associated with the construction of the well pad. The pad is located with Deep Channel Creek to the south along with some minor drainages east and west of the pad. The access would require crossing several drainages, increasing disturbances associated with this location.

This location was evaluated via a desktop analysis and was not pursued based on the costly build and the limits to the laterals. The location being positioned in the middle of the section would result in either drilling long portions of non-production lateral or drilling shortened laterals.

### **Location's setting and potentially impacted receptors:**

*(Land use, density of RBUs, HOBUs, proximity to urban development, etc.)*

- There are no RBUs, HOBUs, DIC and the location is 22 miles from Meeker, CO.
- Surface use agreements would need to be pursued for the location.
- The current land use is dry land grazing for open range livestock and the future use is the same.

### **Potential Impacts to health, safety, welfare, wildlife, and the environment:**

*(Proximity to floodplains, wetlands, Surface Water Supply Areas, wildlife, distance to BUs, BU ownership, right to construct, DIC, current and future land use, etc.)*

- There is potential wetland associated with Deep Channel Creek near the proposed disturbance. The drainages do come close to the proposed disturbance. The steep slopes of the ridges on either side of the pad location may cause direct affects to the drainage to the south.
- HPH located within the proposed disturbance footprint include the following:
  - o Greater Sage-grouse Priority Habitat
  - o Greater Sage-grouse General Habitat
  - o Elk Severe Winter Range
  - o Elk Winter Concentration Area
  - o Mule Deer Winter Concentration Area
  - o Pronghorn Winter Concentration Area

### **Advantages of this location:**

- Not located in Disproportionately Impacted Communities
- Does not impact land use, RBUs, HOBUs, etc.



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**Disadvantages of this location:**

- Surface Owners may not approve of the pad location
- May not be economically feasible to tie in to existing Oil and Gas Developments
- Cannot drill all the minerals and leases of interest
- Topography limits size of pad
- Pad could directly affect drainages
- Located in HPH habitats
  - o Impacts can be mitigated by following timing stipulations and best management planning guidelines set forth by BLM and CPW

**Permitting considerations:**

- Local government, Moffat County Natural Resource Department has not been notified; a copy of the APDs would be submitted to the Moffat County Commissioners and COGCC if location were pursued.
- The BLM was notified through a Notice of Staking process. If the location were to be pursued, a Federal APD would be required for the federal minerals to be penetrated.

**Tier Classification:**

IV-B – Classification is based on the following:

- 304.b.(2).B.vii: Location is upgradient of wetland
- 304.b.(2).B.viii: Location is in side of HPH

### ***Alternative Location 3: Coyote Alt 3 Pad***

**Legal Description:** NWNE of Section 25, T03N-R97W, 6<sup>th</sup> P.M

**Location Coordinates:** 40.206421, -108.222855 (NAD 83)

**Elevation:** 6,069 feet (ungraded elevation)

### ***Summary for Coyote Alt 3 Pad***

The Coyote Alt 3 Pad accommodates three horizontal wells with the potential to place three additional wells on the pad. However, the three additional wells do not meet the Federal Exploratory Unit Requirements. The Coyote Alt 3 Pad would be a new location developed on BLM surfaces. The access would be on private land owned and managed by Buffalo Horn Properties, LLC and a portion would cross BLM surfaces.

A desktop analysis was conducted for the location and a Notice of Staking was submitted to the BLM; however, this was cancelled prior to an onsite with the agencies as the leases to be penetrated are unleased federal minerals.

The site is located within Moffat County, Colorado approximately 21 miles northwest of Meeker, Colorado. The location is flat with a balance in cut and fill associated with the construction of the well pad. There is evidence of livestock grazing. The pad is situated with an ephemeral drainage to the east of the proposed disturbance.

### **Location's setting and potentially impacted receptors:**

*(Land use, density of RBUs, HOBUs, proximity to urban development, etc.)*

- There are no RBUs, HOBUs, DIC and the location is 21 miles from Meeker, CO.
- Surface use agreements would need to be pursued for the location.
- The current land use is dry land grazing for open range livestock and the future use is the same.

