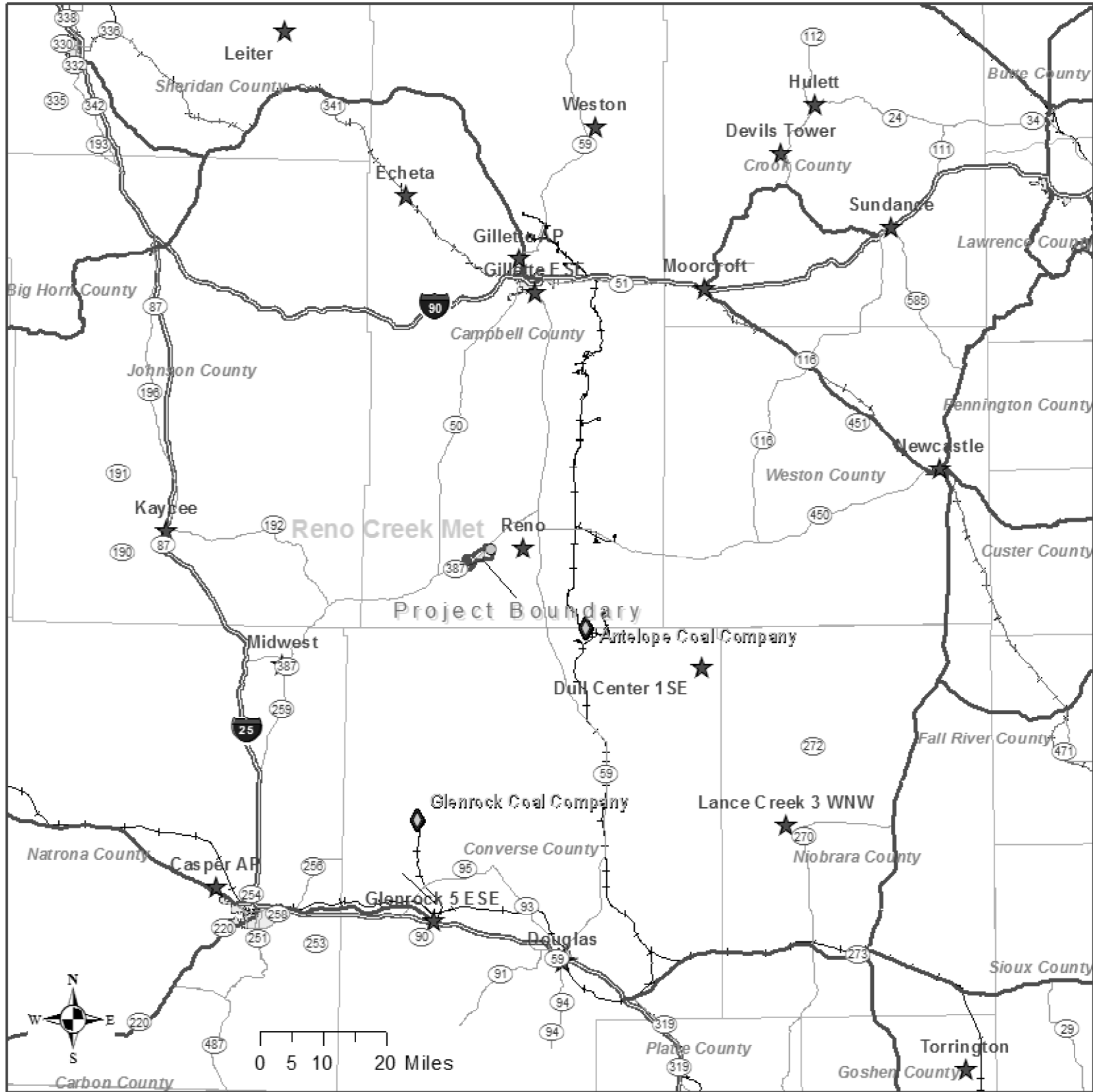


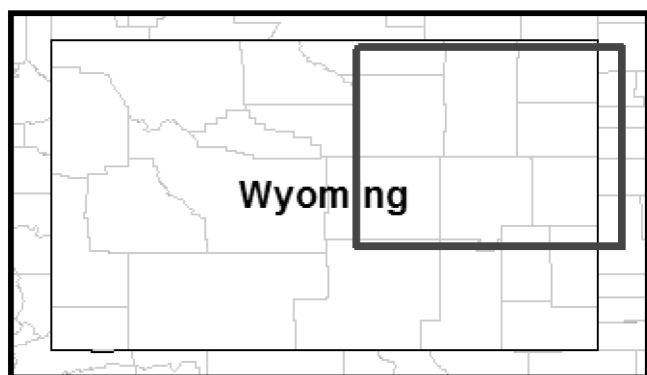
**APPENDIX F**  
**Additional Non-RAI Requests**  
**(SEIS Figures)**

Additional Non-RAI Request	Description of Request
Air Quality	NWS and Coal Mine Meteorological Stations
Air Quality	Casper Airport 8-Year Wind Rose
Air Quality	Antelope Mine 25-Year Wind Rose
Air Quality	Glenrock Mine 14-Year Wind Rose
Air Quality	Reno Creek Project Wind Rose
Air Quality	Proposed Project Wind Rose: 1st Quarter
Air Quality	Proposed Project Wind Rose: 2nd Quarter
Air Quality	Proposed Project Wind Rose: 3rd Quarter
Air Quality	Proposed Project Wind Rose: 4th Quarter
Air Quality	Antelope Mine Short and Long-Term Wind Roses
Air Quality	Proposed Project Meteorological Monitoring Map
Air Quality	Energy Developments
Public & Occupational Health	Project Schedule
Public & Occupational Health	Vacuum Dryer
Public & Occupational Health	Rad Site Characterization Sampling Locations
Public & Occupational Health	Residences within Two Miles of the Project Area
Transportation	Automated Traffic Count Sampling Locations
Waste Management	Conceptual Site Plan with Deep Disposal Well Infrastructure
Land Use	Land Use within Five Miles
Land Use	Surface Ownership
Land Use	Mineral Ownership
Land Use	Existing CBM Infrastructure
Land Use	Non-CBM Oil and Gas Wells within 10 Miles
Geology	Geologic Map of Pumpkin Buttes Uranium District
Geology	Generalized Stratigraphic Column for the Powder River Basin
Geology	Typical Geophysical Log RC0003 (Southeast)
Geology	Structural Cross Section, C-C'
Noise	Nearest Residence and Construction Noise Level
Noise	Nearby Recreation Areas
Noise	Uranium Recovery Facilities within 50 Miles of the Project Area
Noise	Figure 1 - Conceptual Site Plan with Wellfield Infrastructure Figure 2 - Conceptual Site Plan with Wellfield Locations and Monitoring Wells Figure 3 - Conceptual Site Plan with Deep Disposal Well Infrastructure
Groundwater	Gray-scale figure to represent general conceptualizations of the site hydrostratigraphy for the: (i) fully saturated PZA region, and (ii) partially saturated PZA region based on Figures 2.7B-16 through 2.7B-19. Information from Figures 2.6A-11 through 2.6A-33 could also be used. Figures: 1 - 2 - 3 - 4 - 5 - 6 - 7
Groundwater	Generalized Stratigraphic Column for the Powder River Basin
Surface Water	Drainages
Surface Water	Gaging Station Locations
Surface Water	Baseline Radiological Sampling Locations
Ecology (Vegetation)	Black/white figure from map in ER Addendum 3.5-E. Show baseline vegetation communities, tree stand and noxious weed locations. Do not need to show all of 1/2 mi. buffer. Do not include sample locations or habitat survey points.
Ecology (Vegetation)	Using vegetation (mentioned above) map as a base, create a new figure showing the proposed facilities (well fields, ponds, well, pipelines, roads, structures, etc.) and facilities for the proposed alternatives (backup storage pond, etc.) (see Dewey Burdock Figs. 4.6-1 and 4.6-3 as an example).
Ecology (Biological Resources)	Show the proposed Reno Creek project area and 1-mile wildlife survey buffer (could use ER Figure 3.5-1 as a base). Add WGFD Crucial Habitat Priority Area and an Enhancement Habitat Priority Area for the sagebrush/mixed grassland habitat within Greater sage-grouse complexes. Add sage grouse lek locations (160 Acre, Porcupine Creek, and Spring Creek) that are known within 4 miles. Add the 13 raptor nest locations from ER Figure 3.5-1 and identify by species.
Ecology (Biological Resources)	Using above map as a base, create a new figure only keeping the sage grouse lek locations and raptor nests. Place a 2-mile radius ring around the active leks, and add all planned and alternative facilities. The map area can be zoomed in to include just the boundaries of the 2-mile rings
Wetlands	Black/white figure that fits on one 8.5"x11" page, showing jurisdictional wetlands and waters of the US and proposed facilities
Cultural Resources	GIS file with coordinates and elevation of the site and surrounding areas. If a GIS file is not available, provide a spreadsheet with x, y, z coordinates describing the site topography. Provide details such as a coordinate system and type of elevation. (See file attachment, "DEM.zip", which contains a Digital Elevation Model)
General	Proposed Reno Creek Project General Location Map
General	Proposed Project Map
General	Site Surface Ownership
General	Site Mineral Ownership
General	Conceptual Site Plan (wellfield map) - wellfield locations with simplified CPP, trunk lines and power lines.
General	Conceptual Site Plan (wellfield map) - wellfield locations and monitoring wells
General	Proposed Project Schedule
General	CPP Facility Area Layout
General	CPP Building Layout





## Reno Creek Project Met Stations



### Met Stations



EPA



ASOS / COOP



Reno Creek



Project Boundary

### Roadways



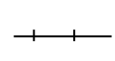
Interstate



Federal



State



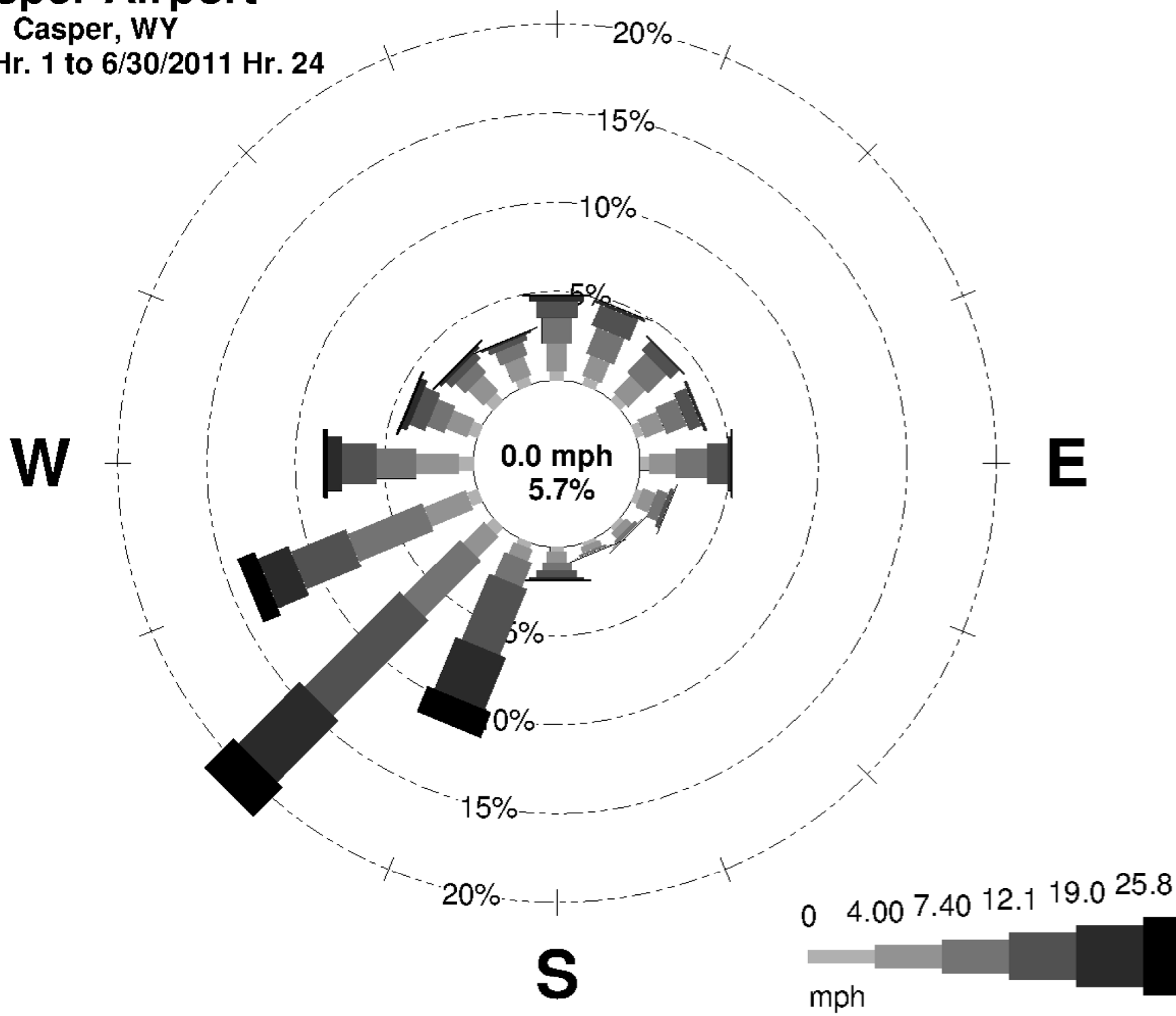
Railroad

## 8-Year WIND ROSE

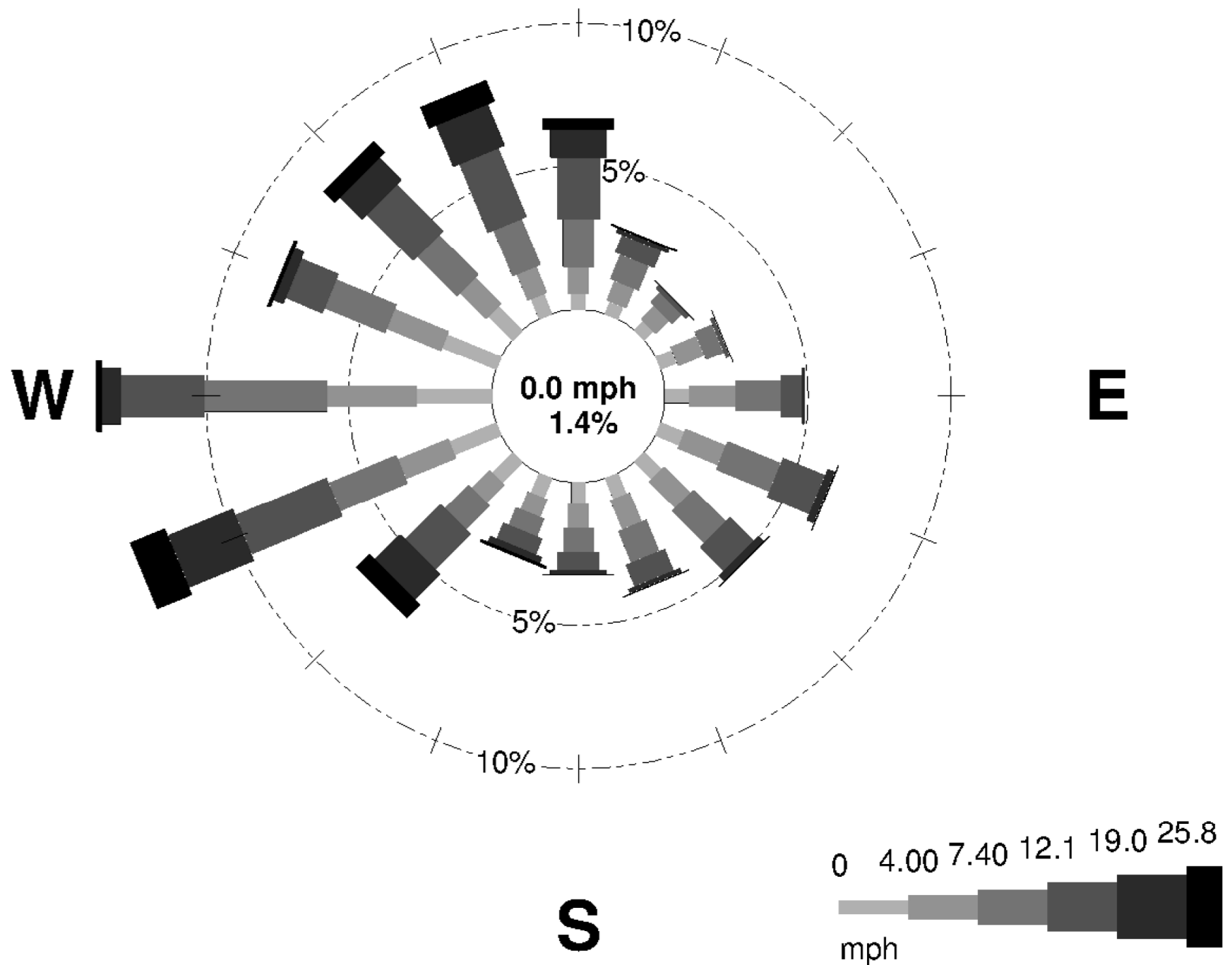
## Casper Airport

Casper, WY

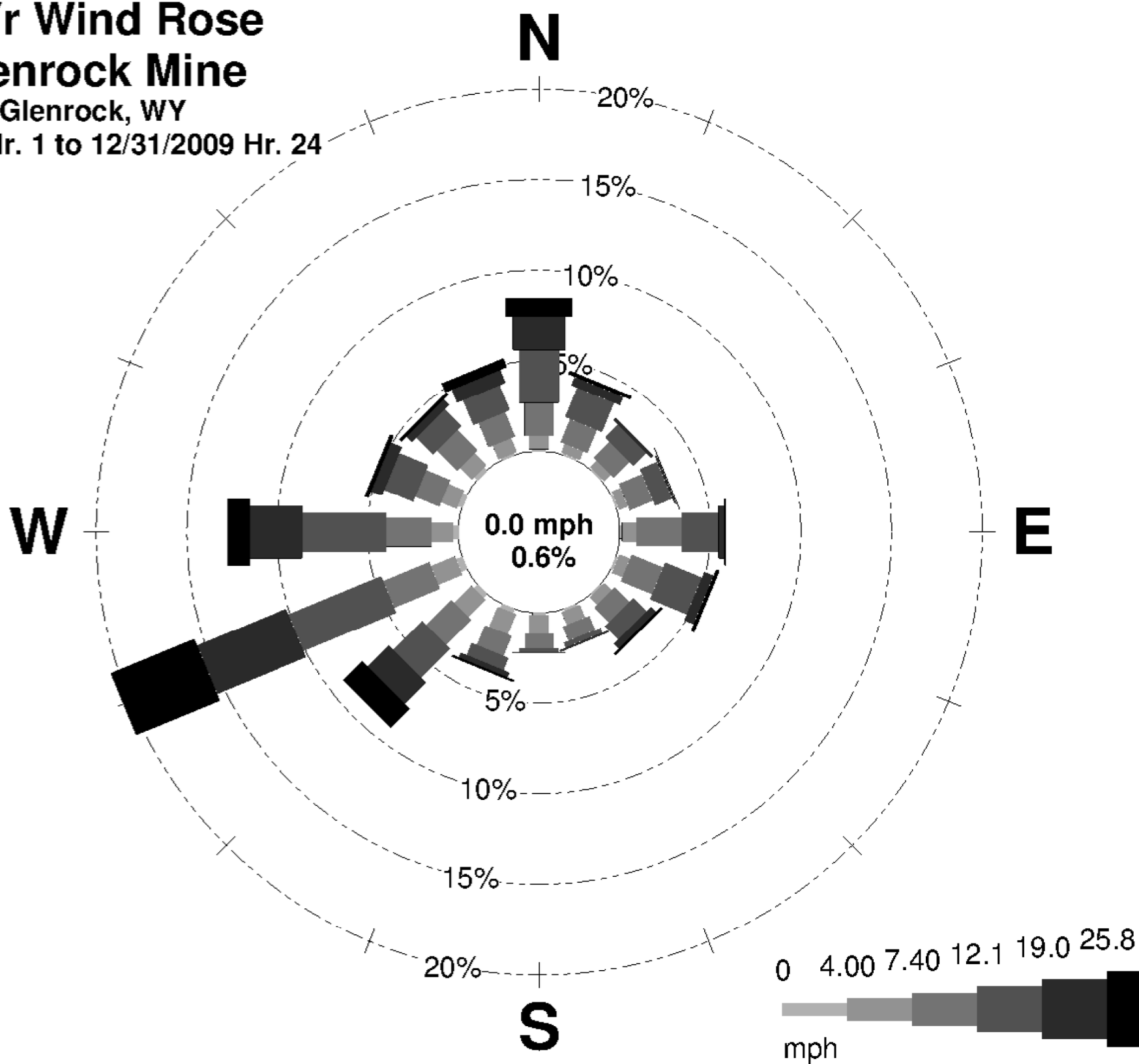
**1/1/2004 Hr. 1 to 6/30/2011 Hr. 24**



**Wright, WY**  
**1/1/1986 Hr. 1 to 10/6/2011 Hr. 14**



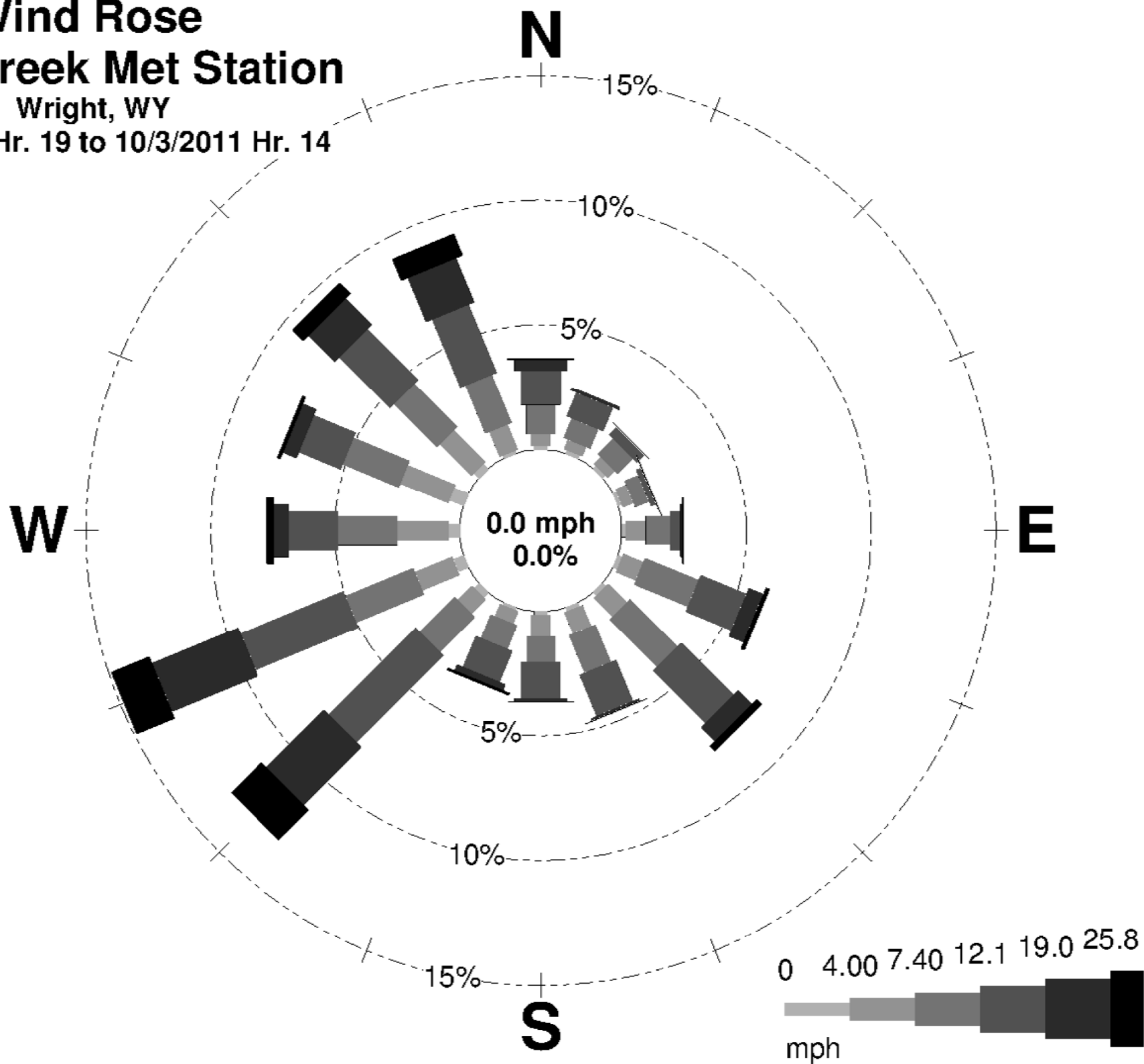
**Glenrock, WY**  
**1/1/1996 Hr. 1 to 12/31/2009 Hr. 24**