### **Potential Impacts to health, safety, welfare, wildlife, and the environment:**

*(Proximity to floodplains, wetlands, Surface Water Supply Areas, wildlife, distance to BUs, BU ownership, right to construct, DIC, current and future land use, etc.)*

- There is potential wetland associated with intermittent stream to the east of the proposed disturbance. The location sits on a slope upgradient to that drainage.
- HPH located within the proposed disturbance footprint include the following:
  - o Greater Sage-grouse Priority Habitat
  - o Elk Production Area
  - o Elk Winter Concentration Area
  - o Mule Deer Winter Concentration Area

### **Advantages of this location:**

- Surface Owners approve of the pad location and the location does not hinder day to day ranch operations
- Can tie into other existing Oil and Gas Developments, consolidating traffic and flowlines
- Not located in Disproportionately Impacted Communities
- Does not impact land use, RBUs, HOBUs, etc.

**Disadvantages of this location:**

- Cannot drill all the minerals and leases of interest
- Located in HPH habitats
  - o Impacts can be mitigated by following Timing Stipulations and best management planning guidelines set forth by BLM and CPW
  - o Close proximity to NSO of Sage-grouse Lek.

**Permitting considerations:**

- Local government, Moffat County Natural Resource Department has not been notified; a copy of the APDs would need be submitted to the Moffat County Commissioners and COGCC.
- The BLM was notified through a Notice of Staking process. If the location were to be pursued, a Federal APD would be required for the federal minerals to be penetrated.

**Tier Classification:**

IV-B – Classification is based on the following:

- 304.b.(2).B.vii: Location is upgradient of wetland
- 304.b.(2).B.viii: Location is in side of HPH

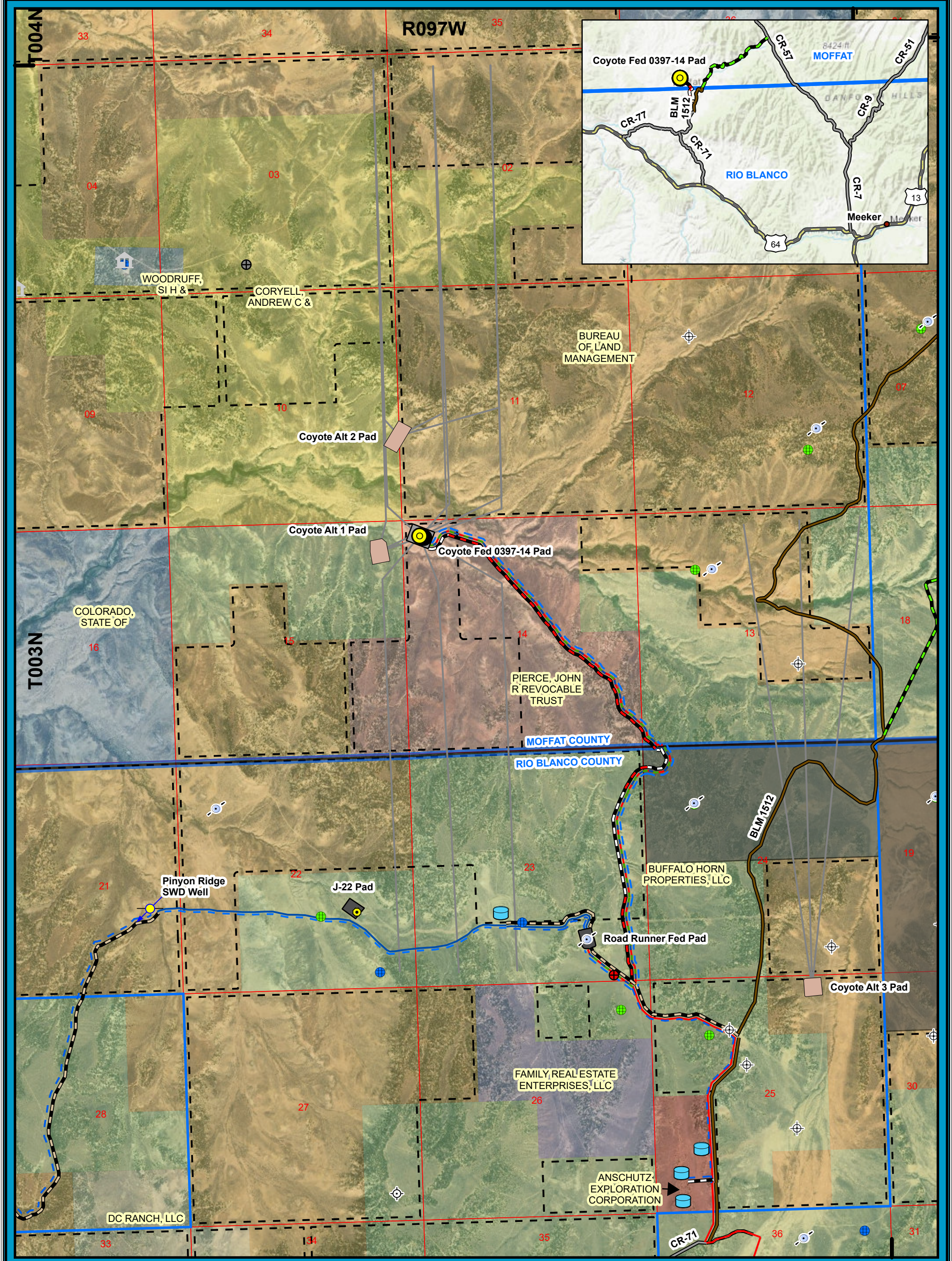
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## ATTACHMENTS

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***Alternate Location Analysis Maps***





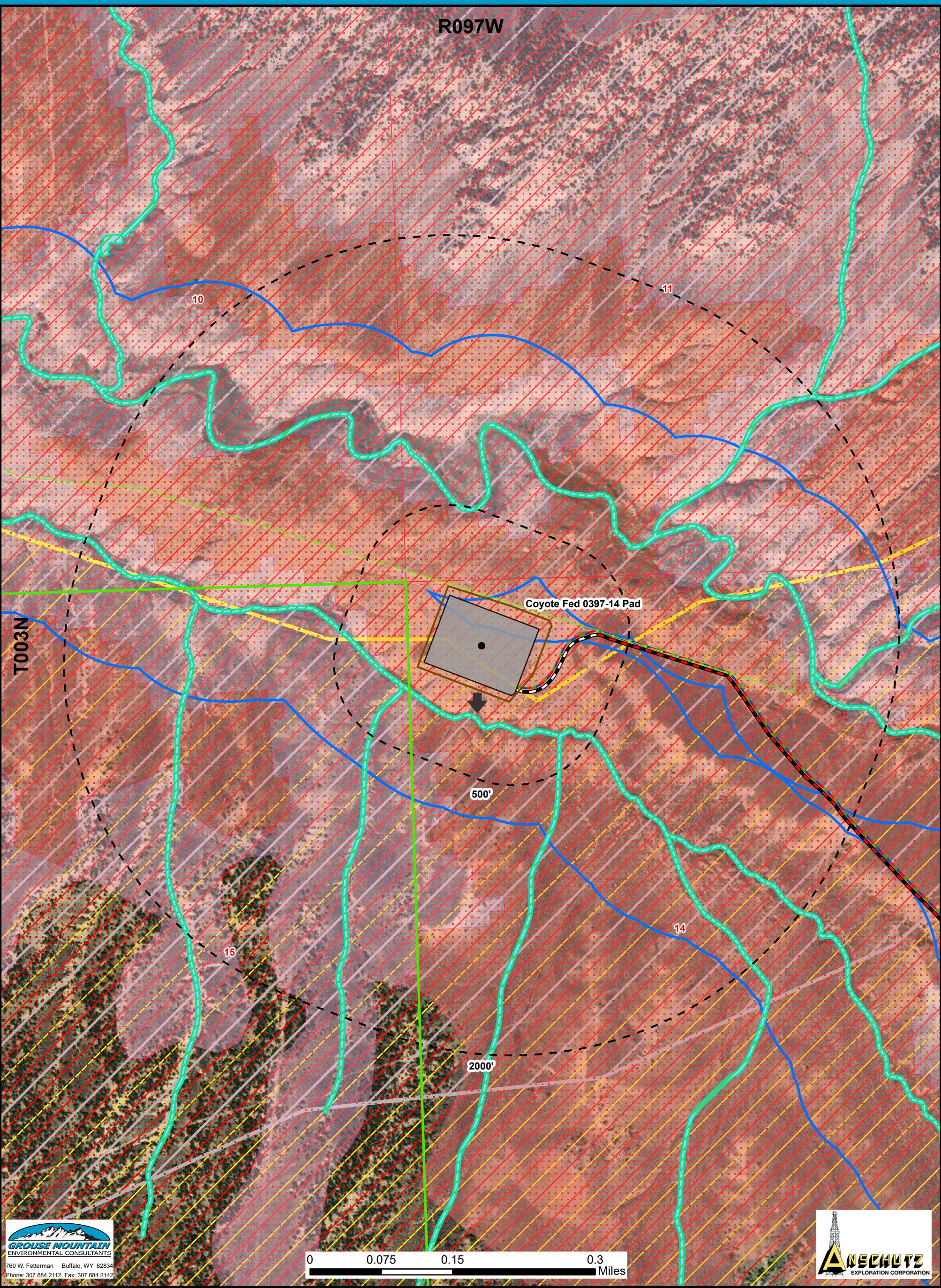
Alternate Locations Map: Coyote Fed 0397-14 and Alternative Pads