# Wind Rose

## Reno Creek Met Station

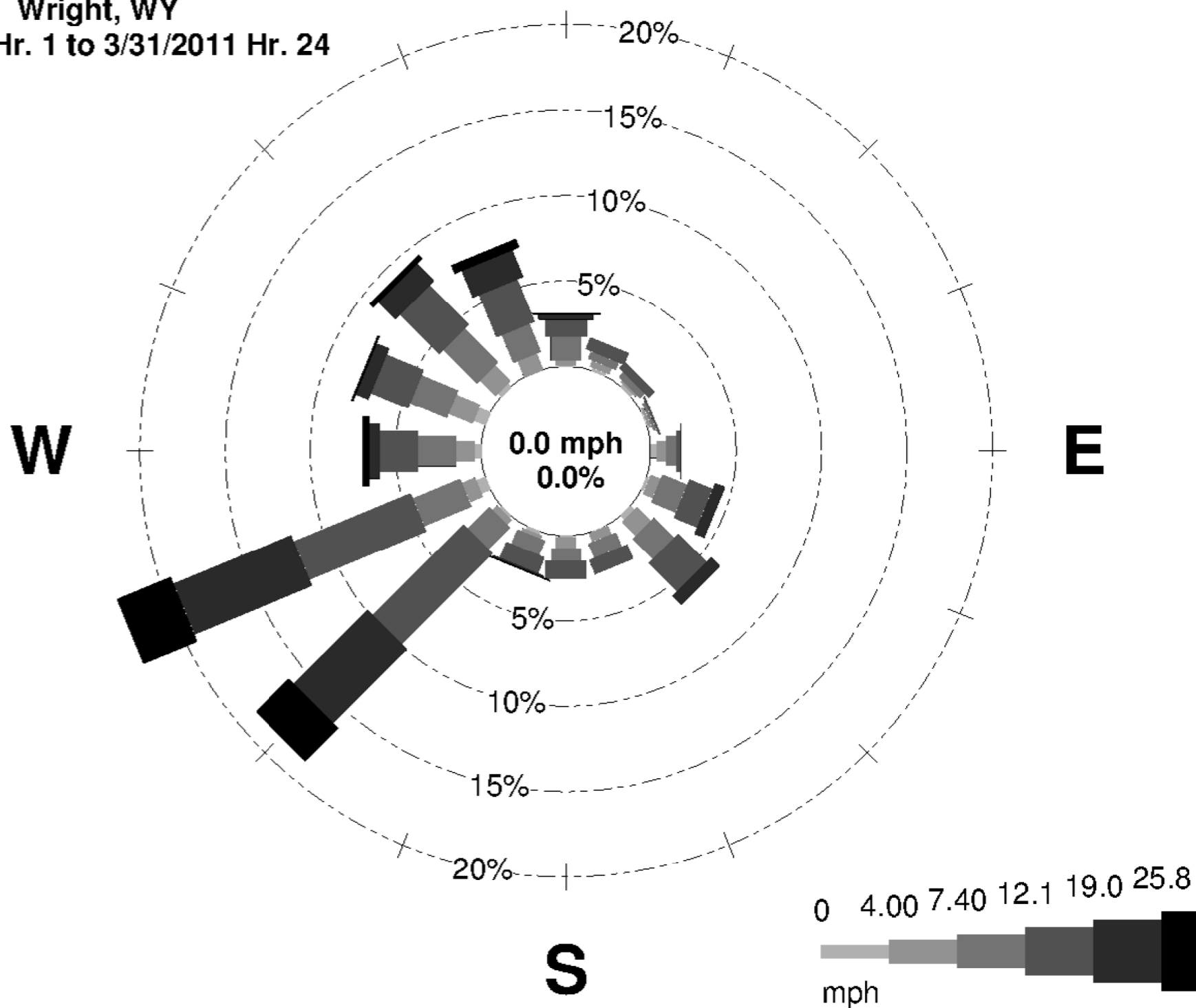
Wright, WY  
10/6/2010 Hr. 19 to 10/3/2011 Hr. 14



# Wind Rose - 1st Quarter Reno Creek Met Station

Wright, WY

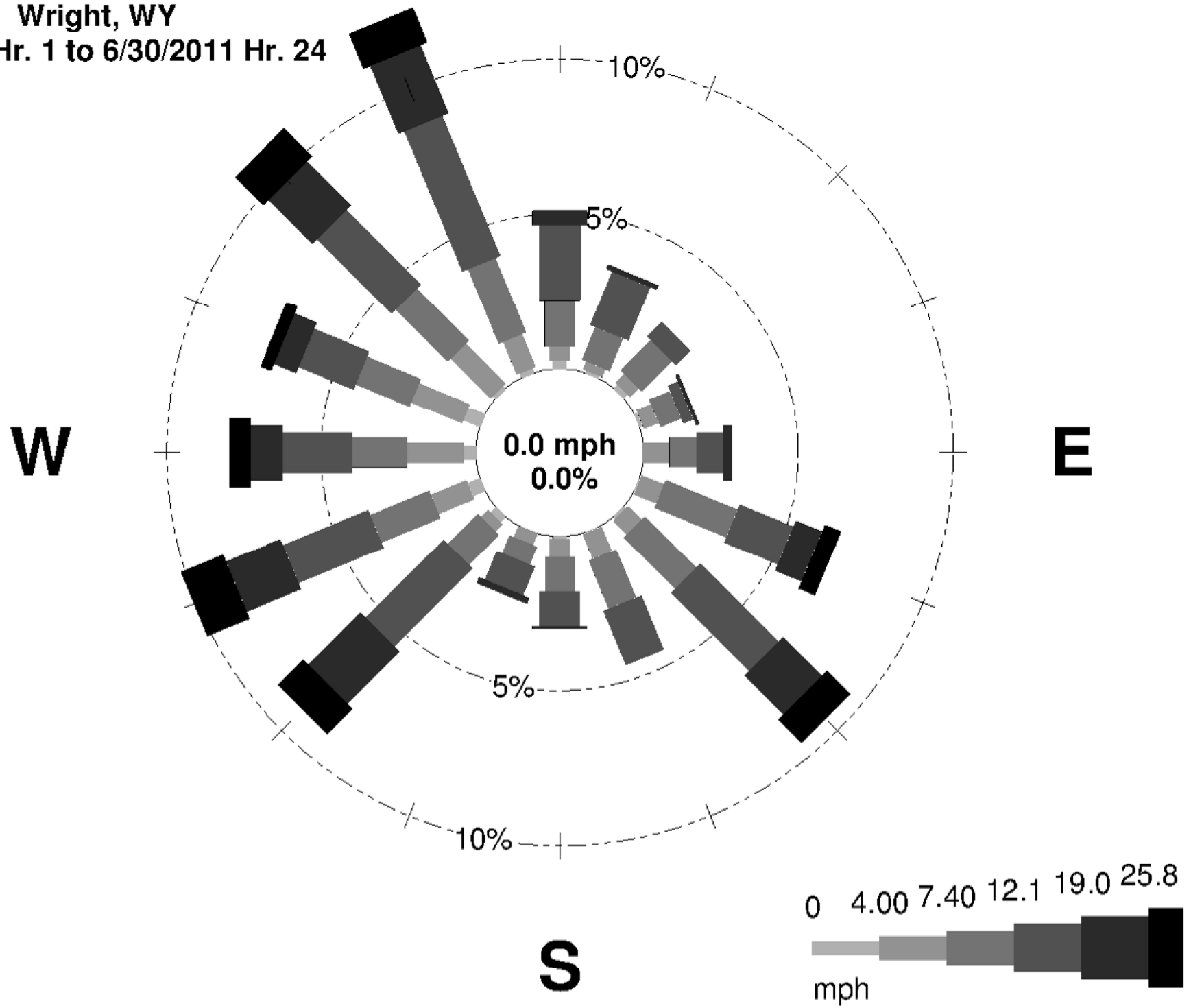
1/1/2011 Hr. 1 to 3/31/2011 Hr. 24



# Wind Rose - 2nd Quarter Reno Creek Met Station

Wright, WY

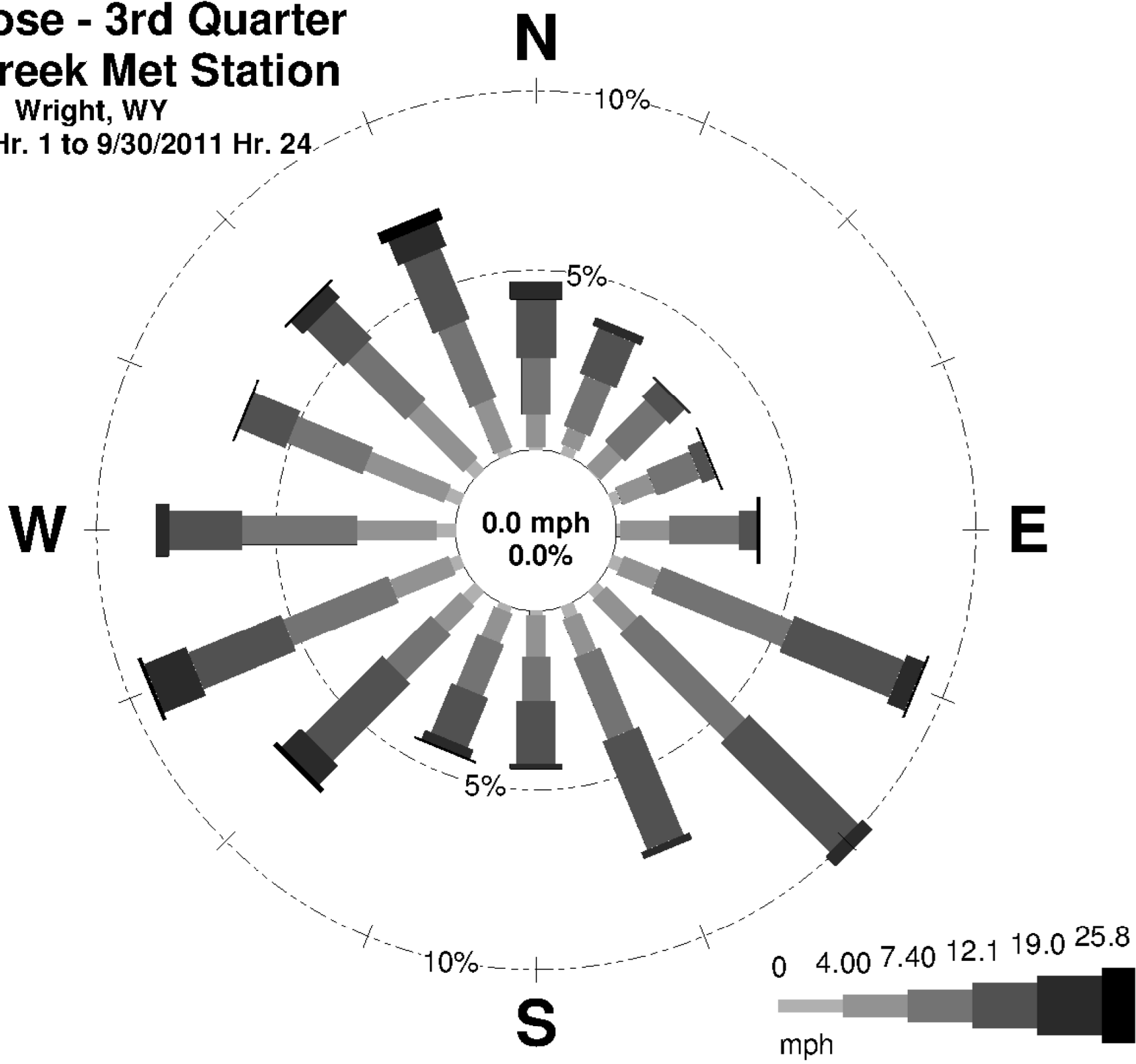
4/1/2011 Hr. 1 to 6/30/2011 Hr. 24



## Wind Rose - 3rd Quarter Reno Creek Met Station

Wright, WY

7/1/2011 Hr. 1 to 9/30/2011 Hr. 24

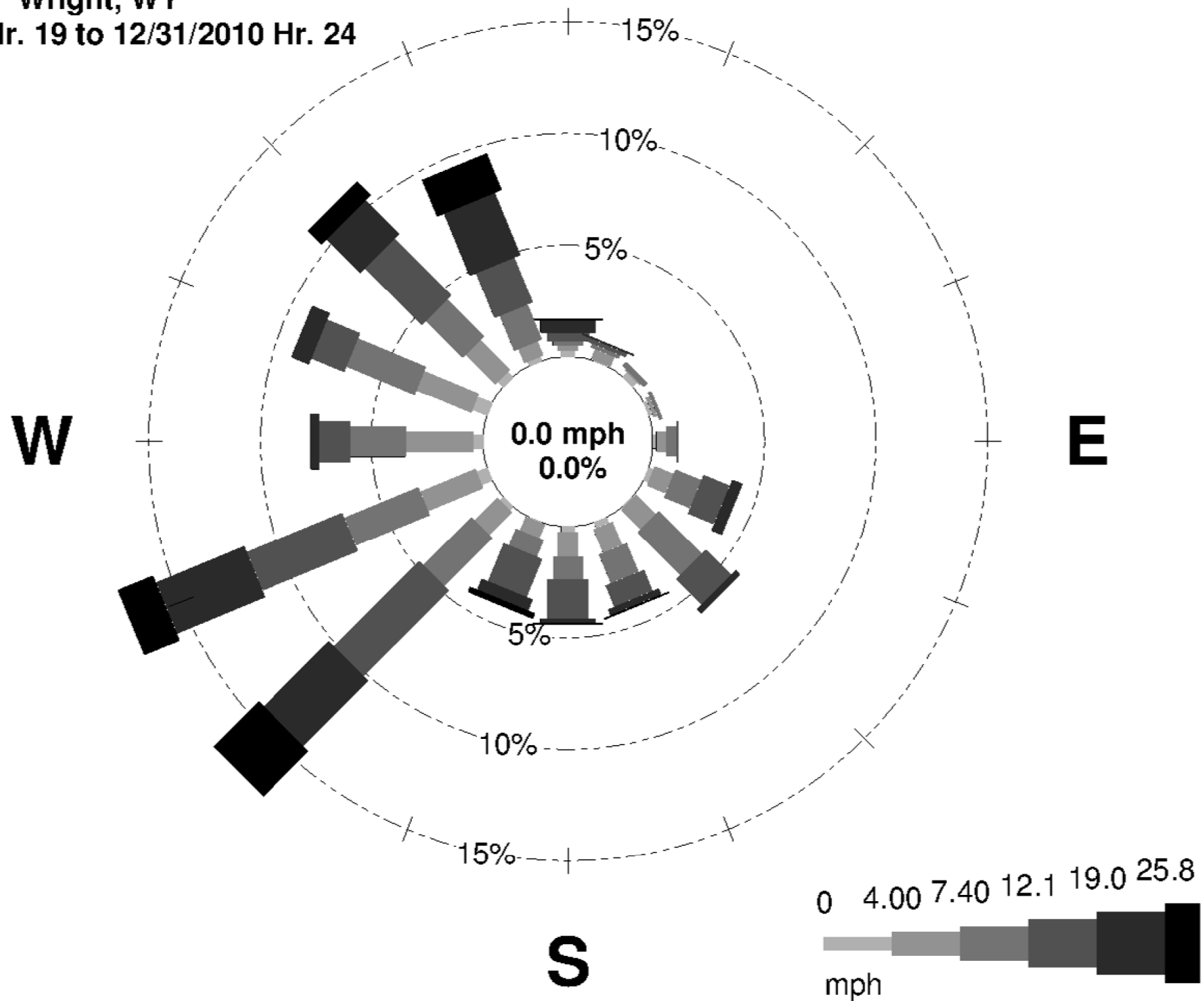




# Wind Rose - 4th Quarter Reno Creek Met Station

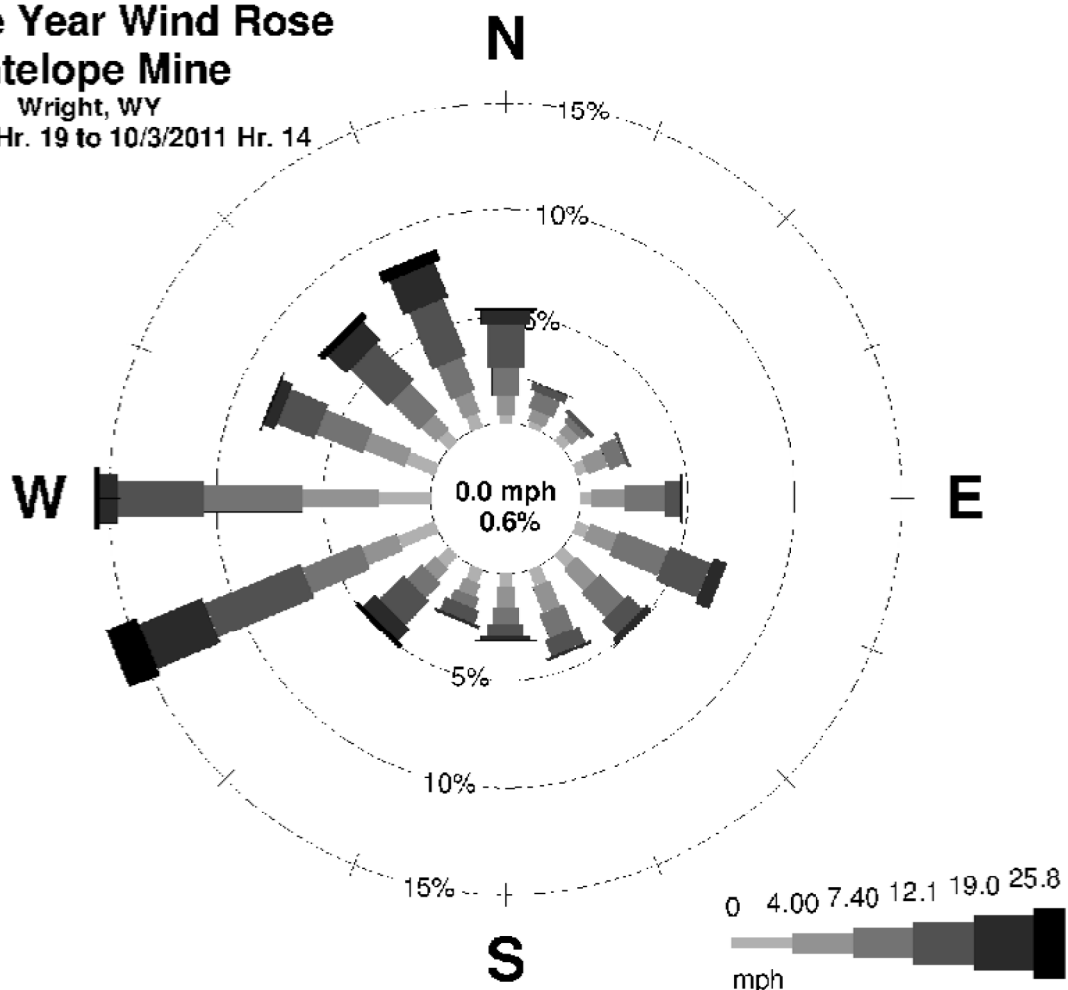
Wright, WY

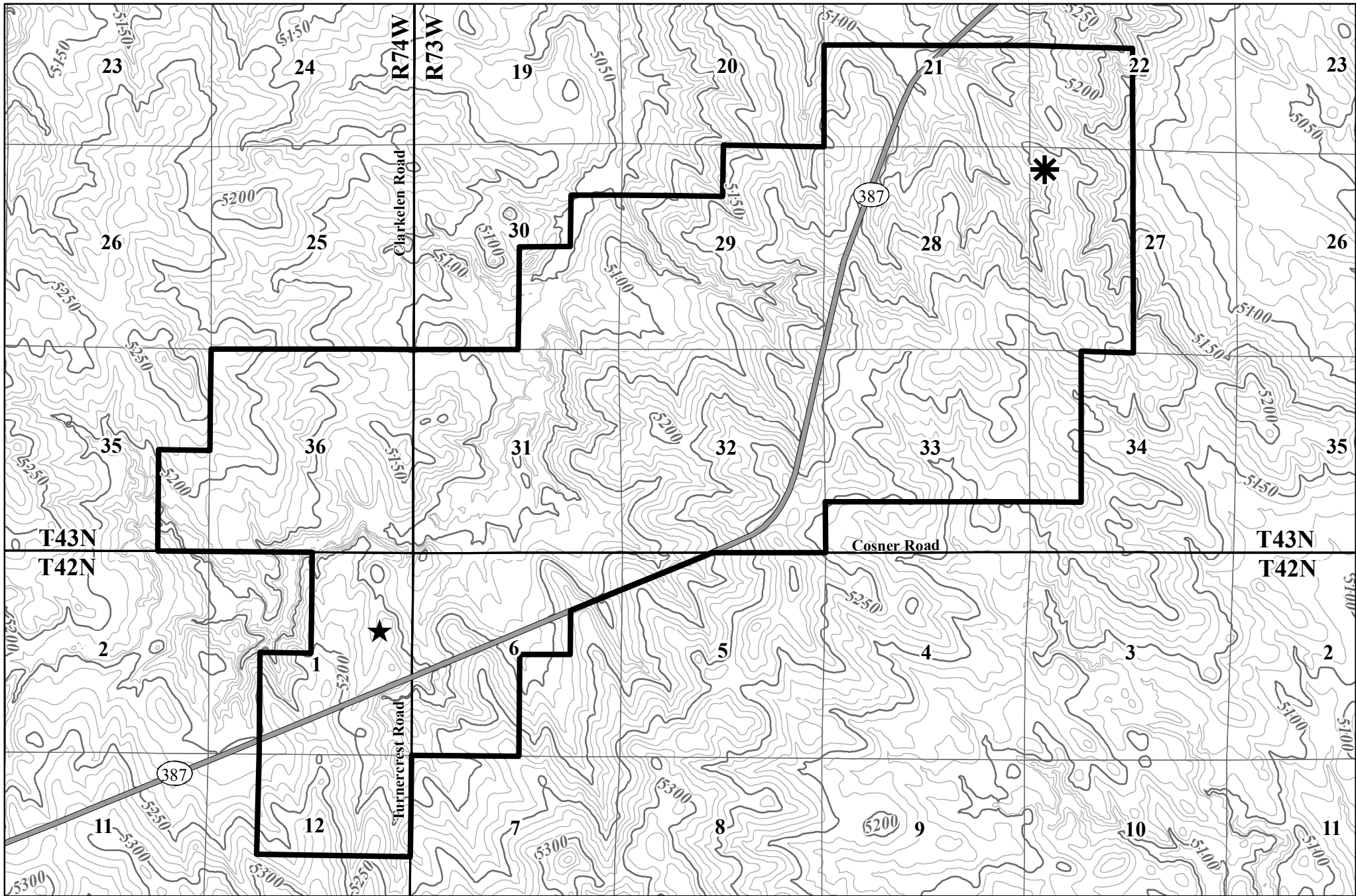
10/6/2010 Hr. 19 to 12/31/2010 Hr. 24







# Baseline Year Wind Rose Antelope Mine

Wright, WY  
10/6/2010 Hr. 19 to 10/3/2011 Hr. 14



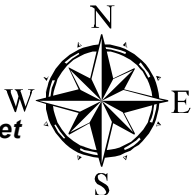


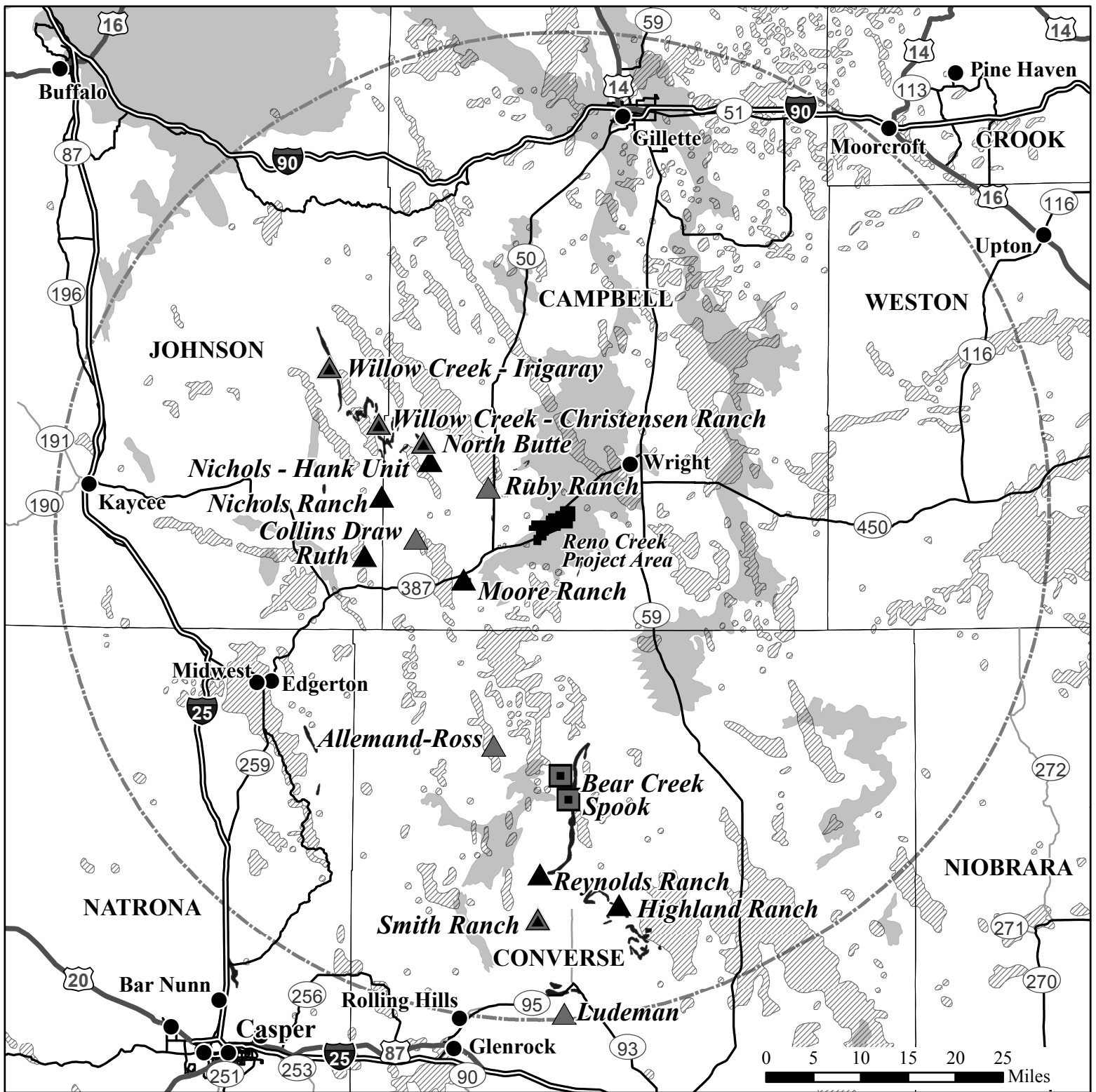
## Legend

-  Proposed Reno Creek Project Boundary
-  Meteorological Station
-  Central Processing Plant
-  Major Road