<ul style="list-style-type: none"><li>Alternate Oil Well Pad Location</li><li>Proposed Oil Well Pad</li><li>Existing Oil Well Pad</li><li>Proposed Oil Well SHL</li><li>Proposed Oil Well Borepath</li><li>Pinyon Ridge SWD Well</li><li>Federal Exploratory Unit</li><li>O&amp;G Lease Boundary</li><li>Unleased Federal Mineral</li></ul>	<ul style="list-style-type: none"><li>RBU</li><li>Proposed Water Storage</li><li>Existing BLM Improved Access</li><li>County Road</li><li>Existing Improved Access; 24' Running Width (No Upgrade Needed)</li><li>Existing Improved Access; 14' Running Width (No Upgrade Needed)</li><li>Existing BLM Improved Access; Gas Piping</li><li>Existing Improved Access; Proposed Temporary Surface Waterline</li></ul>	<ul style="list-style-type: none"><li>Proposed Improved Access (New Construction); Proposed Gas Pipe; Proposed Temporary Surface Waterline</li><li>Existing Buried Gas Pipeline</li><li>Existing Improved Access; Proposed Temporary Surface Waterline</li><li>Existing Improved Access; Proposed Temporary Surface Waterline; Produced Waterline</li><li>Proposed Temporary Surface Waterline; Produced Waterline</li><li>Existing BLM Improved Access; Gas Piping; Proposed Temporary Surface Waterline</li></ul>	<ul style="list-style-type: none"><li>Proposed Improved Access; Proposed Temporary Surface Waterline; Gas Injection Piping; Gas Piping; Produced Waterline</li><li>Existing Unimproved Access; Proposed Temporary Surface Waterline; Gas Injection Piping; Gas Piping; Produced Waterline</li><li>Existing Improved Access; Proposed Temporary Surface Waterline; Gas Injection Piping; Gas Piping; Produced Waterline</li></ul>	<ul style="list-style-type: none"><li>Proposed Improved Access; Proposed Temporary Surface Waterline</li><li>COGCC Producing Well</li><li>COGCC Abandoned Well</li><li>COGCC Dry and Abandoned Well</li><li>COGCC Plugged and Abandoned Well</li><li>Water - Permit Canceled</li><li>Water - Permit Expired</li><li>Water - Permit Issued</li><li>Water - Well Constructed</li></ul>
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760 W. Fetterman Buffalo, WY 82834  
Phone: 307.684.2112 Fax: 307.684.2142

Coordinate System: NAD 1983 UTM Zone 12N  
Projection: Transverse Mercator  
Datum: North American 1983  
Units: Meter  
Scale: 1:24,000  
Date: 8/10/2022  
Created by: GTraylor  
File Name: AEC-007\_Coyote\_ALA\_1\_Overview\_Map\_072622





**GROUSE MOUNTAIN**  
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Phone: 307.684.2112 Fax: 307.684.2142



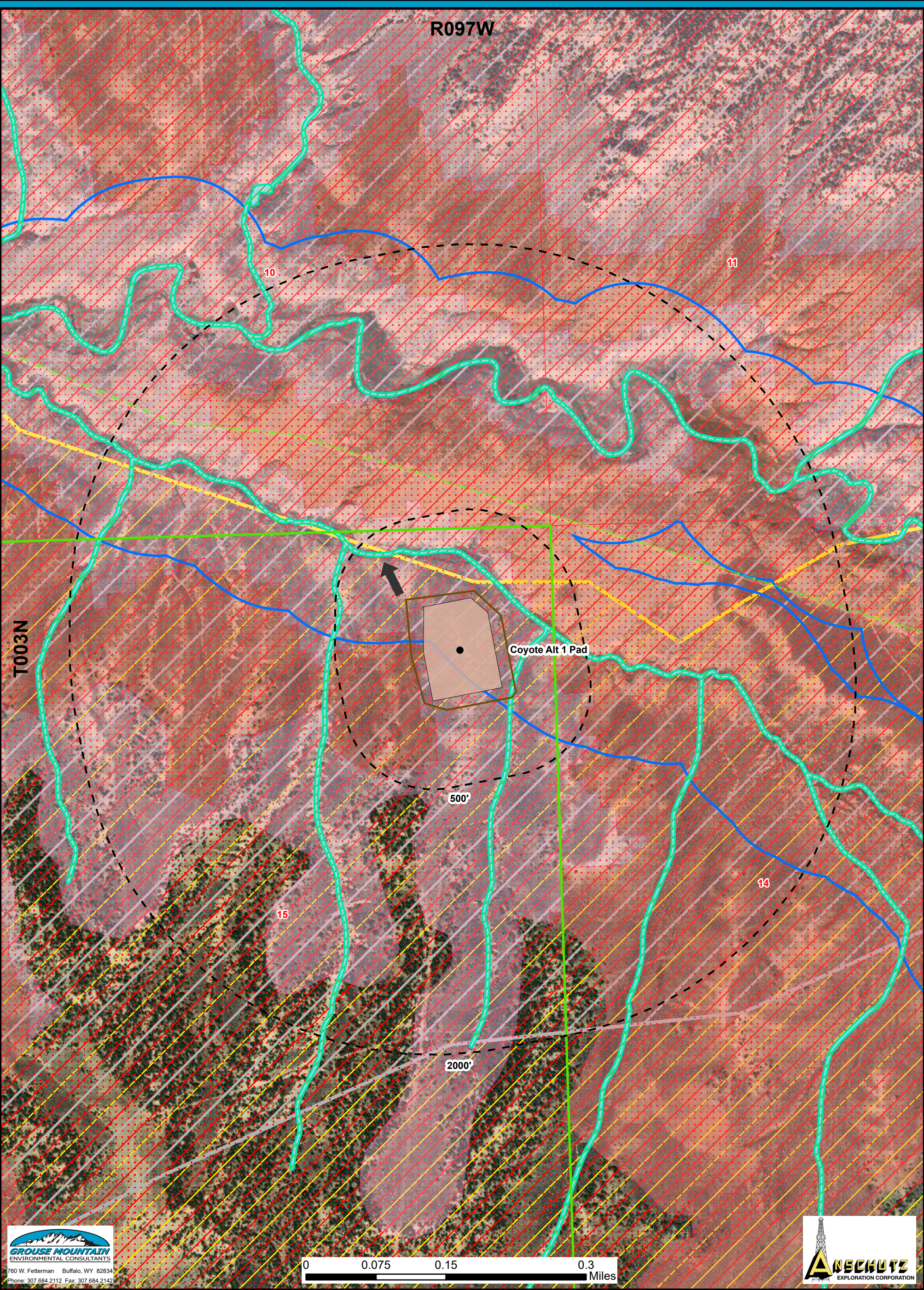
**Alternative Location Analysis Data Map: Coyote Fed 0397-14 Pad**