Elevation Contour Interval = 10 feet

0 0.25 0.5 0.75 1 Miles



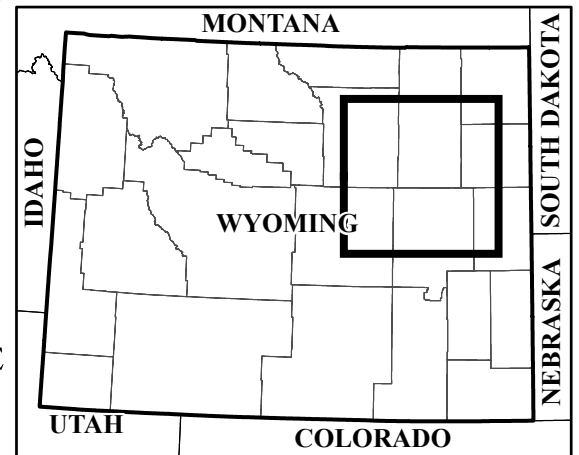
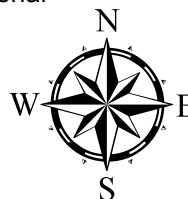


## Legend

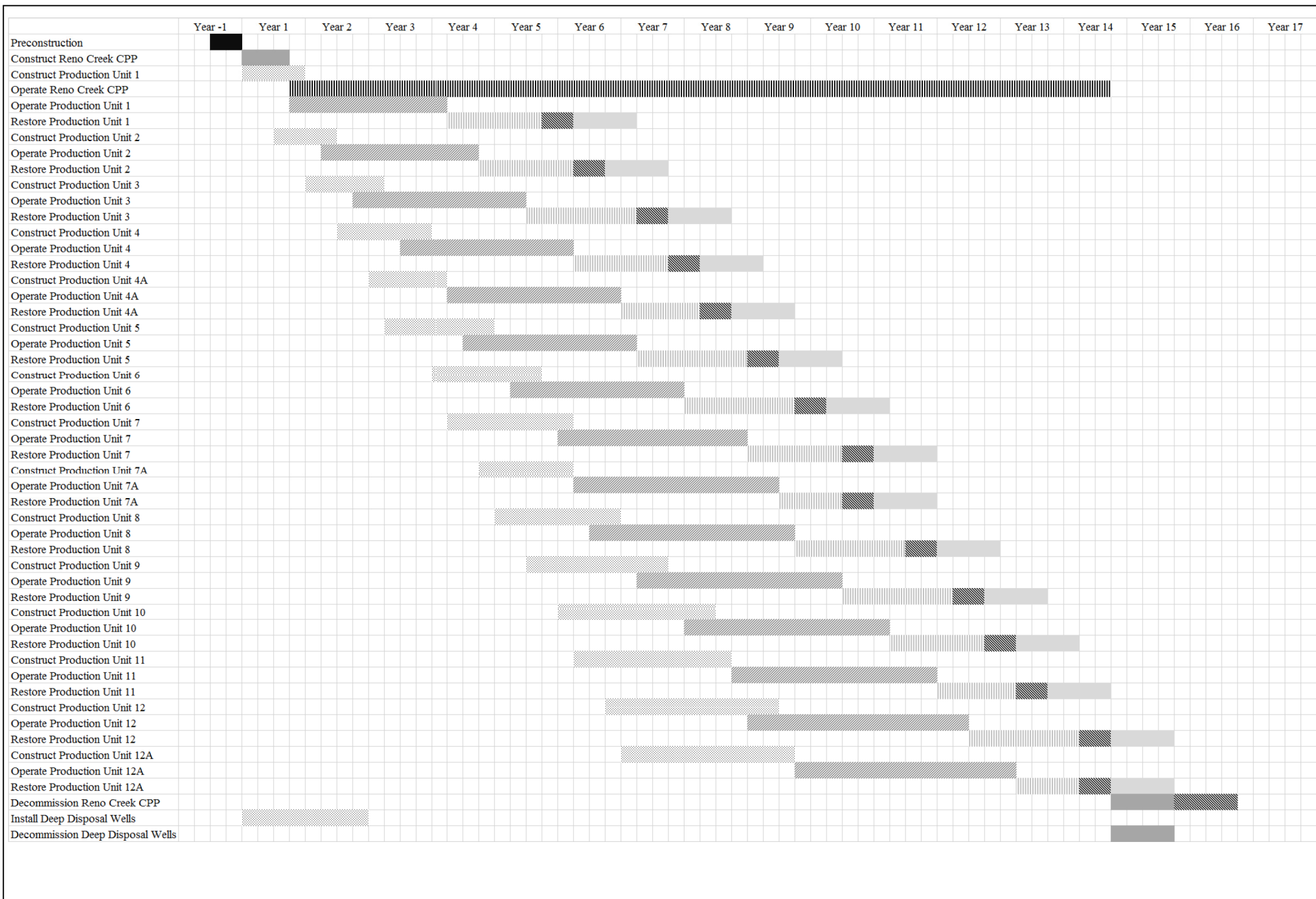
- Proposed Reno Creek Project Boundary
- 50 Mile Review
- Cities and Towns
- Interstate
- Highway
- Major Road
- Local Road
- Uranium Occurance - Highly Favorable
- Oil and Gas Fields - Highly Favorable
- Coal Fields - Highly Favorable

## Uranium ISR Projects

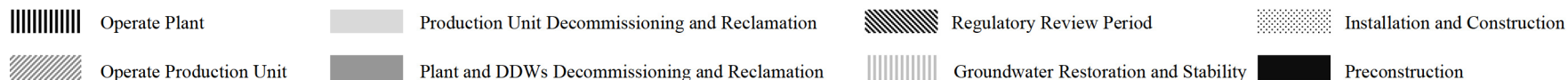
- Licensed - Operating
- Licensed - Not Operating
- Proposed
- Legacy
- Conventional Uranium Project

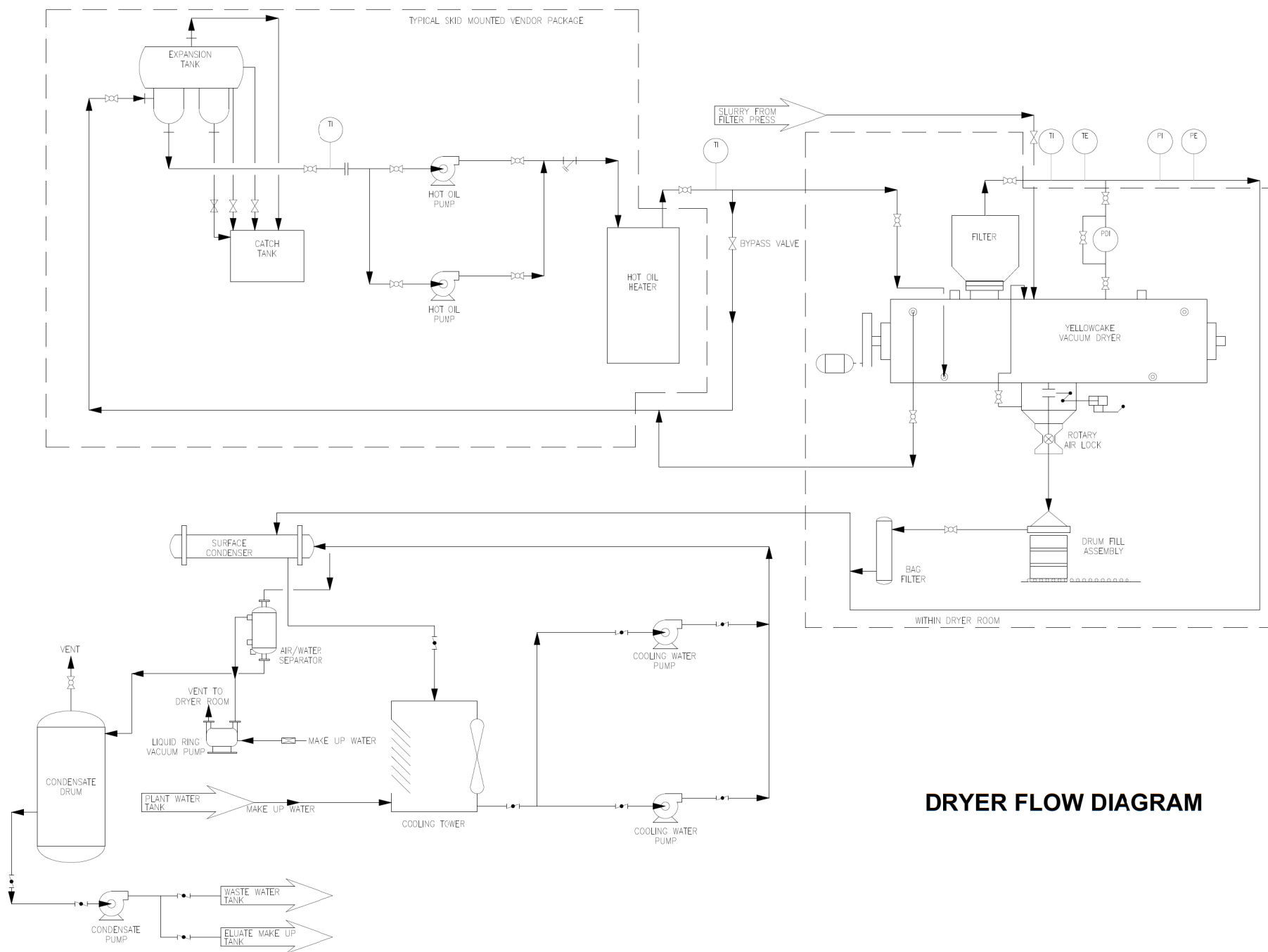


Source: Potential exploitable uranium, oil and gas and coal areas - U.S. Bureau of Mines, 1990



## Legend

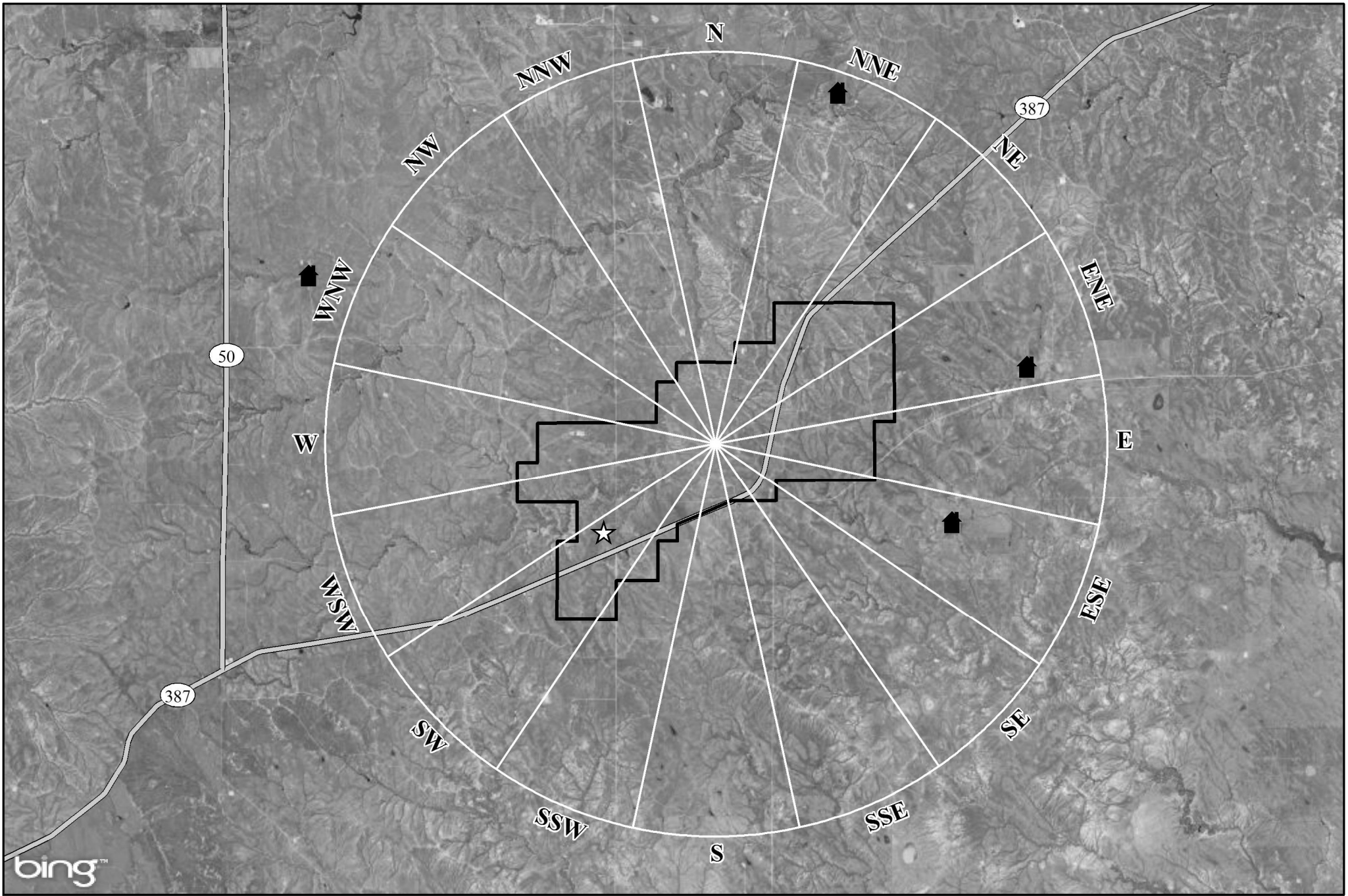







**DRYER FLOW DIAGRAM**





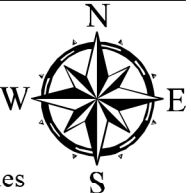
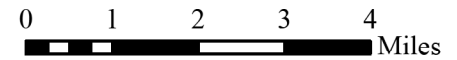


## Legend

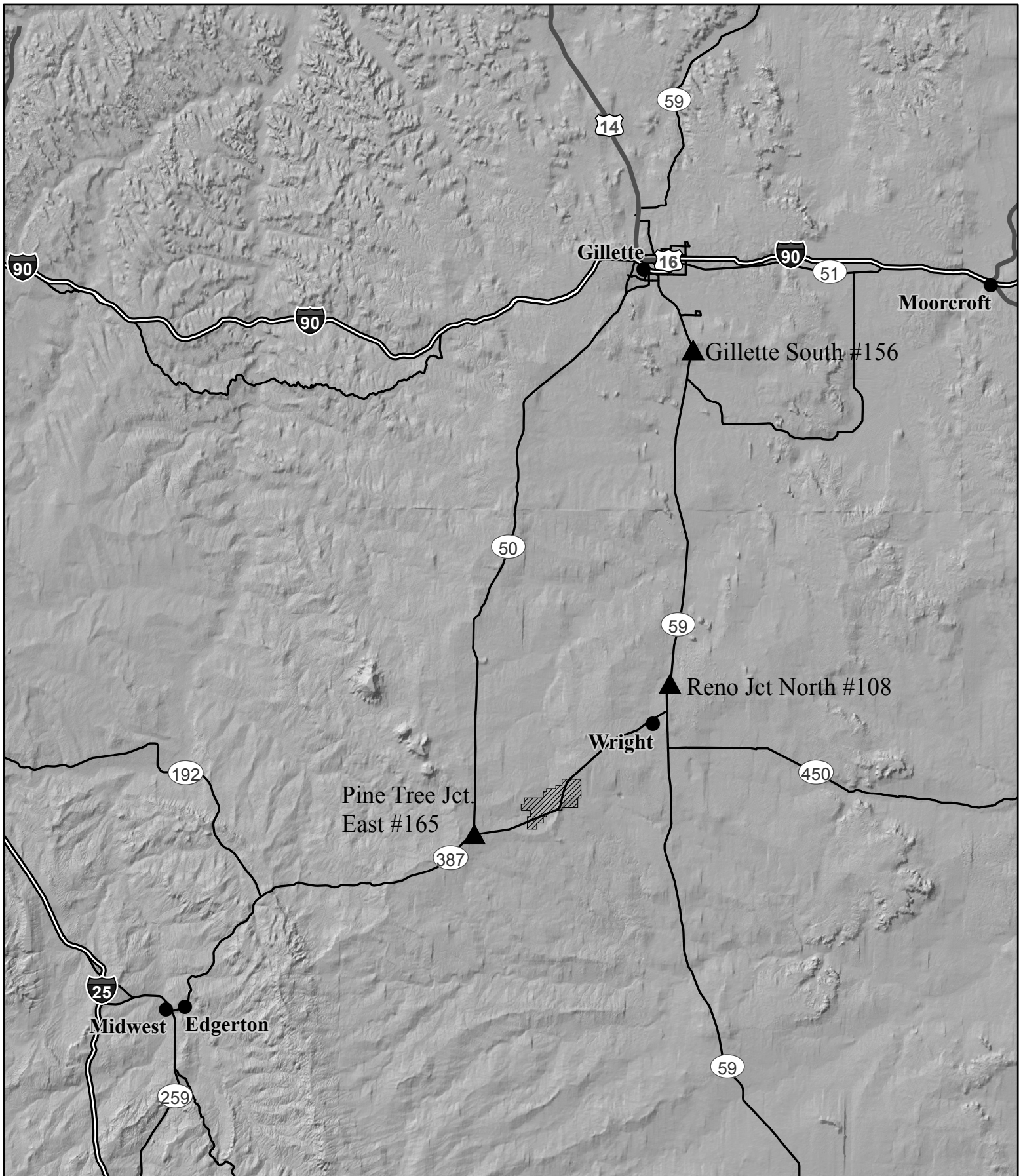
-  Proposed Reno Creek Project Boundary
-  Central Processing Plant
-  Residence

### Name

 Major Road (Paved)










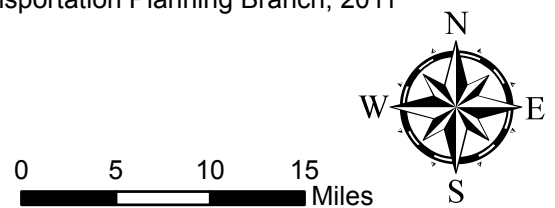


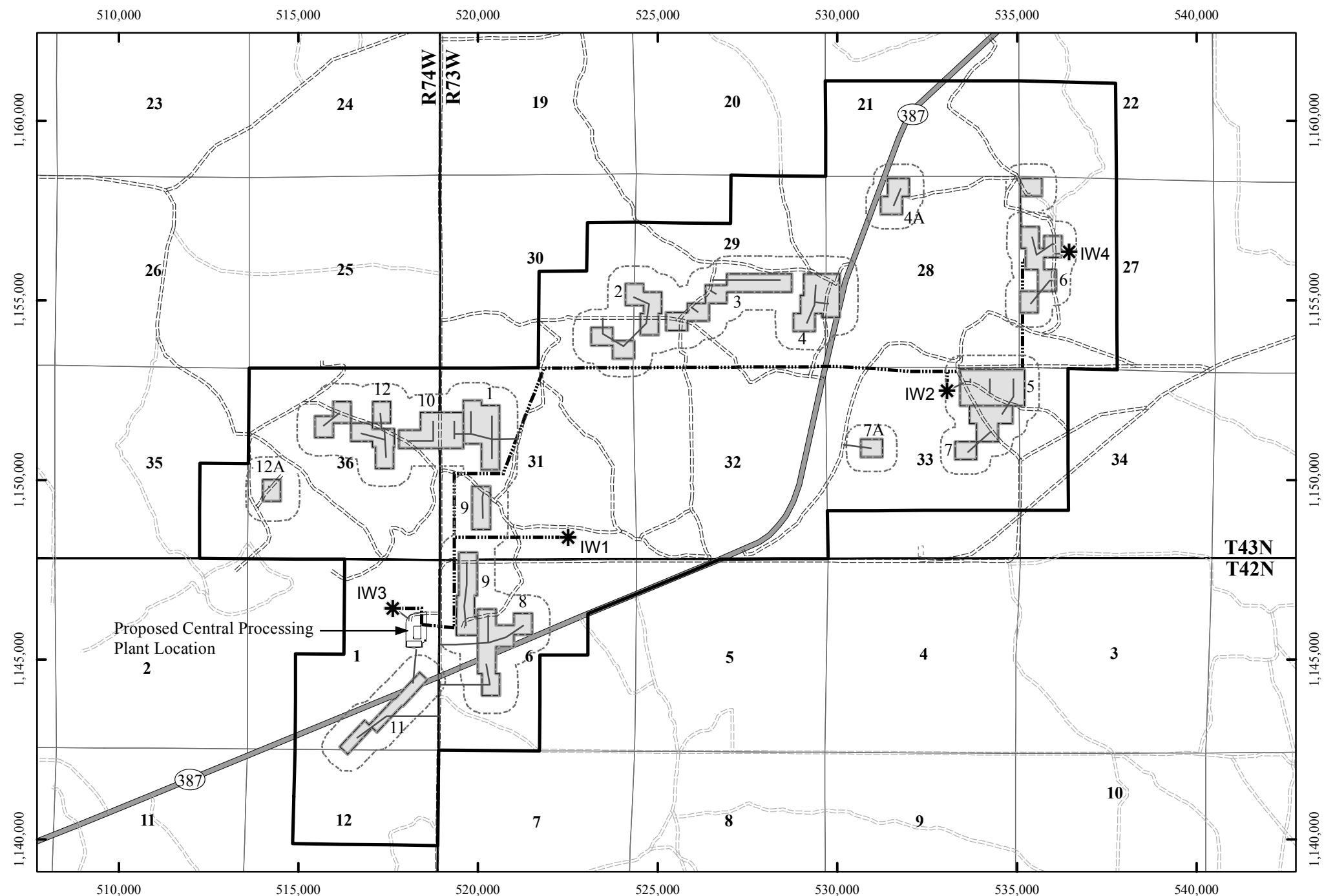


## Legend

Source: Wyoming Department of Transportation Planning Branch, 2011

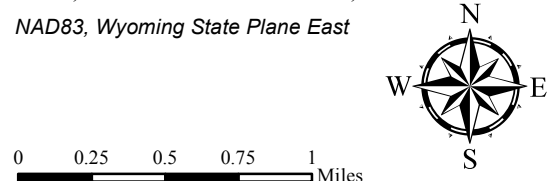
- |  |  |
|--|--|
|  Proposed Reno Creek Project Boundary |  Interstate |
|  Automated Traffic Counter            |  Highway    |
|  Cities and Towns                     |  Major Road |
|  |  Local Road |