- |                              |   |   |
|------------------------------|---|---|
| Proposed Oil Well Pad        | Proposed Improved Access;<br>Gas Injection Piping;<br>Gas Piping;<br>Produced Waterline   | Greater Sage-grouse Priority Habitat Mgmt. Area |
| Surface Disturbance Boundary | Existing Unimproved Access;<br>Gas Injection Piping;<br>Gas Piping;<br>Produced Waterline | Greater Sage-grouse General Habitat Mgmt. Area  |
| Reference Point              | Downgradient (USGS Quad Map)  | Elk Severe Winter Range                         |
| 500' Buffer of Proposed Pad  | Sportfish Management Waters   | Pronghorn Winter Concentration Area             |
| 2000' Buffer of Proposed Pad |   | Mule Deer Winter Concentration Area             |
| Existing Fence               |   | Elk Winter Concentration Area                   |
| Mineral Development Area     |   | Wetlands  |

Reference Point of  
0397-14 Pad  
Lat: 40.235181  
Long: -108.253523

Coordinate System: NAD 1983 UTM Zone 12N  
Projection: Transverse Mercator  
Datum: North American 1983  
Units: Meter  
Scale: 1:6,000  
Date: 12/19/2022  
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AEC\_007





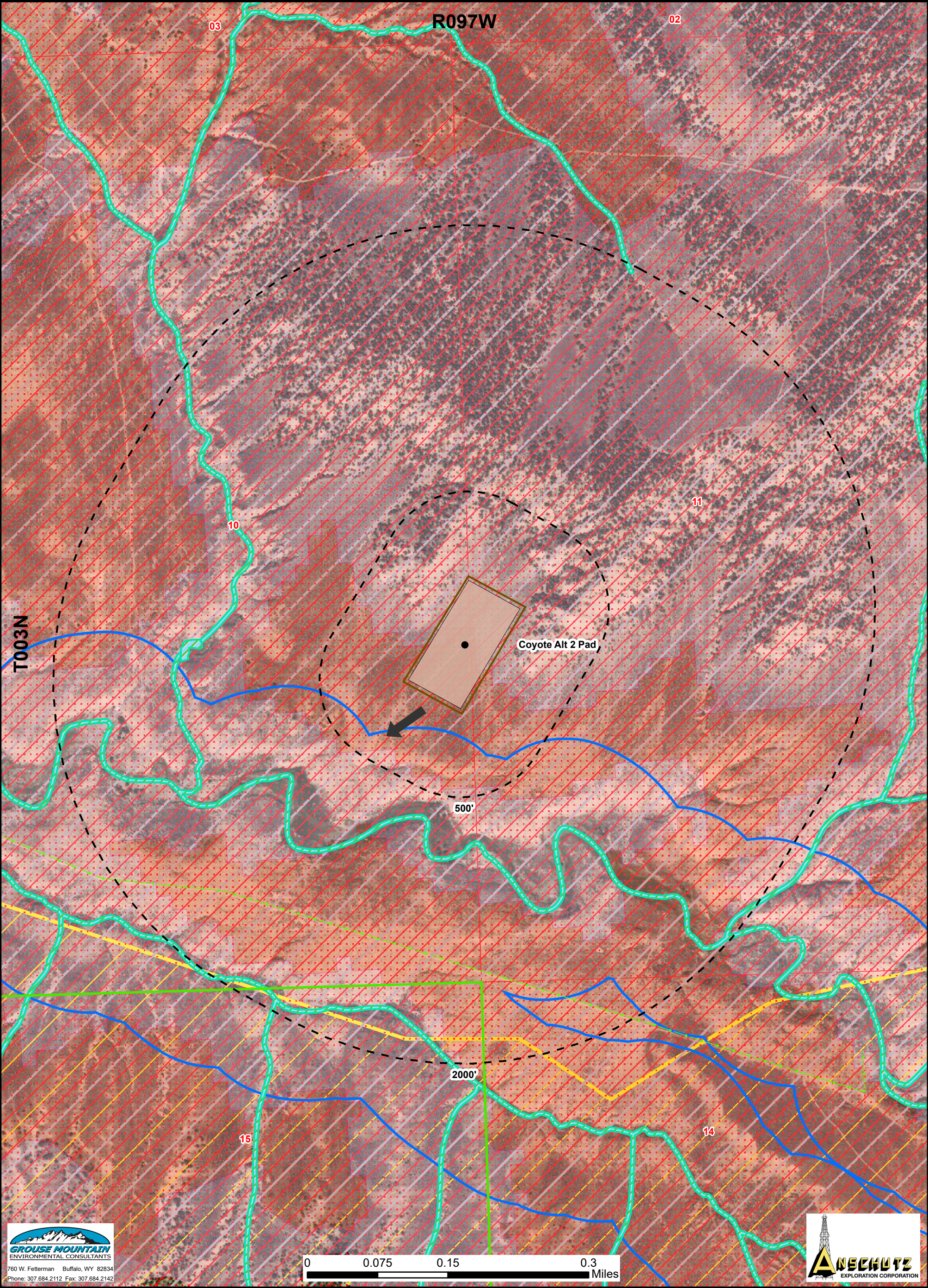
Alternative Location Analysis Data Map: Coyote Alt 1 Pad

- |                                 |   |                                     |
|---------------------------------|---|-------------------------------------|
| Proposed Alternate Oil Well Pad | Mineral Development Area                        | Pronghorn Winter Concentration Area |
| Surface Disturbance Boundary    | Downgradient (USGS Quad Map)                    | Mule Deer Winter Concentration Area |
| Reference Point                 | Sportfish Management Waters                     | Elk Winter Concentration Area       |
| 500' Buffer of Proposed Pad     | Greater Sage-grouse Priority Habitat Mgmt. Area | Wetlands                            |
| 2000' Buffer of Proposed Pad    | Greater Sage-grouse General Habitat Mgmt. Area  |                                     |
| Existing Fence                  | Elk Severe Winter Range                         |                                     |

Reference Point of  
Alt 1 Pad  
Lat: 40.234301  
Long: -108.256896

Coordinate System: NAD 1983 UTM Zone 12N  
Projection: Transverse Mercator  
Datum: North American 1983  
Units: Meter  
Scale: 1:6,000  
Date: 12/19/2022  
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Alternative Location Analysis Data Map: Coyote Alt 2 Pad

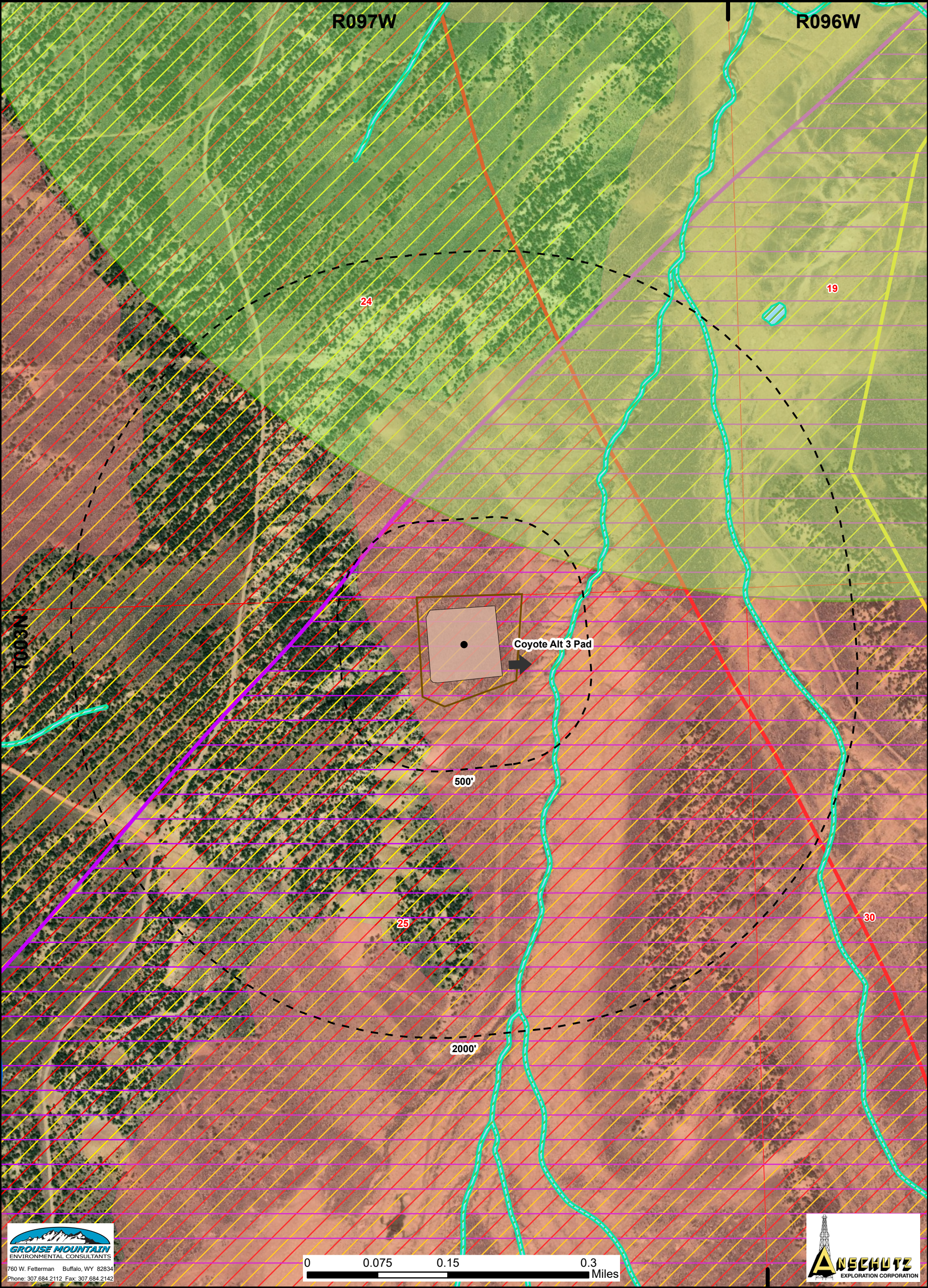
- |                                 |   |                                     |
|---------------------------------|---|-------------------------------------|
| Proposed Alternate Oil Well Pad | Mineral Development Area                        | Pronghorn Winter Concentration Area |
| Surface Disturbance Boundary    | Downgradient (USGS Quad Map)                    | Mule Deer Winter Concentration Area |
| Reference Point                 | Sportfish Management Waters                     | Elk Winter Concentration Area       |