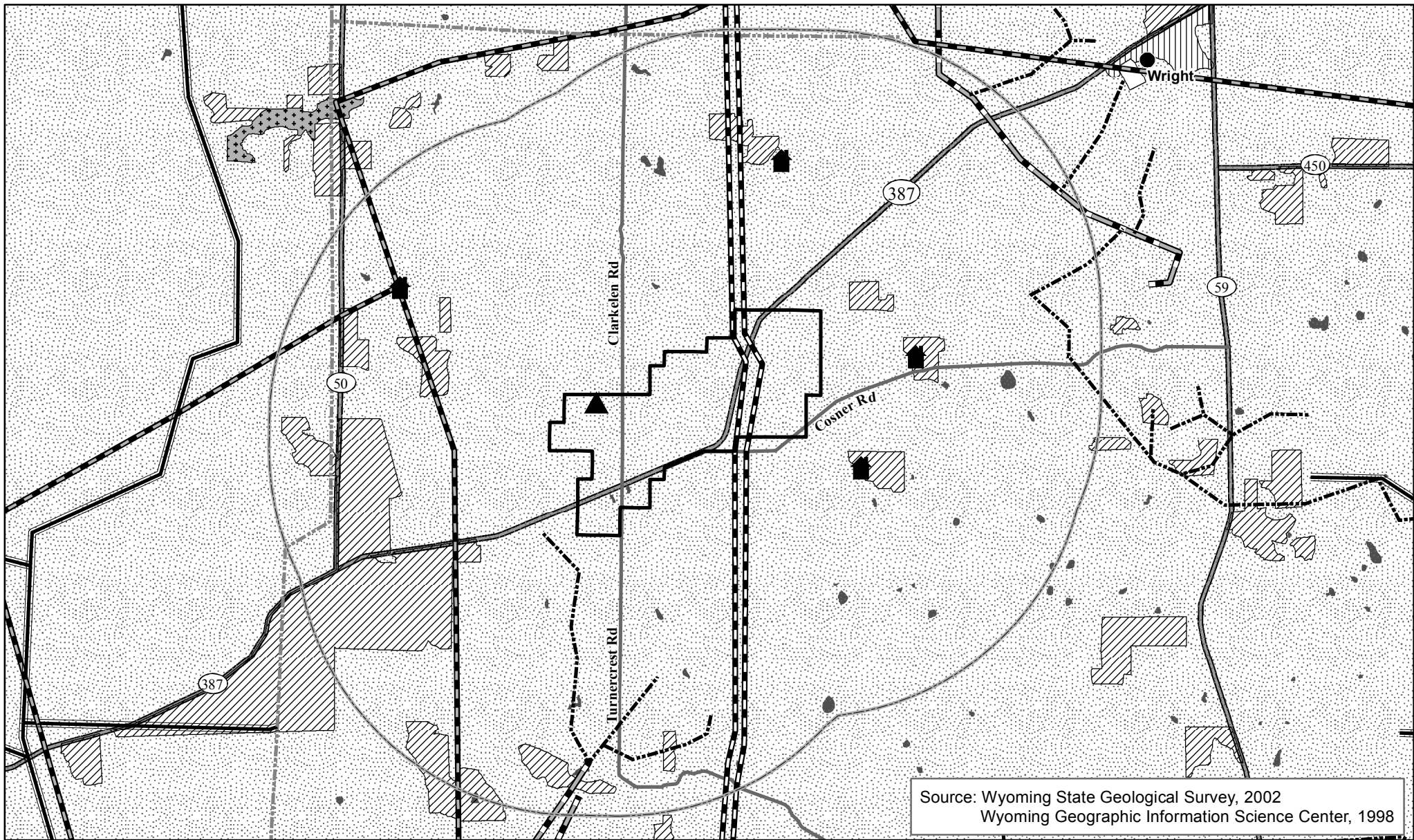




**Legend**

- |                                      |  |   |
|--------------------------------------|--|---|
| Proposed Project Boundary            | Existing Primary and Secondary Access Road | Major Road (Paved)                        |
| Deep Disposal Well                   | Proposed Secondary Road                    | Minor Road (Unpaved Existing Access Road) |
| Proposed Deep Disposal Well Pipeline | Proposed Tertiary Road                     |   |
| Production Unit                      |  |   |





Source: Wyoming State Geological Survey, 2002  
 Wyoming Geographic Information Science Center, 1998

## Legend

- Proposed Reno Creek Project Boundary
- Five Mile Review
- Residence
- CBM Compressor Station
- Cities and Towns
- Major Road (Paved)
- Road

### Pipeline Operator

- Belle Fourche (Crude Oil)
- Fort Union Gas Gathering (Natural Gas)
- Kansas-Nebraska Gas Gathering (Natural Gas)
- Kinder Morgan Operating, L.P. (Natural Gas)
- Thunder Creek Gas Services, L.L.C. (Natural Gas)
- Western Gas Resources (Natural Gas)

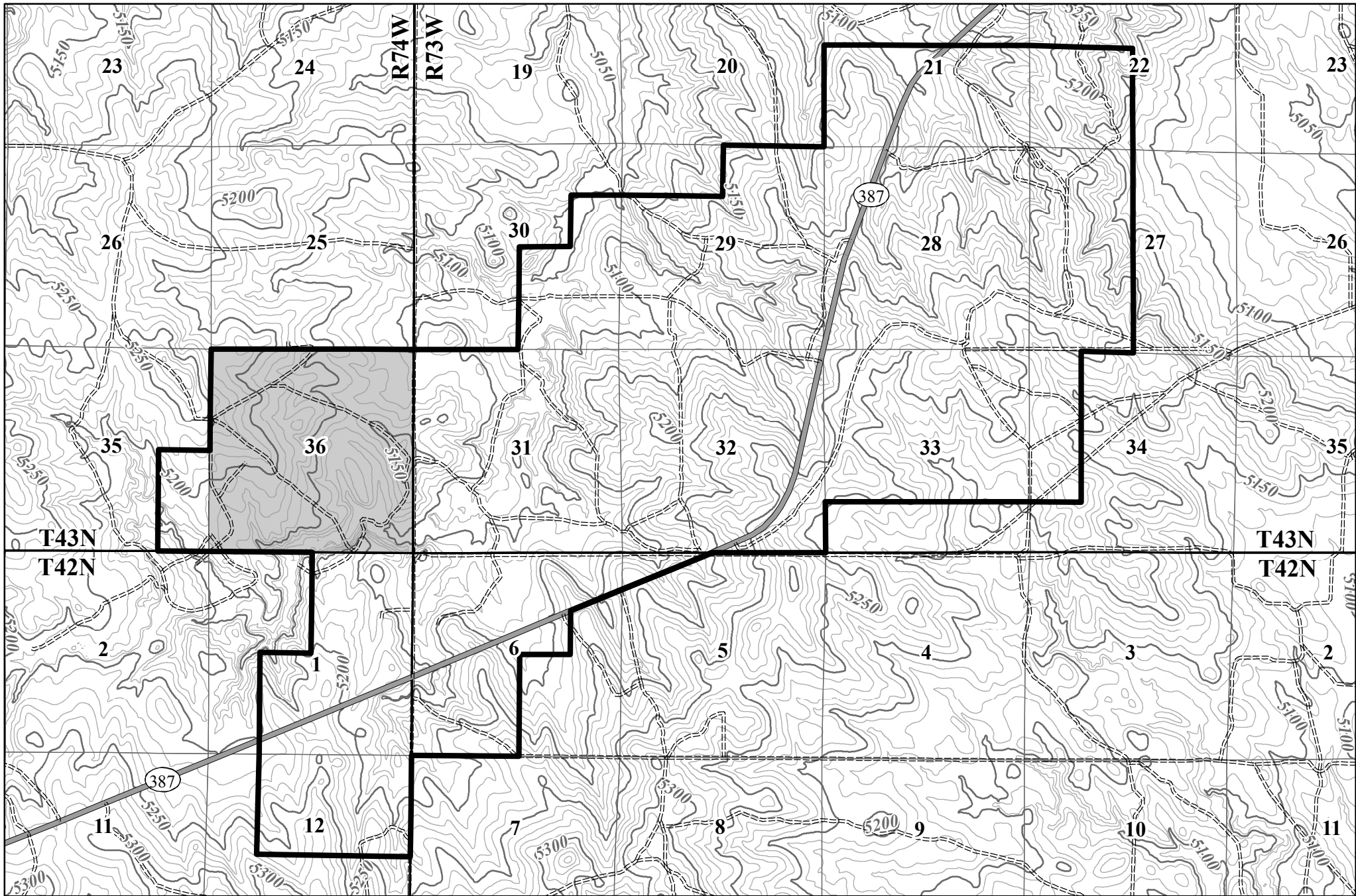
### Land Use Description

- Irrigated Cropland
- Agricultural
- Non-Irrigated Cropland
- Urban/Built-Up Area
- Surface Water Features

0 1 2 3 4 Miles







## Legend



Proposed Reno Creek Project Boundary

Major Road

Minor Road

## Surface Ownership Classification



State

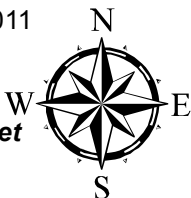


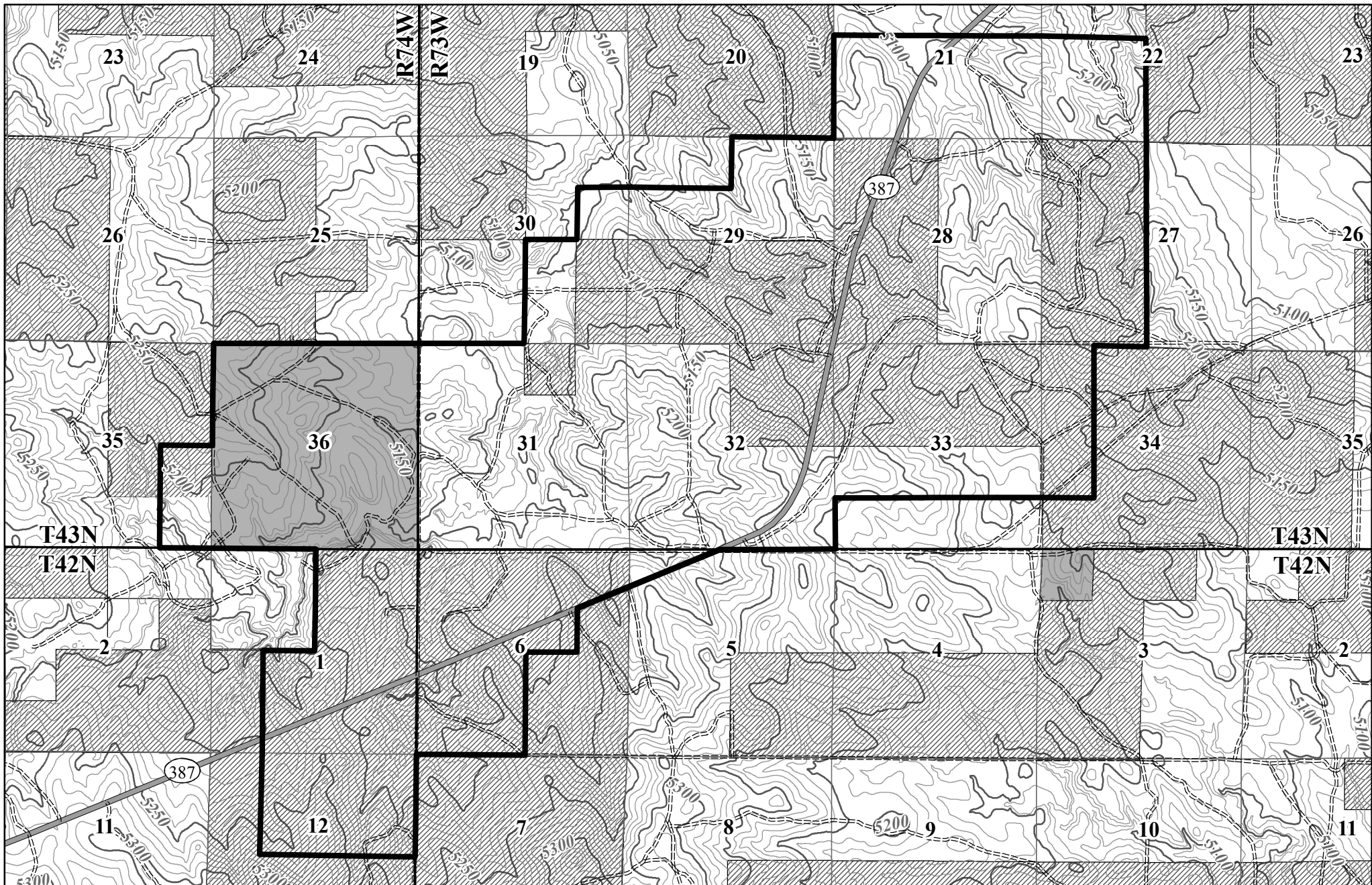
Private

Source: U.S. Bureau of Land Management, 2011

Elevation Contour Interval = 10 feet

0 0.25 0.5 0.75 1 Miles





## Legend



Proposed Reno Creek Project Boundary

Major Road

Minor Road

## Mineral Ownership Classifications

State Mineral

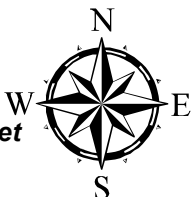
Federal Mineral

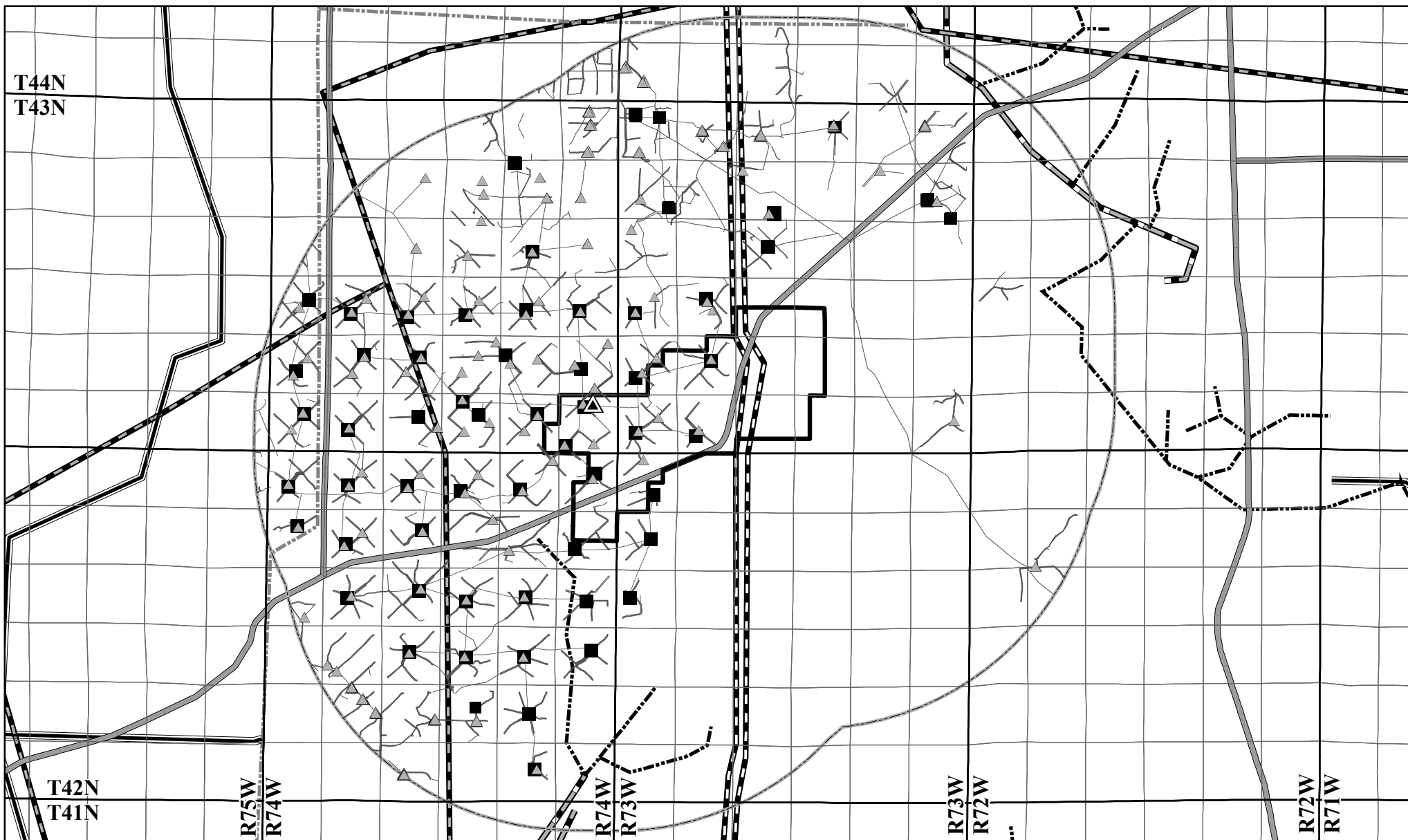
Private Mineral

Source: U.S. Bureau of Land Management, 2011

Elevation Contour Interval = 10 feet

0 0.25 0.5 0.75 1 Miles





## Legend

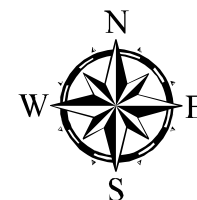
- Proposed Reno Creek Project Boundary
- Five Mile Review
- Major Road (Paved)
- CBM Compressor Station
- Structure
- Underground Utility
- Overhead Power Drop

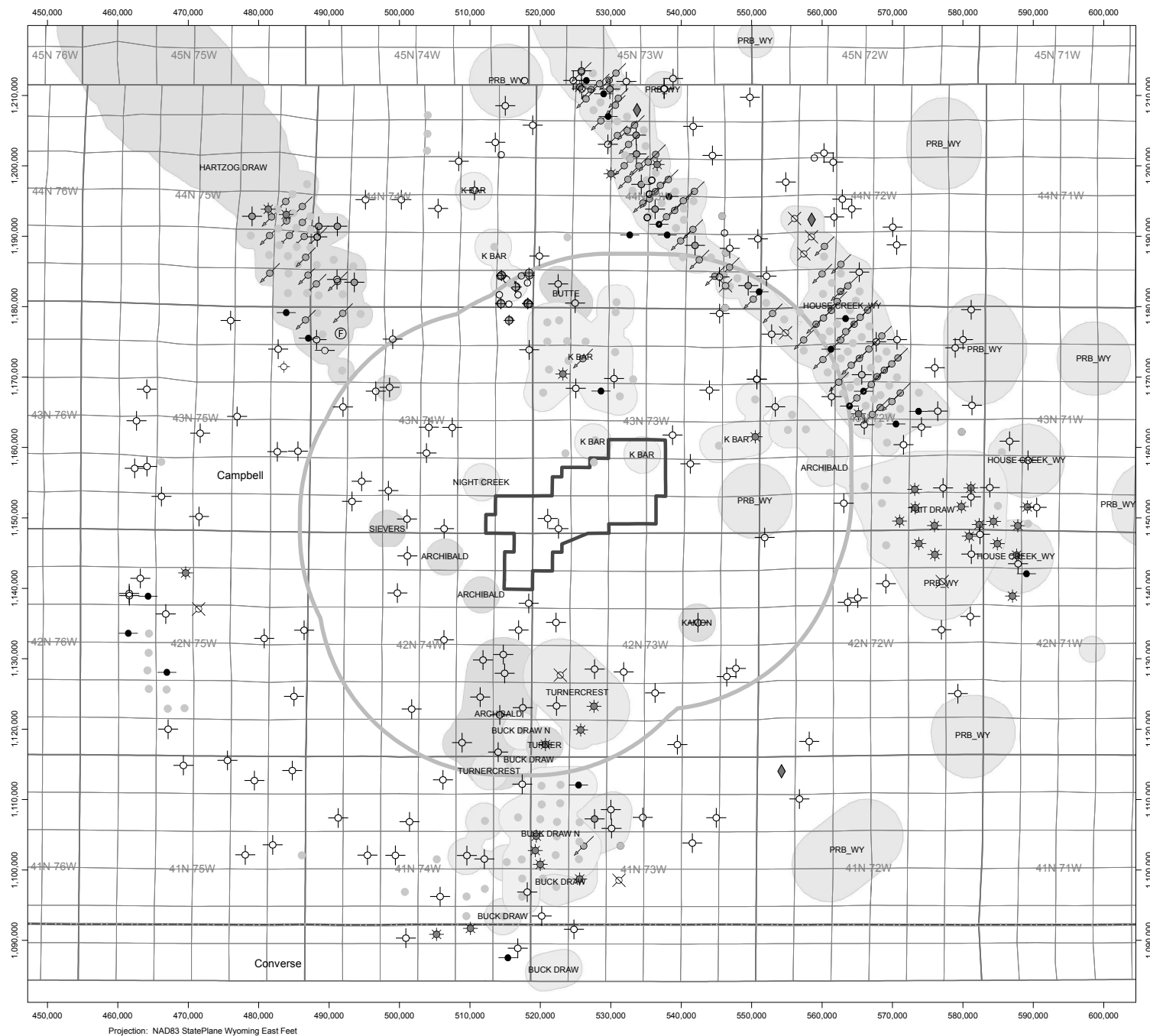
## Pipeline Operator

- Belle Fourche (Crude Oil)
- Fort Union Gas Gathering (Natural Gas)
- Kansas-Nebraska Gas Gathering (Natural Gas)
- Kinder Morgan Operating, LP. (Natural Gas)
- Thunder Creek Gas Services, L.L.C. (Natural Gas)
- Western Gas Resources (Natural Gas)

Source: Williams Production Rmt Company, 2011  
Yates Petroleum Corporation, 2012