| 500' Buffer of Proposed Pad     | Greater Sage-grouse Priority Habitat Mgmt. Area | Wetlands                            |
| 2000' Buffer of Proposed Pad    | Greater Sage-grouse General Habitat Mgmt. Area  |                                     |
| Existing Fence                  | Elk Severe Winter Range                         |                                     |

Reference Point of  
Alt 2 Pad  
Lat: 40.241406  
Long: -108.25511

Coordinate System: NAD 1983 UTM Zone 12N  
Projection: Transverse Mercator  
Datum: North American 1983  
Units: Meter  
Scale: 1:6,000  
Date: 12/19/2022  
Created by: kmccarthy  
File Name: AEC\_007







Alternative Location Analysis Data Map: Coyote Alt 3 Pad

- |                                 |   |                                     |
|---------------------------------|---|-------------------------------------|
| Proposed Alternate Oil Well Pad | Downgradient (USGS Quad Map)                    | Mule Deer Winter Concentration Area |
| Surface Disturbance Boundary    | Sportfish Management Waters                     | Elk Winter Concentration Area       |
| Reference Point                 | Greater Sage-grouse Lek Site- 1 mile NSO        | Wetlands                            |
| 500' Buffer of Proposed Pad     | Greater Sage-grouse Priority Habitat Mgmt. Area |                                     |
| 2000' Buffer of Proposed Pad    | Elk Production Area                             |                                     |

Reference Point of  
Alt 3 Pad  
Lat: 40.206421  
Long: -108.222855

Coordinate System: NAD 1983 UTM Zone 12N  
Projection: Transverse Mercator  
Datum: North American 1983  
Units: Meter  
Scale: 1:6,000  
Date: 12/19/2022  
Created by: kmccarthy  
File Name: AEC\_007