0 1 2 3 4 Miles





## Legend

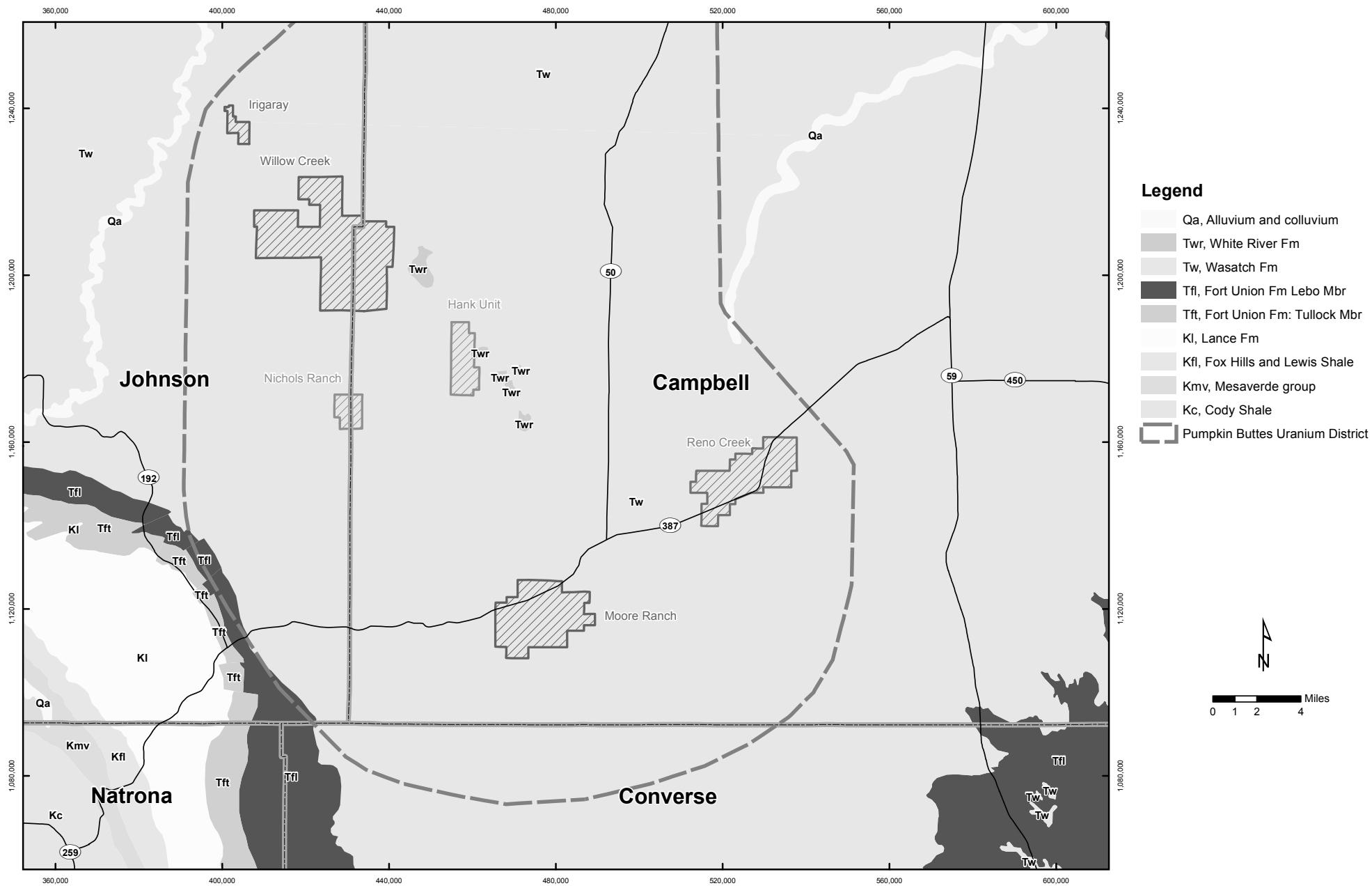
- Active Injector
- Permit to Drill
- Dry Hole
- Dormant
- Flowing
- Monitor Well
- Notice of Intent to Abandon
- Permanently Abandoned
- Producing Gas Well
- Producing Oil Well
- Pumping Rods
- Shut In
- Well Spudded
- Subsequent Report of Abandonment
- Temporarily Abandoned
- Reno Creek 5 Mile AOR

## Oil & Gas Fields

- ARCHIBALD
- BUCK DRAW
- BUCK DRAW N
- BUTTE
- HARTZOG DRAW
- HOUSE CREEK\_WY
- K BAR
- KAMON
- NIGHT CREEK
- PRB\_WY
- SIEVERS
- TUIT DRAW
- TURNER
- TURNERCREST

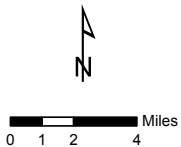


0 1 2 Miles



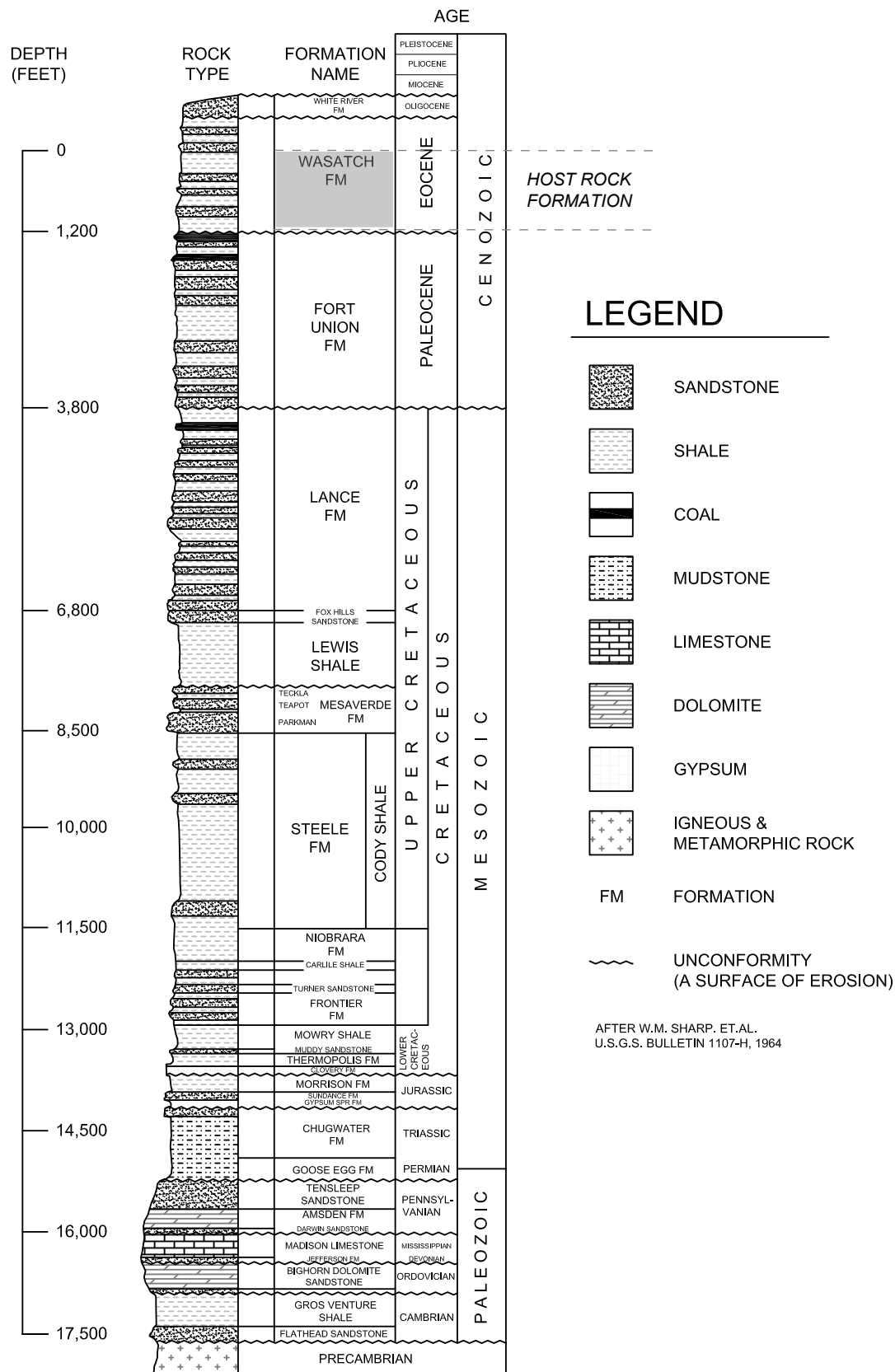
**Legend**

- Qa, Alluvium and colluvium
- Twr, White River Fm
- Tw, Wasatch Fm
- Tfl, Fort Union Fm Lebo Mbr
- Tft, Fort Union Fm: Tullock Mbr
- KI, Lance Fm
- Kfl, Fox Hills and Lewis Shale
- Kmv, Mesaverde group
- Kc, Cody Shale
- Pumpkin Buttes Uranium District

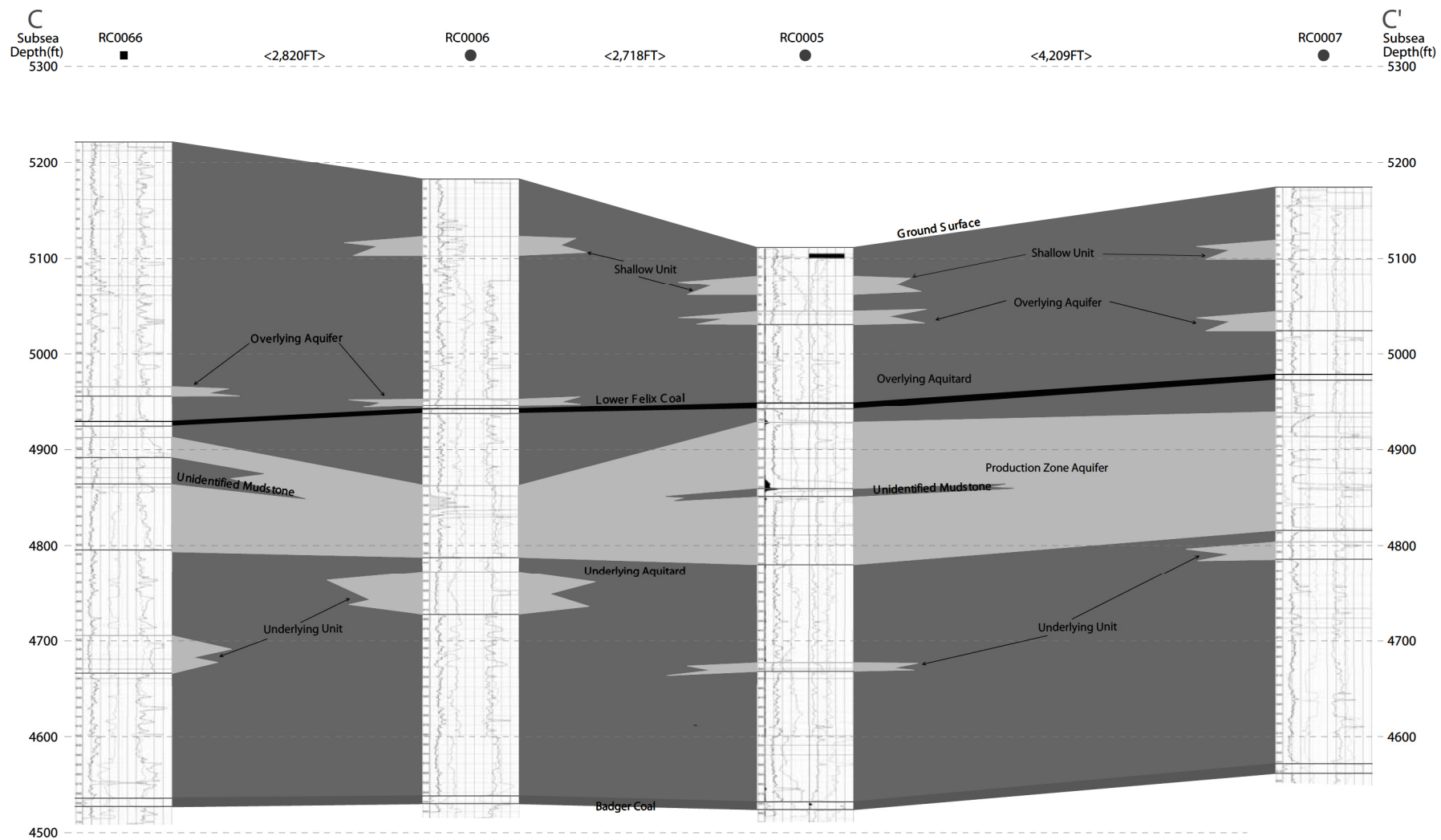


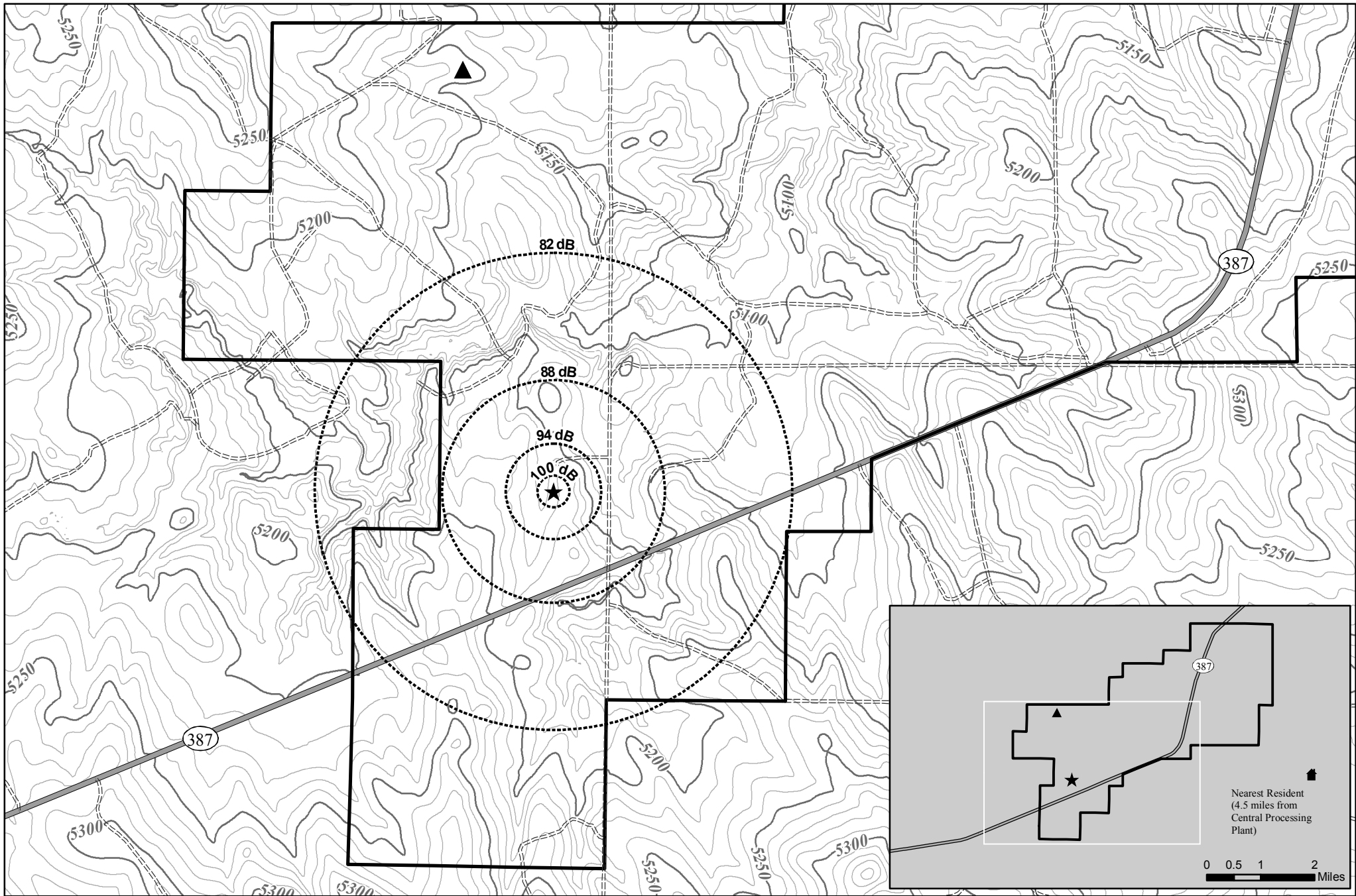
Coordinate System: NAD 1983 StatePlane Wyoming East FIPS 4901 Feet

















## Legend

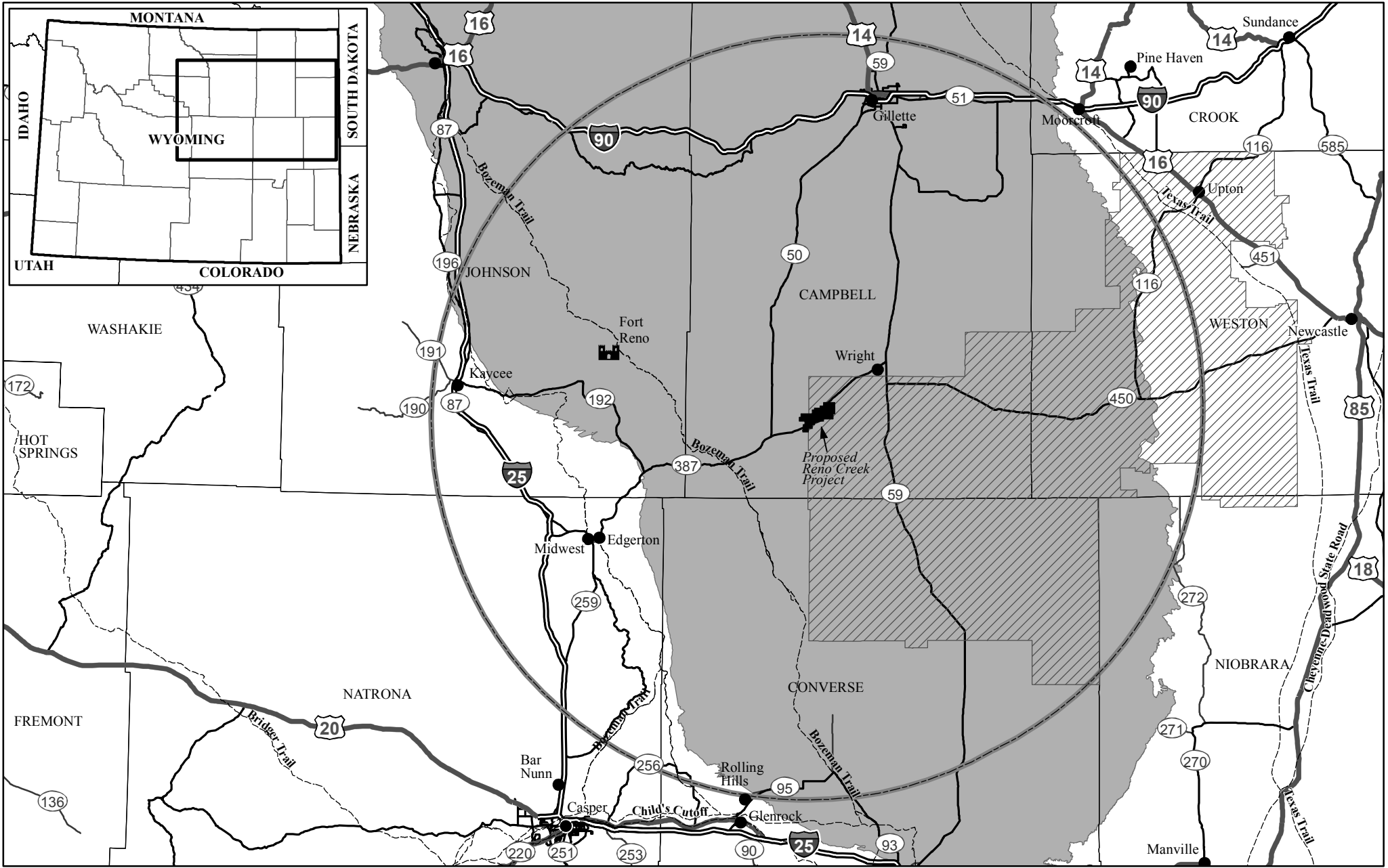
- |  |   |
|--|---|
|  Proposed Reno Creek Project Boundary |  Major Road            |
|  Central Processing Plant             |  Minor Road            |
|  CBM Compressor Station               |  Noise Level (decibel) |

Concentric noise level rings are based on a six decibel drop in loudness per doubled distance from initial expected construction area.







**Elevation Contour Interval = 10 feet**

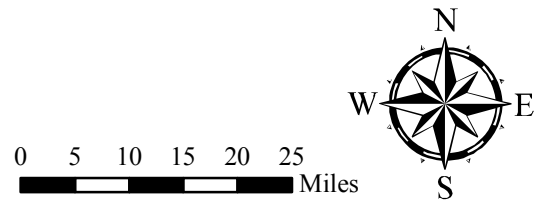
0 0.25 0.5 0.75 1 Miles

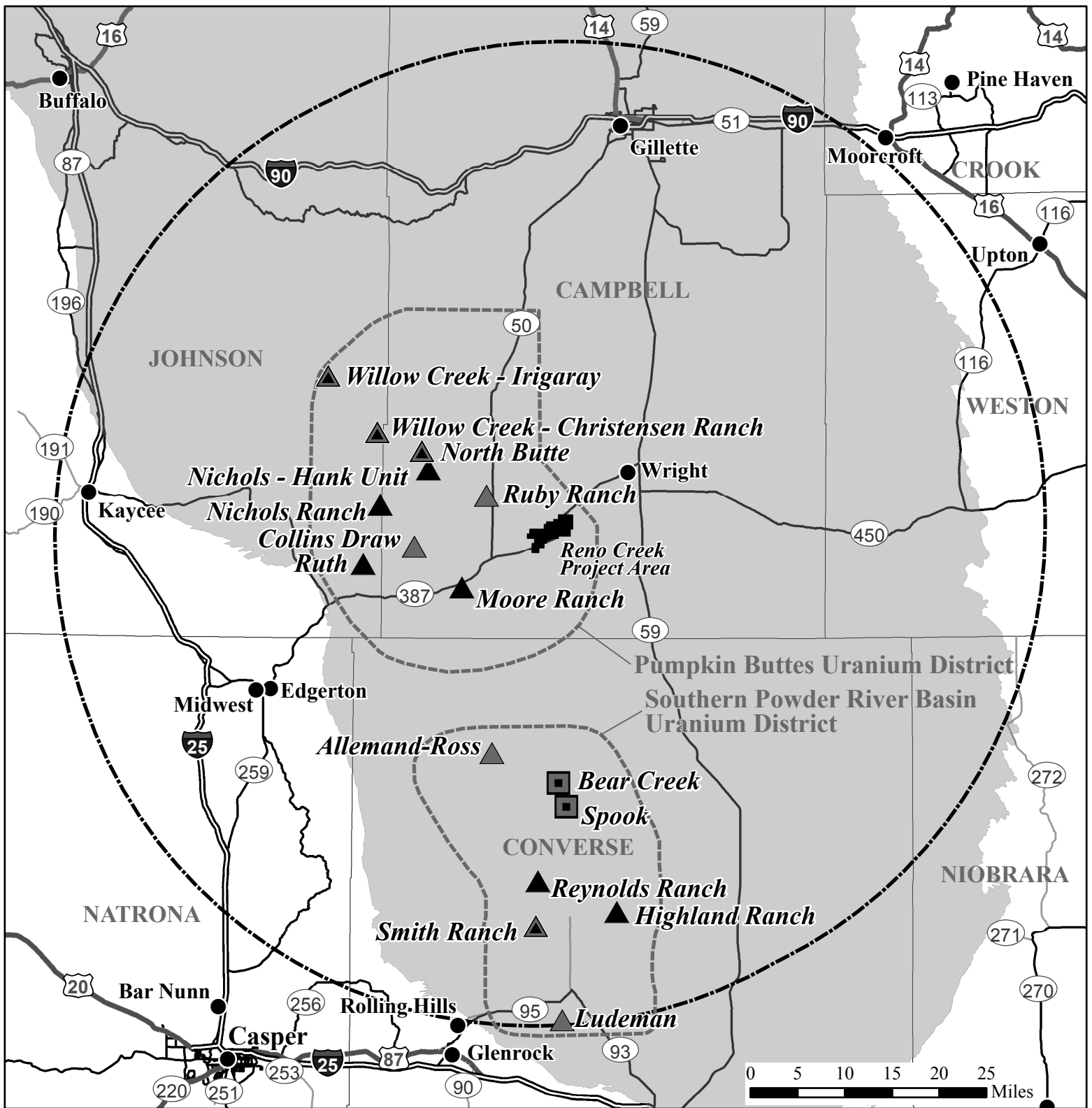




**Legend**

-  Proposed Reno Creek Project Boundary
-  Thunder Basin National Grassland
-  Powder River Basin
-  Historical Trails
-  Fort Reno
-  50 Mile Review



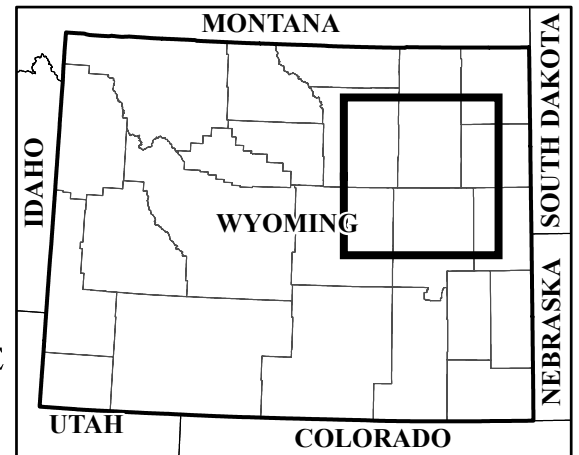
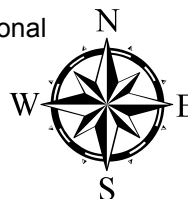


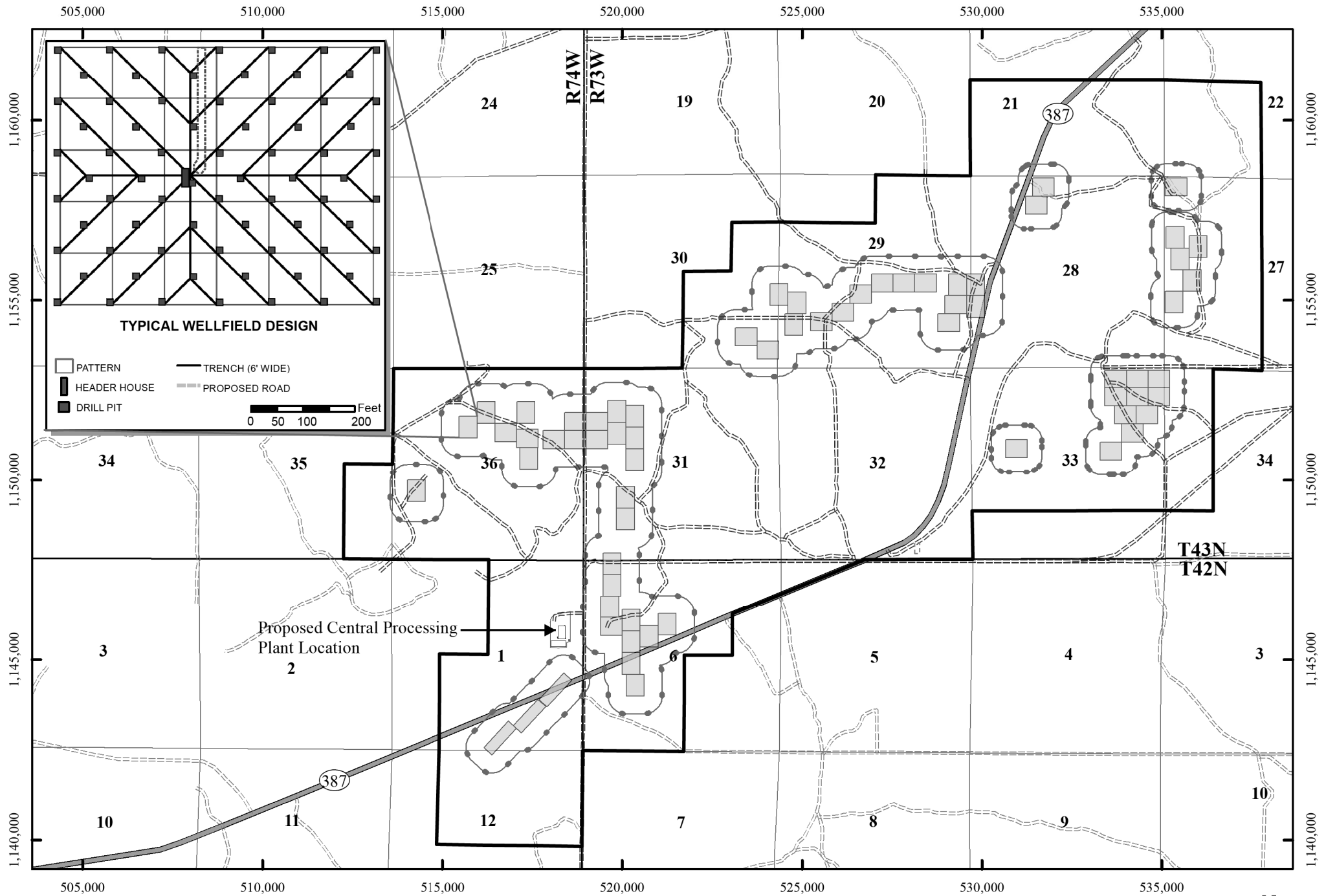
## Legend

- Proposed Reno Creek Project Boundary
- Uranium Districts
- Powder River Basin
- 50 Mile Review
- Cities and Towns
- Interstate
- Highway
- Major Road
- Local Road

## Uranium ISR Projects

- Licensed - Operating
- Licensed - Not Operating
- Proposed
- Legacy Conventional Uranium Project



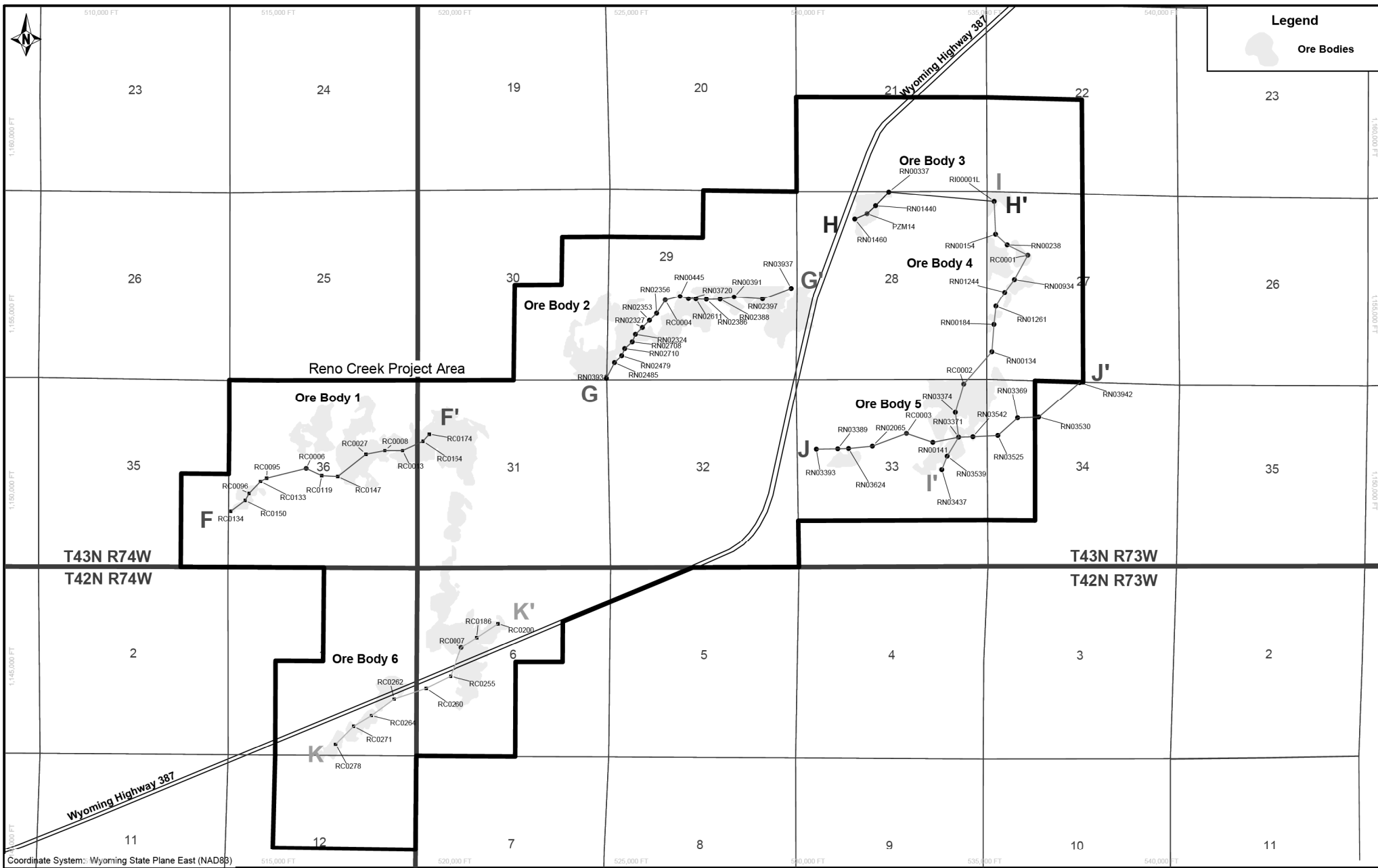


## Legend

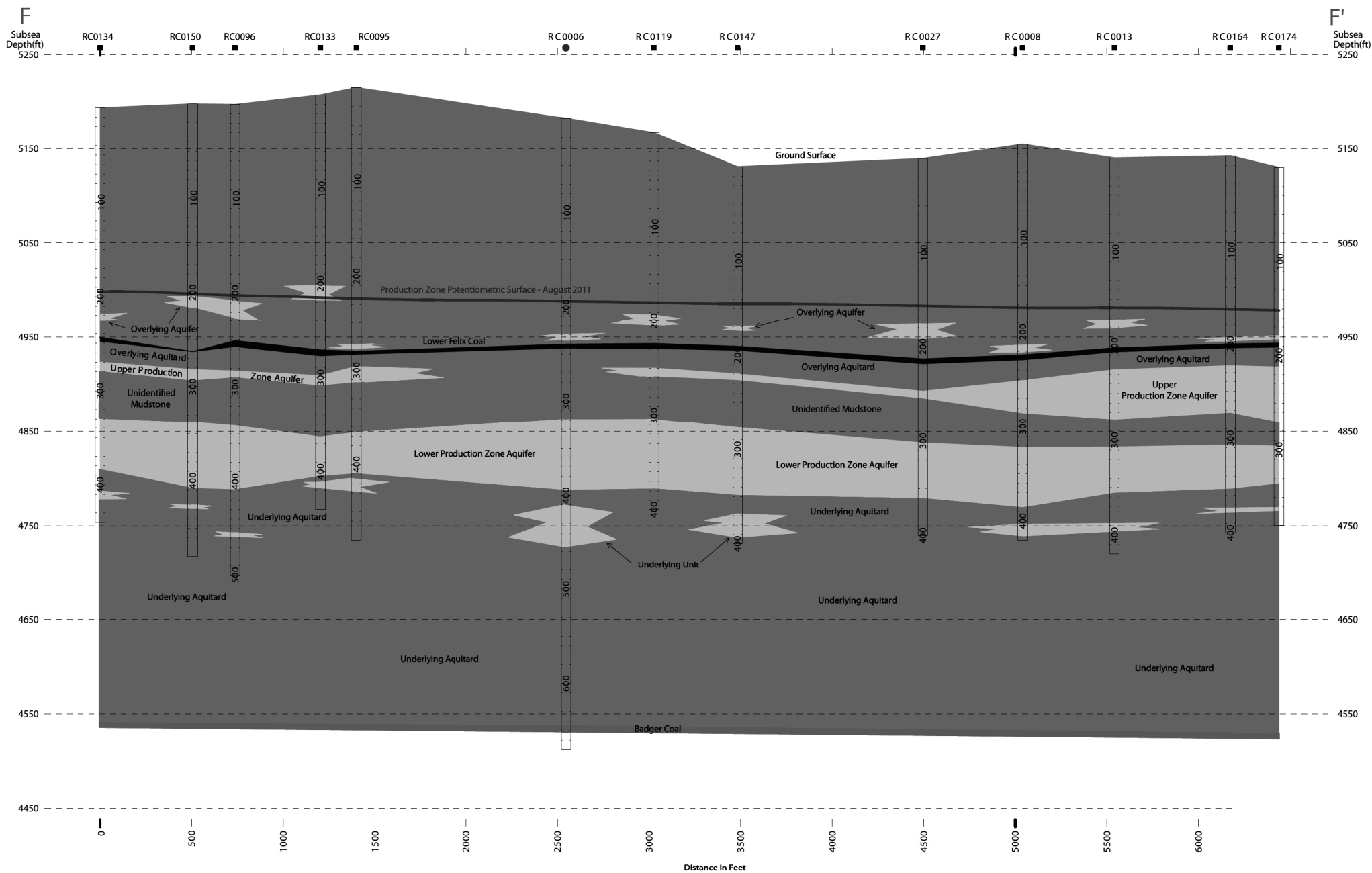
- Proposed Project Boundary
- Existing Primary and Secondary Access Road
- Major Road (Paved)
- Minor Road (Unpaved Existing Access Road)
- Wellfield
- Proposed Monitoring Well Ring

0 0.25 0.5 0.75 1 Miles





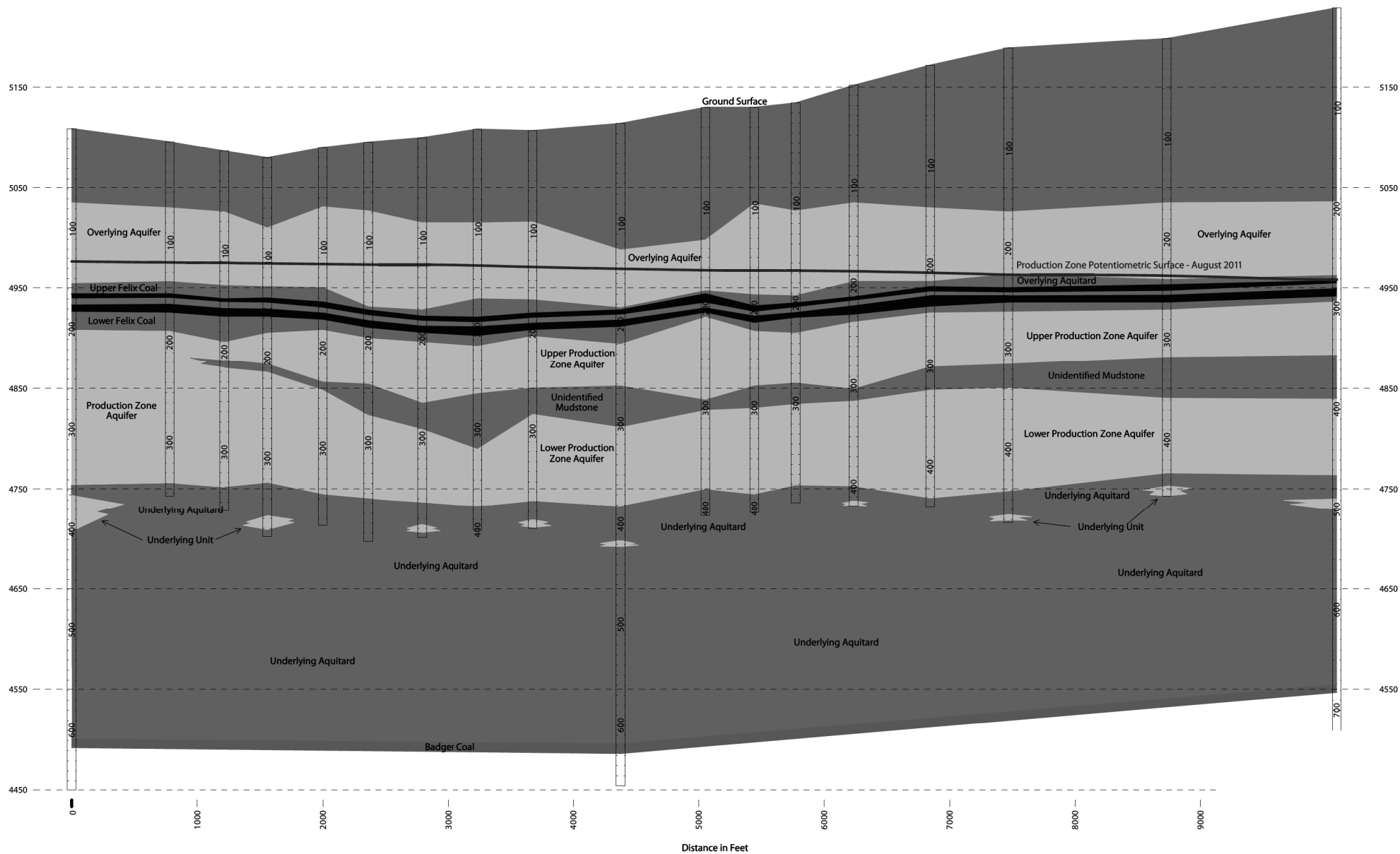




G  
Subsea  
Depth(ft)  
5250

RN03931   RN02485   RN02479   RN02710   RN02708   RN02324   RN02327   RN02353   RN02356   RC0004   RN00445   RN03720   RN02611   RN02386   RN02388   RN00391   RN02397   RN03937

G'  
Subsea  
Depth(ft)  
5250



H  
Subsea  
Depth(ft)  
5250

RN01460

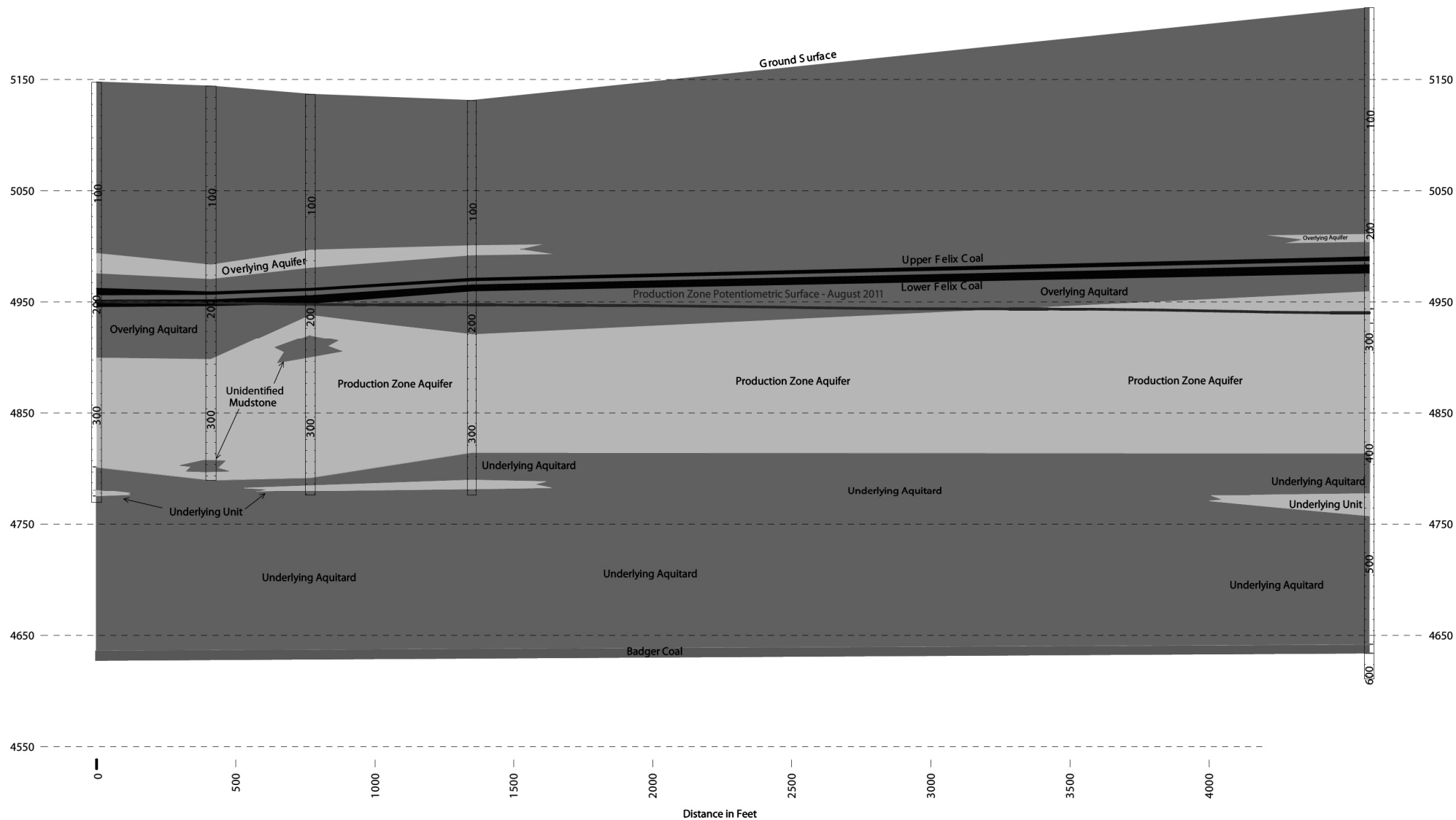
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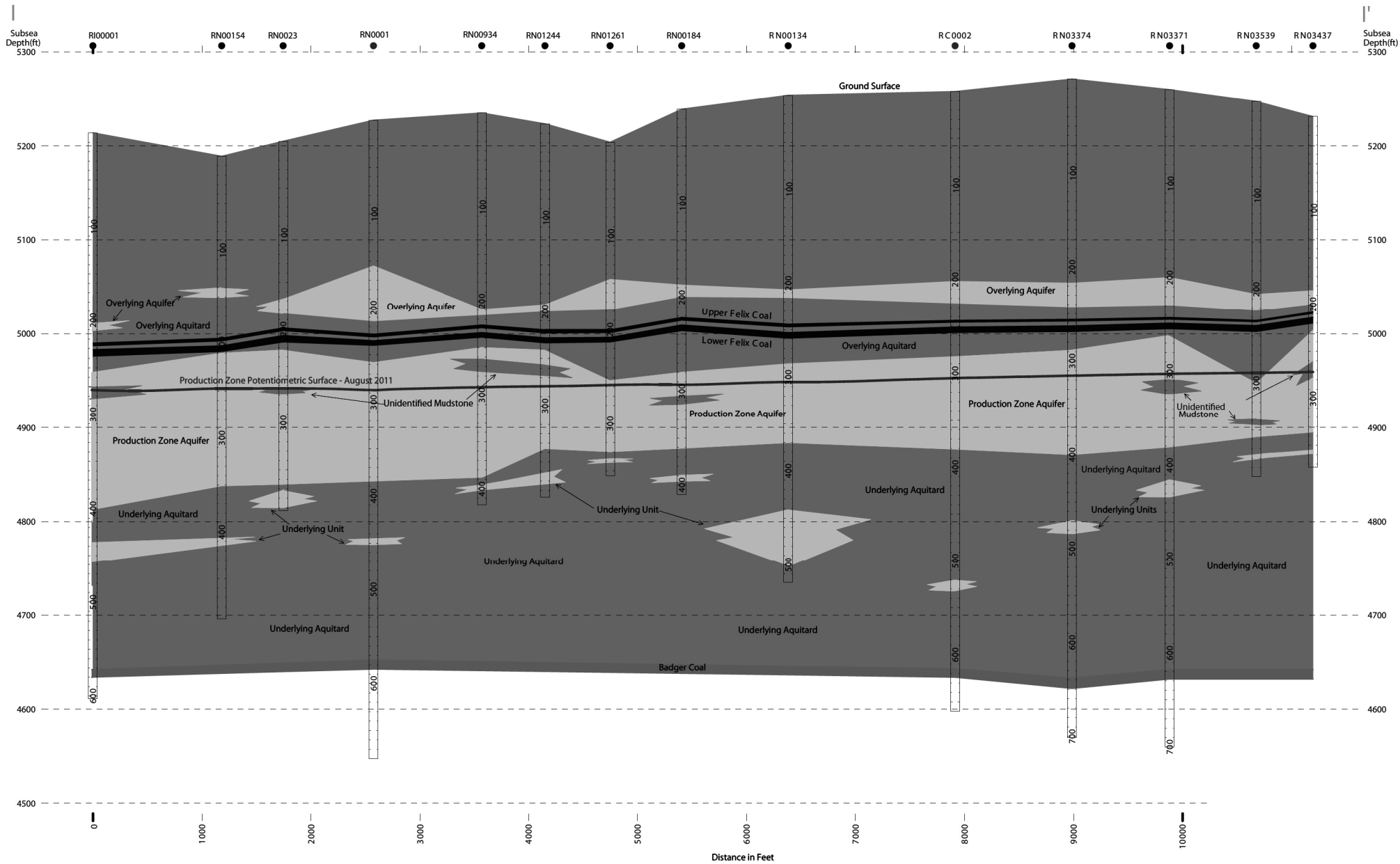
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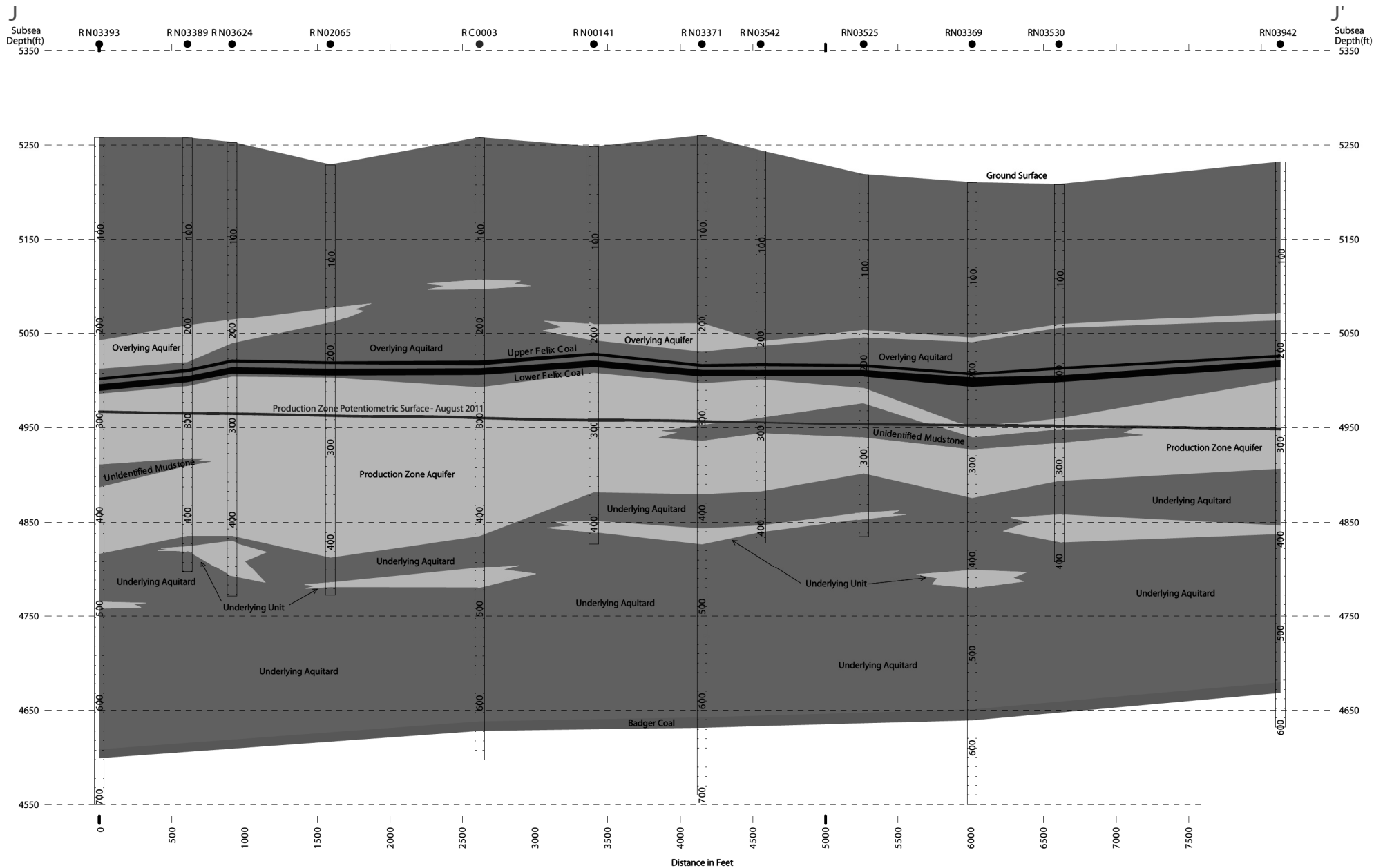
RN00337

RI00001L

H'  
Subsea  
Depth(ft)  
5250







K

Subsea  
Depth(ft)  
5350

RC0278

RC0271

RC0264

RC0262

RC0260

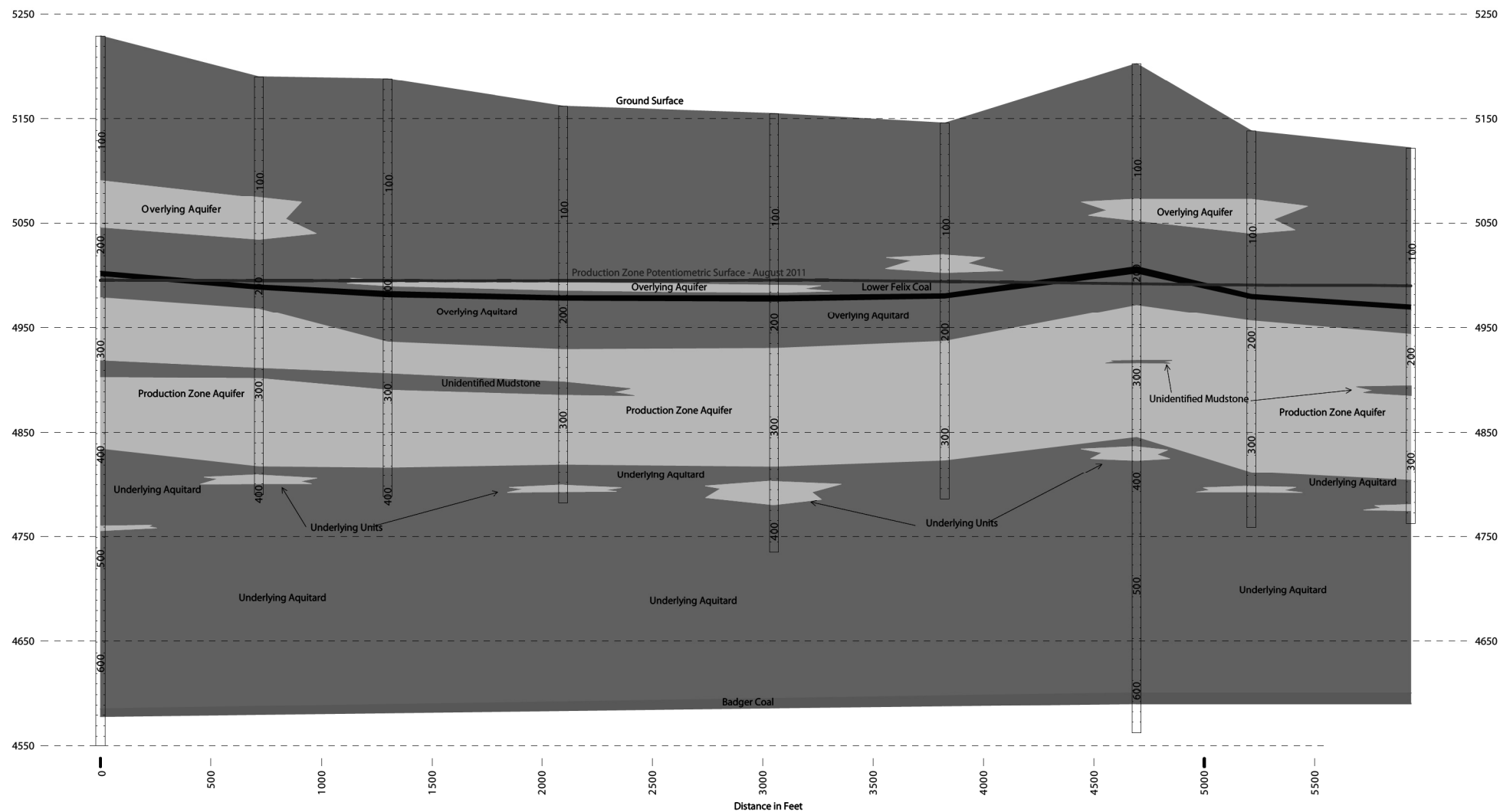
RC0255

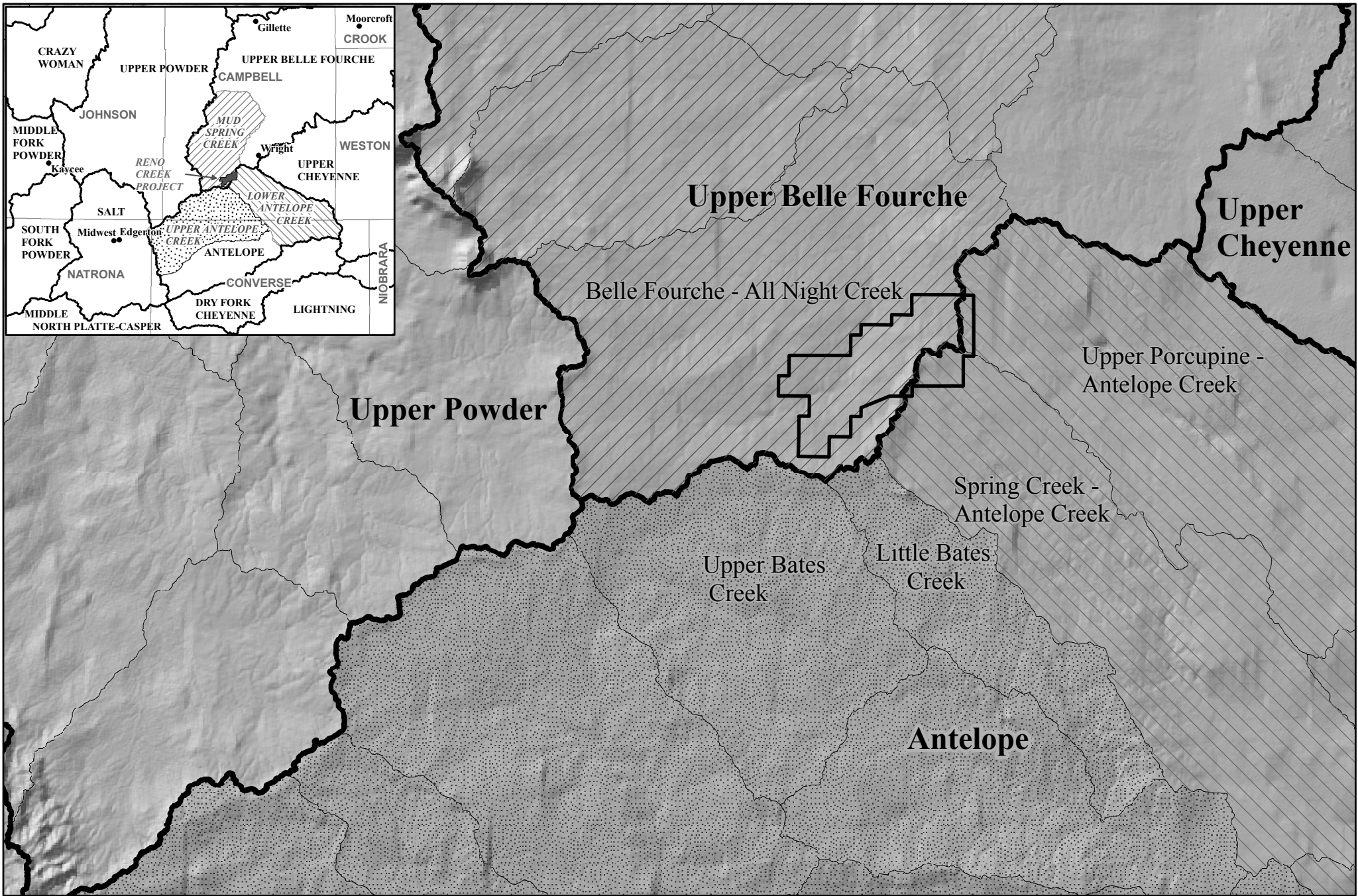
RC0007

RC0186







RC0200

K'

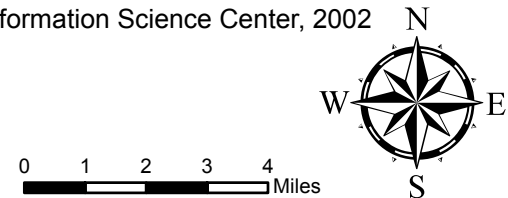
Subsea  
Depth(ft)  
5350

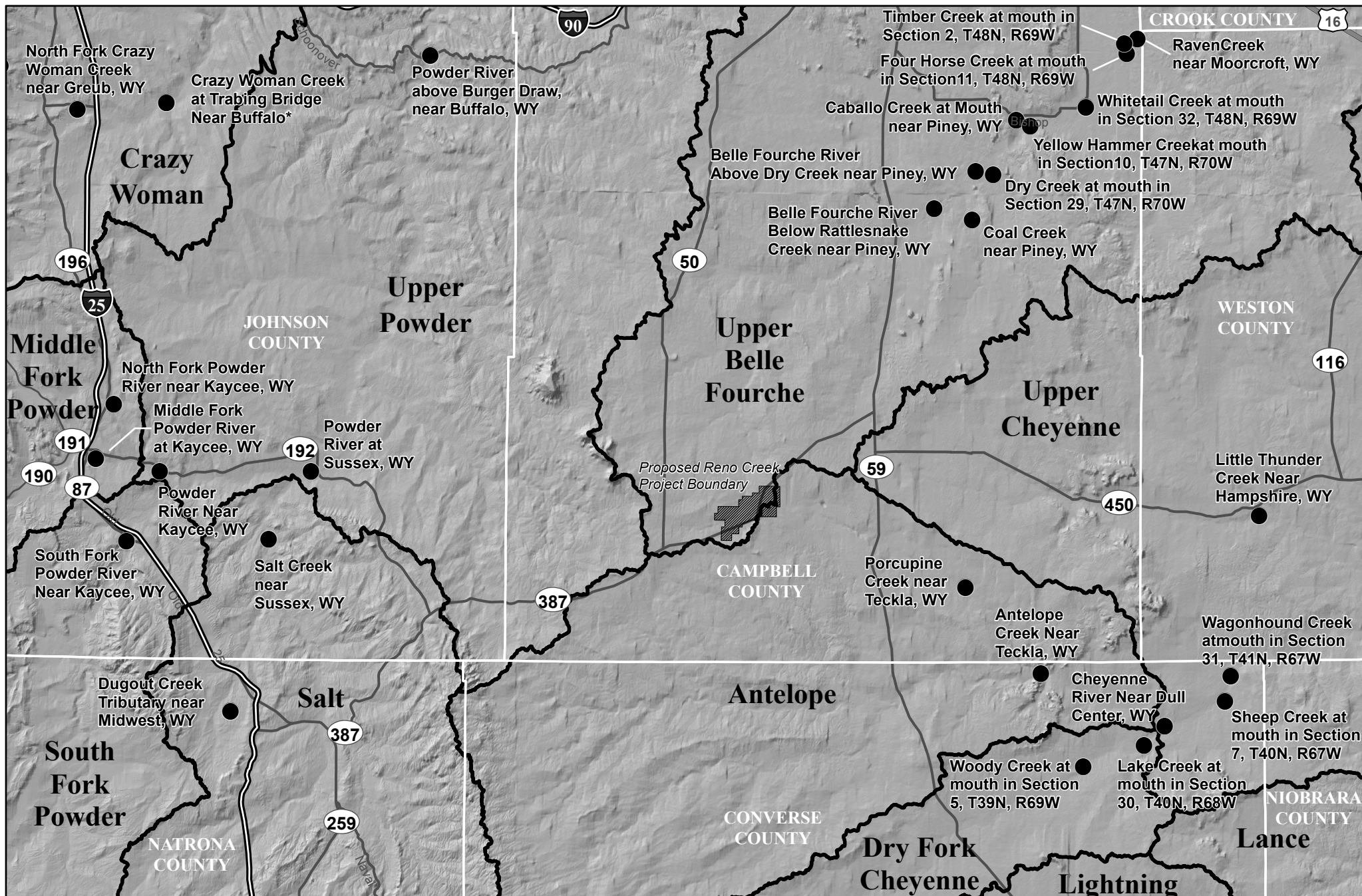


## Legend

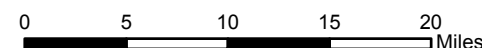
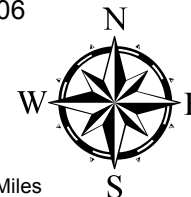
- |   |  |
|---|--|
|  Proposed Reno Creek Project Boundary |  Mud Spring Creek Watershed     |
|  Drainage Basin (HUC 8)               |  Lower Antelope Creek Watershed |
|  Minor Basins (HUC 12)                |  Upper Antelope Creek Watershed |

Source: Wyoming Geographic Information Science Center, 2002

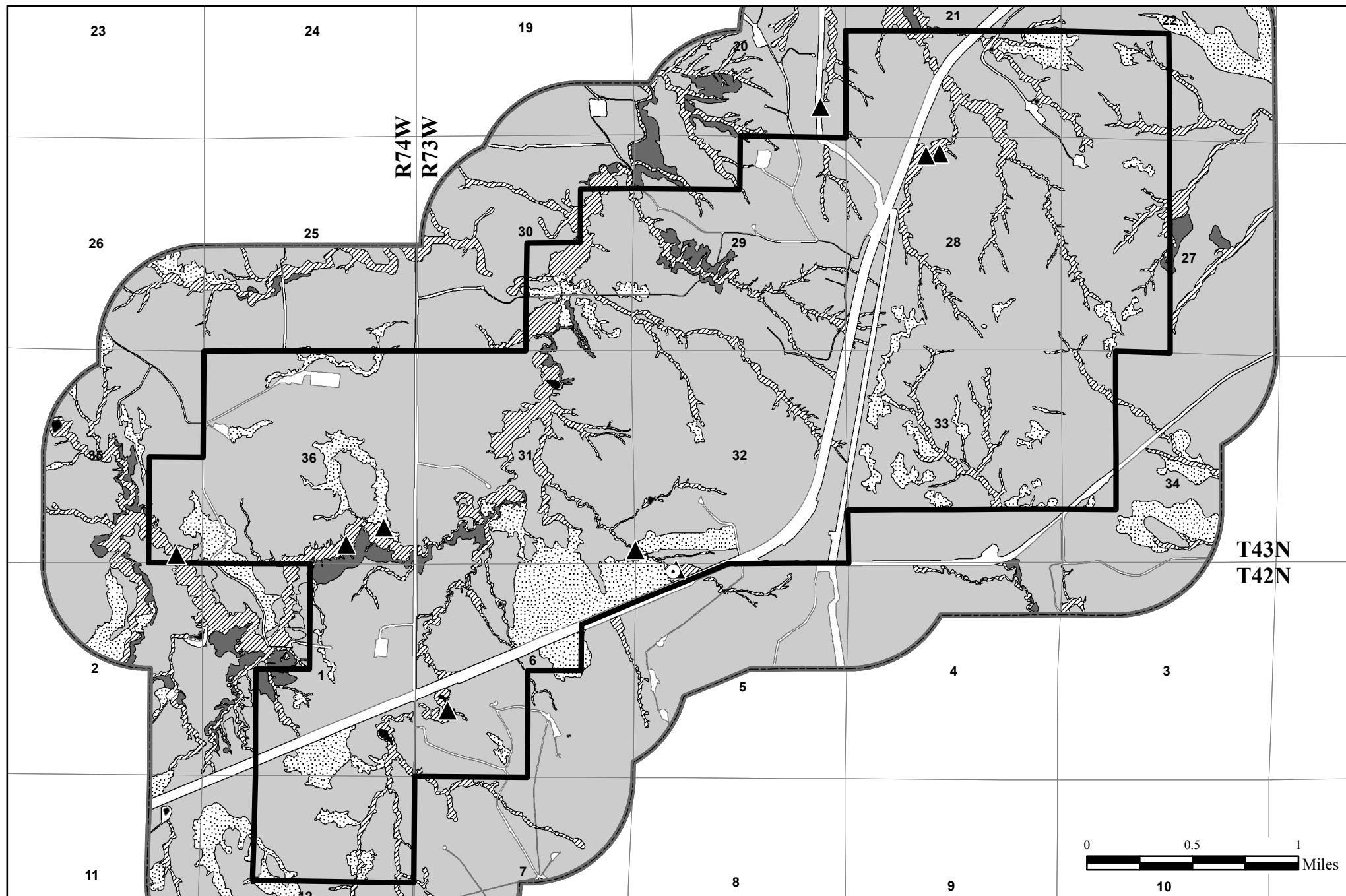








Source: U.S. Geological Survey, 2006













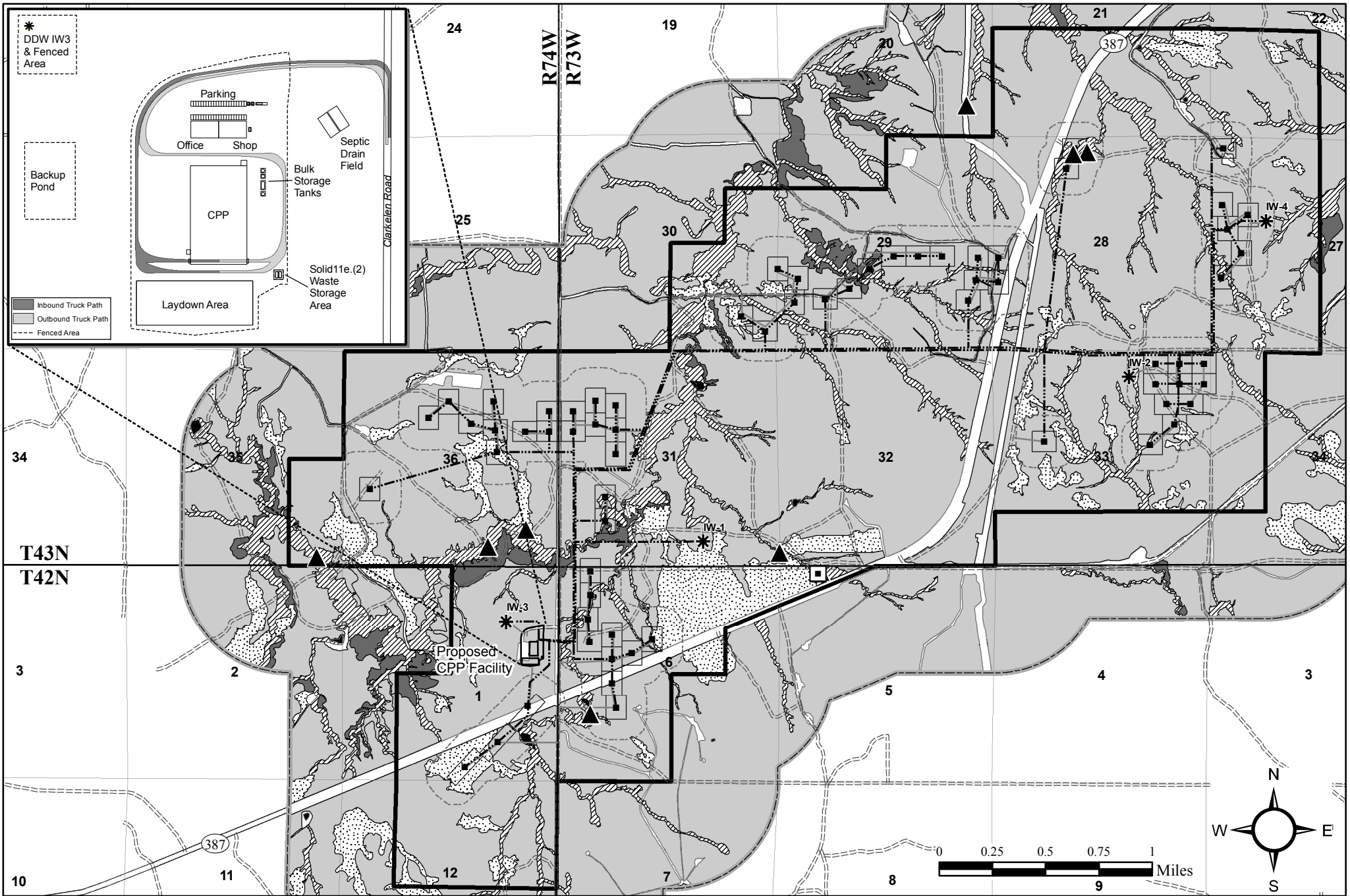
## Legend

-  Proposed Reno Creek Project Boundary
-  Half Mile Project Boundary Buffer
-  Noxious Weed Location
-  Tree Stand Location

## Vegetation Community

-  Breaks Grassland
-  Big Sage Shrubland
-  Disturbed

-  Meadow Grassland
-  Upland Grassland
-  Water



## Legend

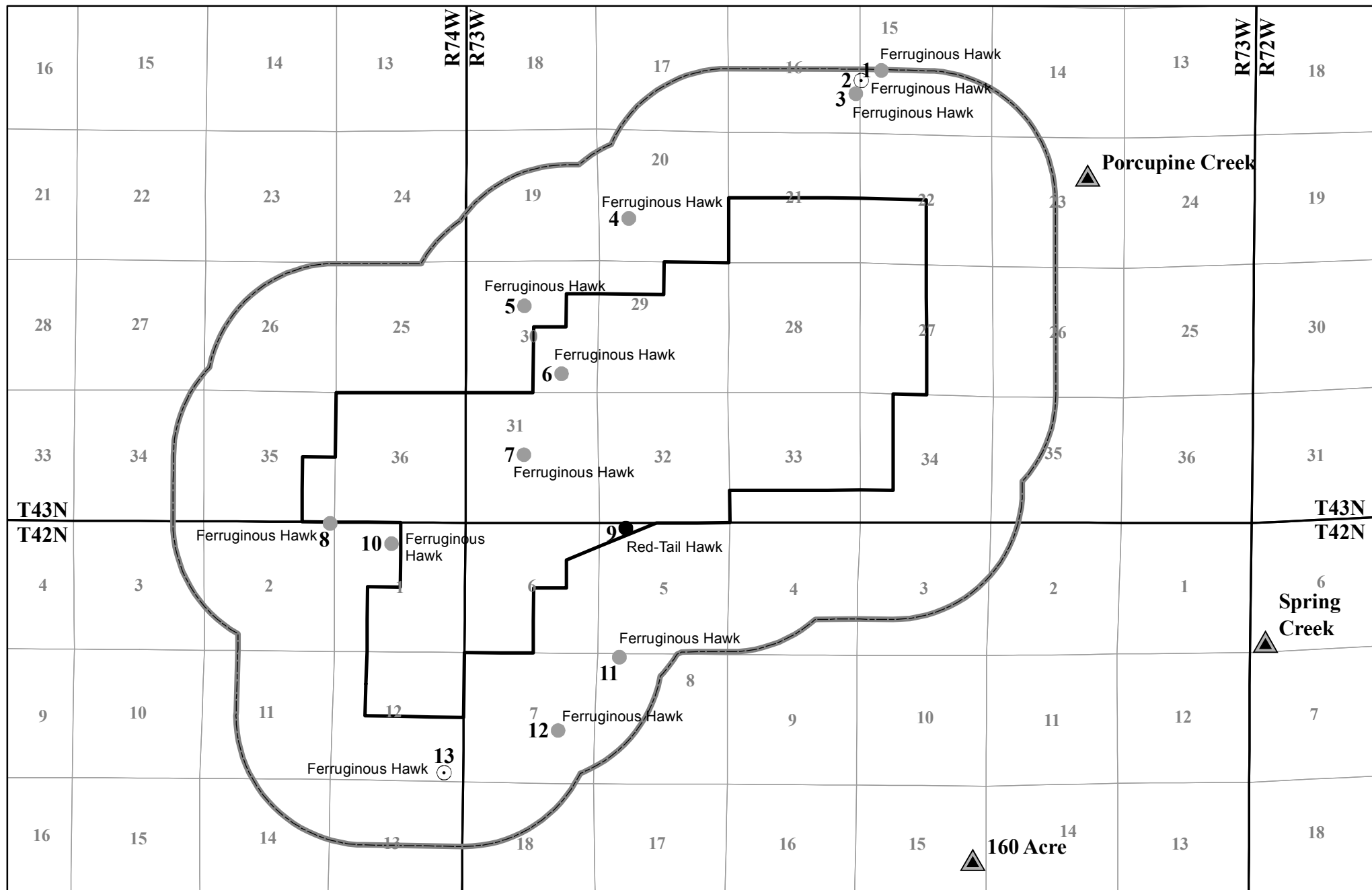
- Proposed Reno Creek Project Boundary
- Half Mile Project Boundary Buffer
- Wellfield
- Proposed Header House Location

- Deep Disposal Well
- Proposed Trunkline
- Noxious Weed Location
- Tree Stand Location

- Minor Road (Unpaved Existing Access Road)
- Proposed Secondary Road
- Proposed Tertiary Road/Monitoring Well Ring

- Vegetation Community**
- Breaks Grassland
  - Big Sage Shrubland
  - Disturbed

- Meadow Grassland
- Upland Grassland
- Water



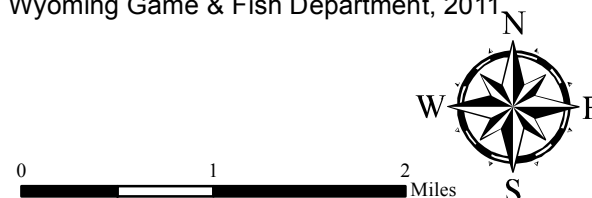
## Legend

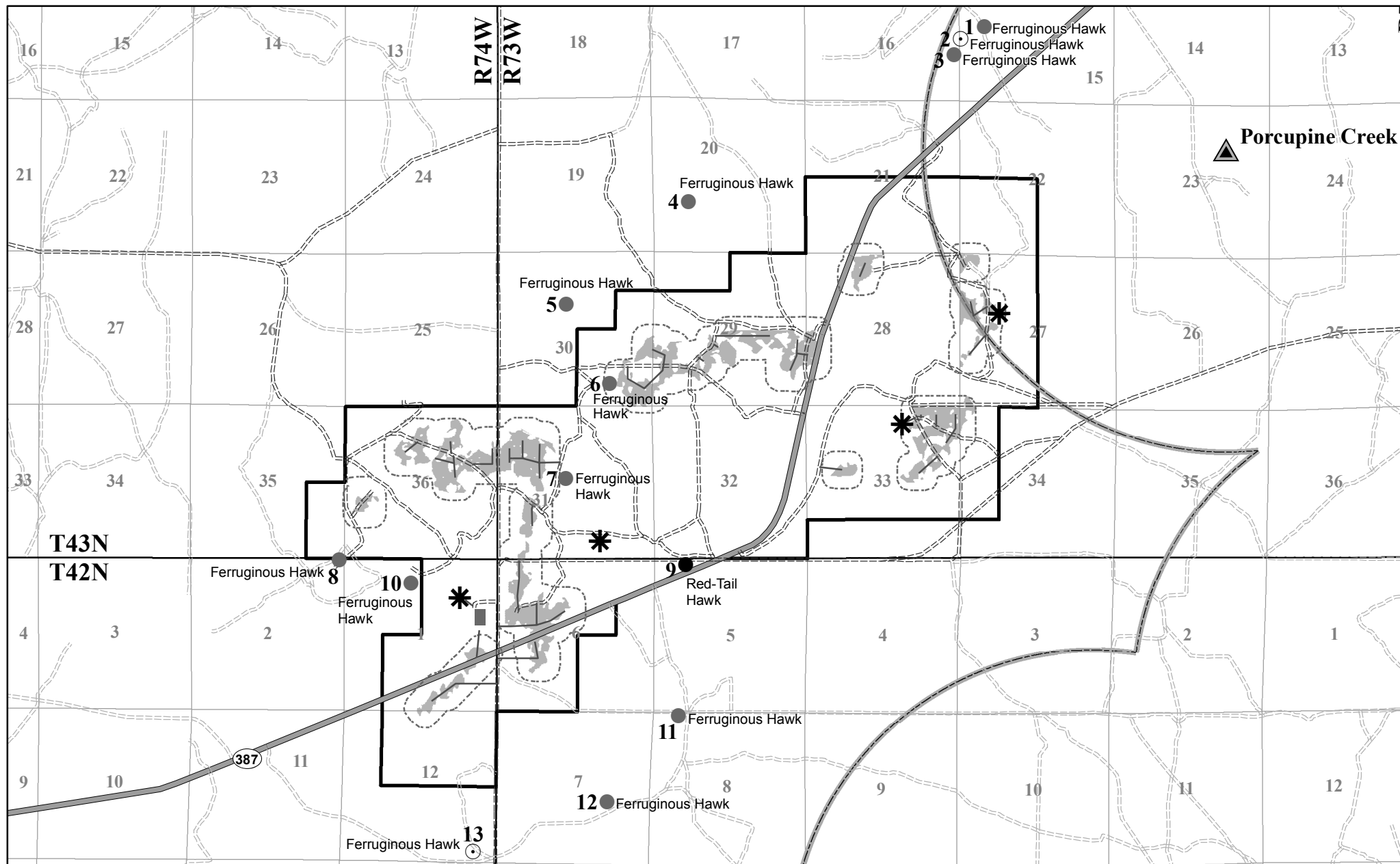
- Proposed Reno Creek Project Boundary
- One Mile Wildlife Survey Area
- Sage-grouse Leks (within Four Miles)

## Raptor Nest Sites - 2011 Status

- Active
- Inactive
- Gone

Source: Lek locations - Wyoming Game & Fish Department, 2011





Source: Lek locations - Wyoming Game & Fish Department, 2011

## Legend

- Proposed Reno Creek Project Boundary
- Deep Disposal Well
- Central Processing Plant
- Ore Body

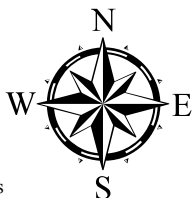
- Major Road (Paved)
- Minor Road (Unpaved Existing Access Road)
- Existing Primary and Secondary Access Road
- Proposed Secondary Road
- Proposed Tertiary Road

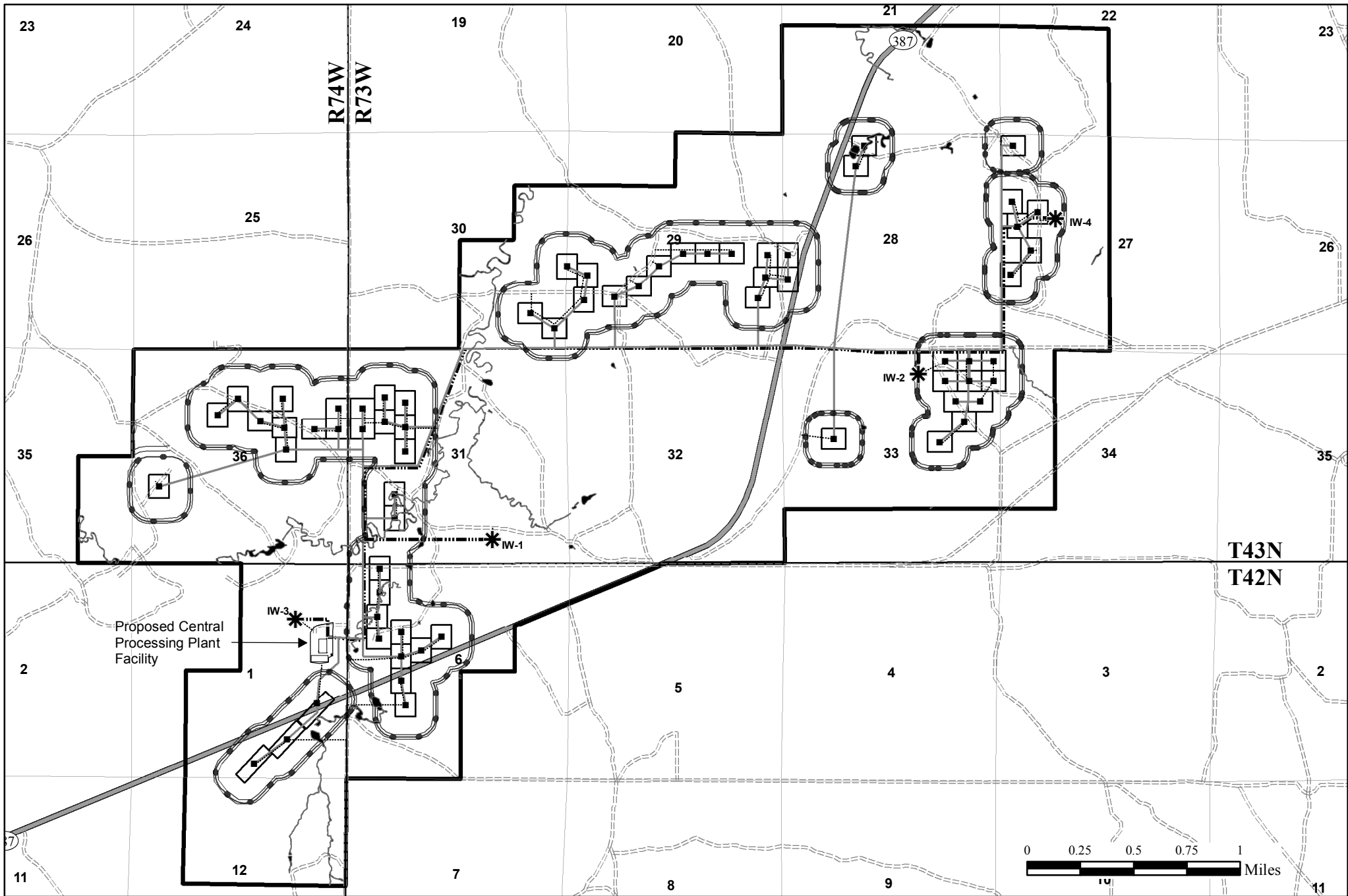
## Raptor Nest Sites - 2011 Status

- Active
- Inactive
- Gone

- Sage-grouse Leks (within Four Miles)
- Sage Grouse Lek Two Mile Buffer

0 1 Miles





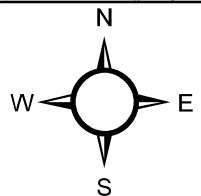
## Legend

- Proposed Reno Creek Project Boundary
- Major Road (Paved)
- Minor Road (Existing Secondary Access Road)

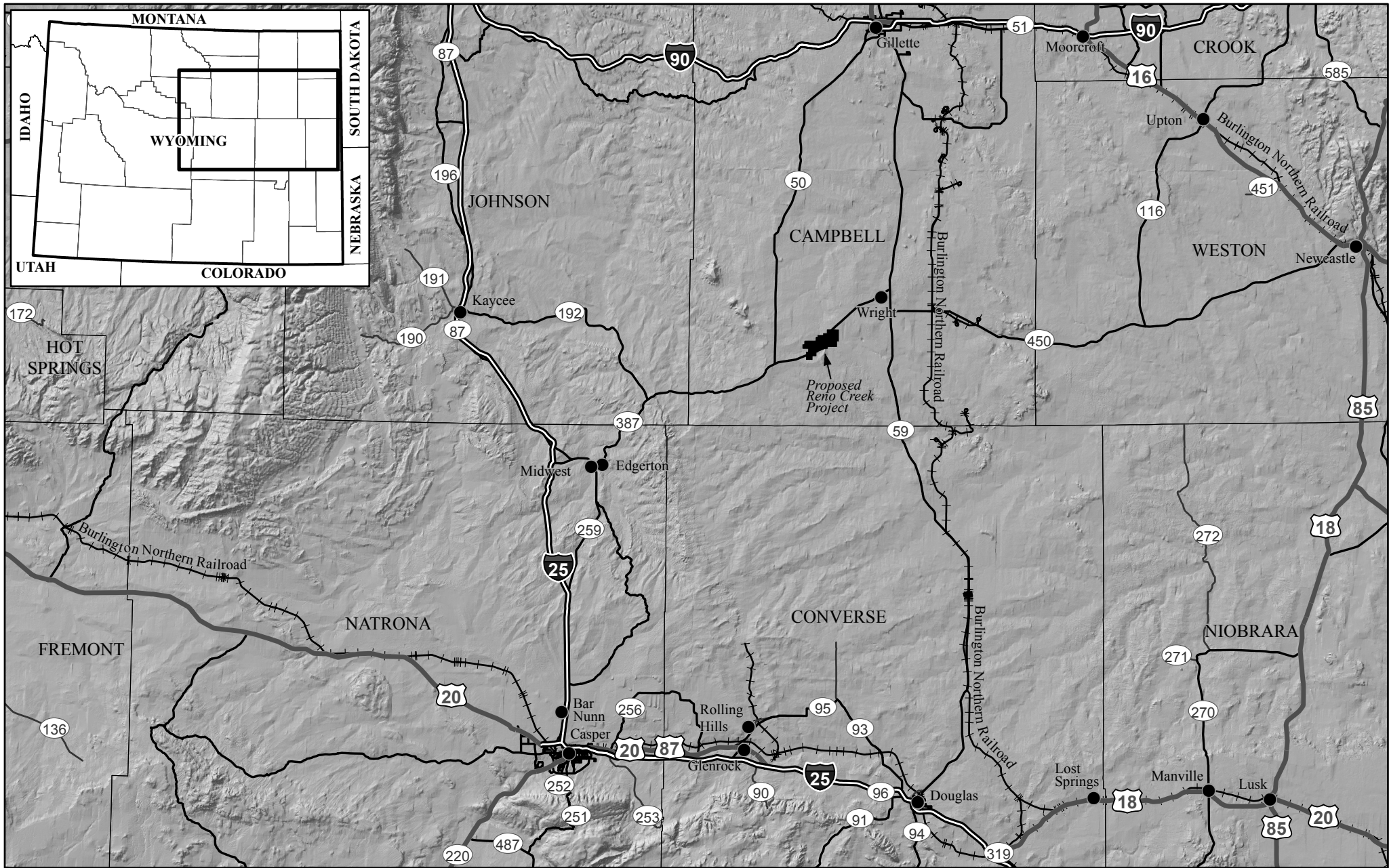
- Deep Disposal Well
- Proposed Deep Disposal Well Pipeline
- Proposed Secondary Road
- Proposed Tertiary Road

- Wellfield
- Proposed Header House Location
- Proposed Trunkline
- Proposed Monitoring Well Ring









- Wetlands

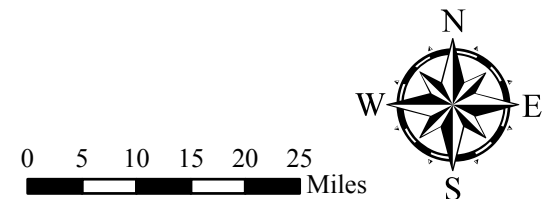


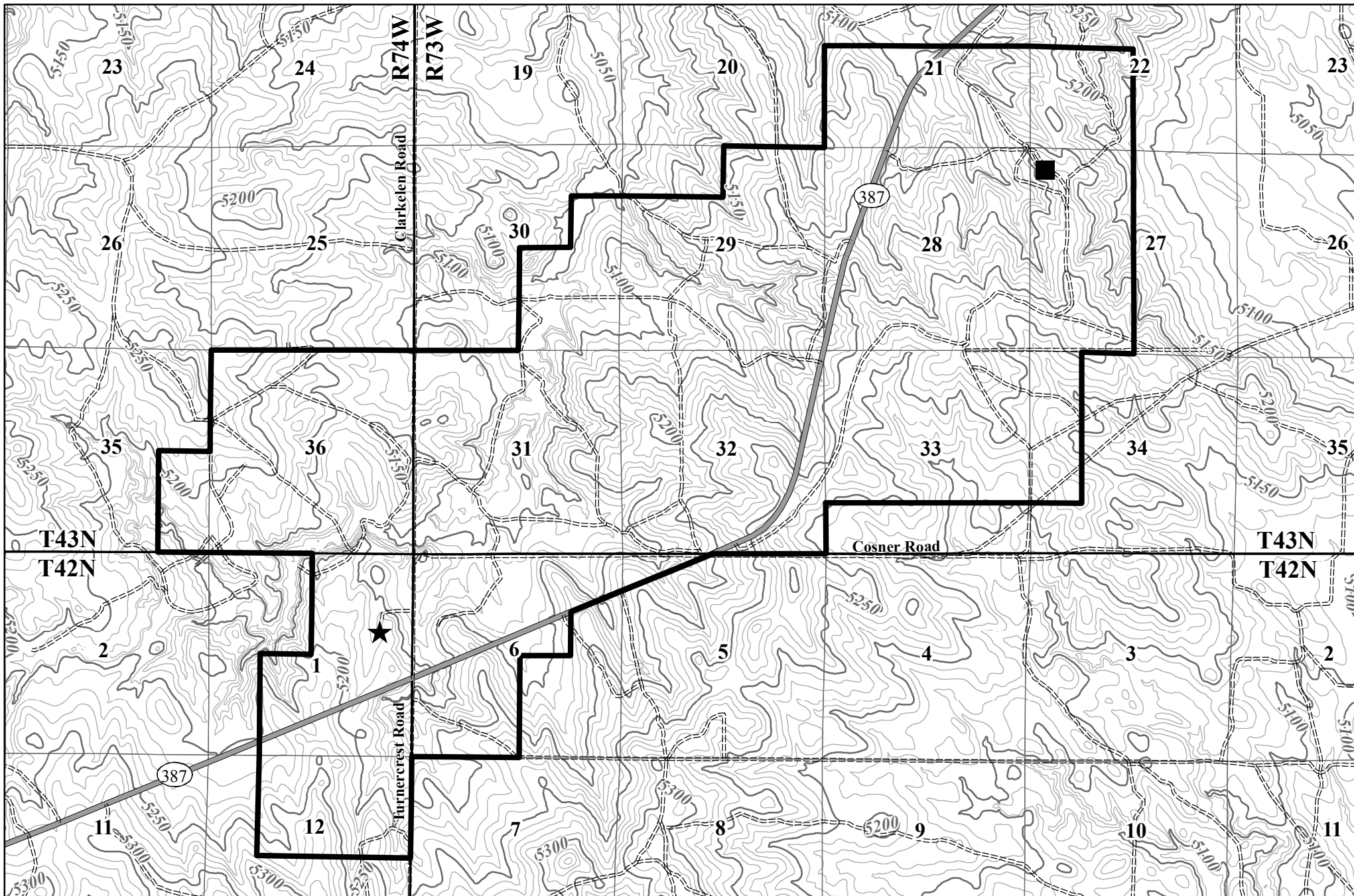









## Legend

-  Proposed Reno Creek Project Boundary
-  Cities and Towns
-  Railroad
-  County Line
-  Interstate
-  Highway
-  Major Road
-  Local Road



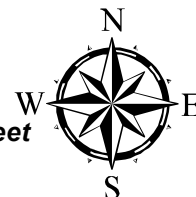


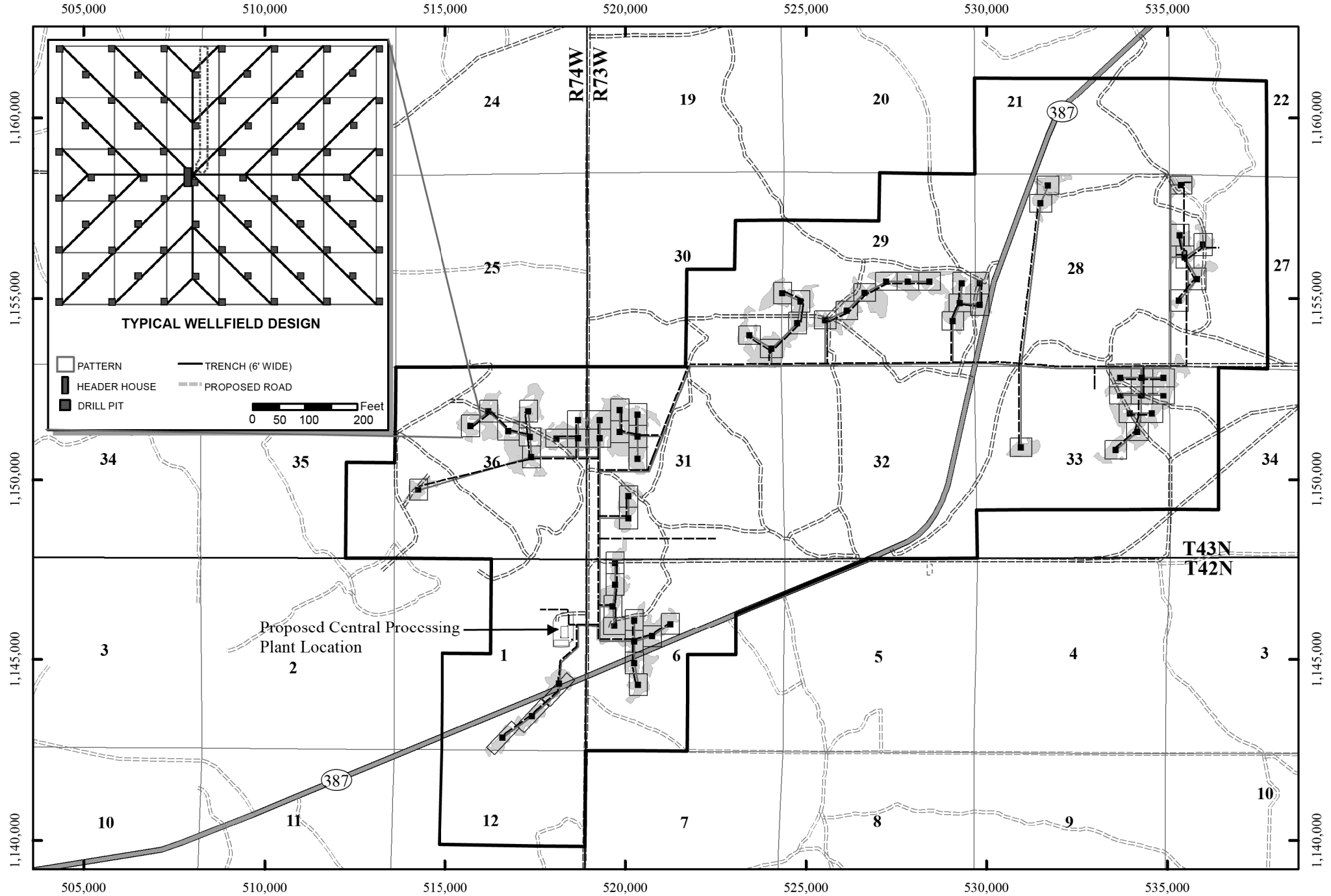
## Legend

-  Proposed Reno Creek Project Boundary
-  Central Processing Plant
-  Historical RME R&D Site
-  Major Road
-  Minor Road

*Elevation Contour Interval = 10 feet*

0 0.25 0.5 0.75 1 Miles





## Legend

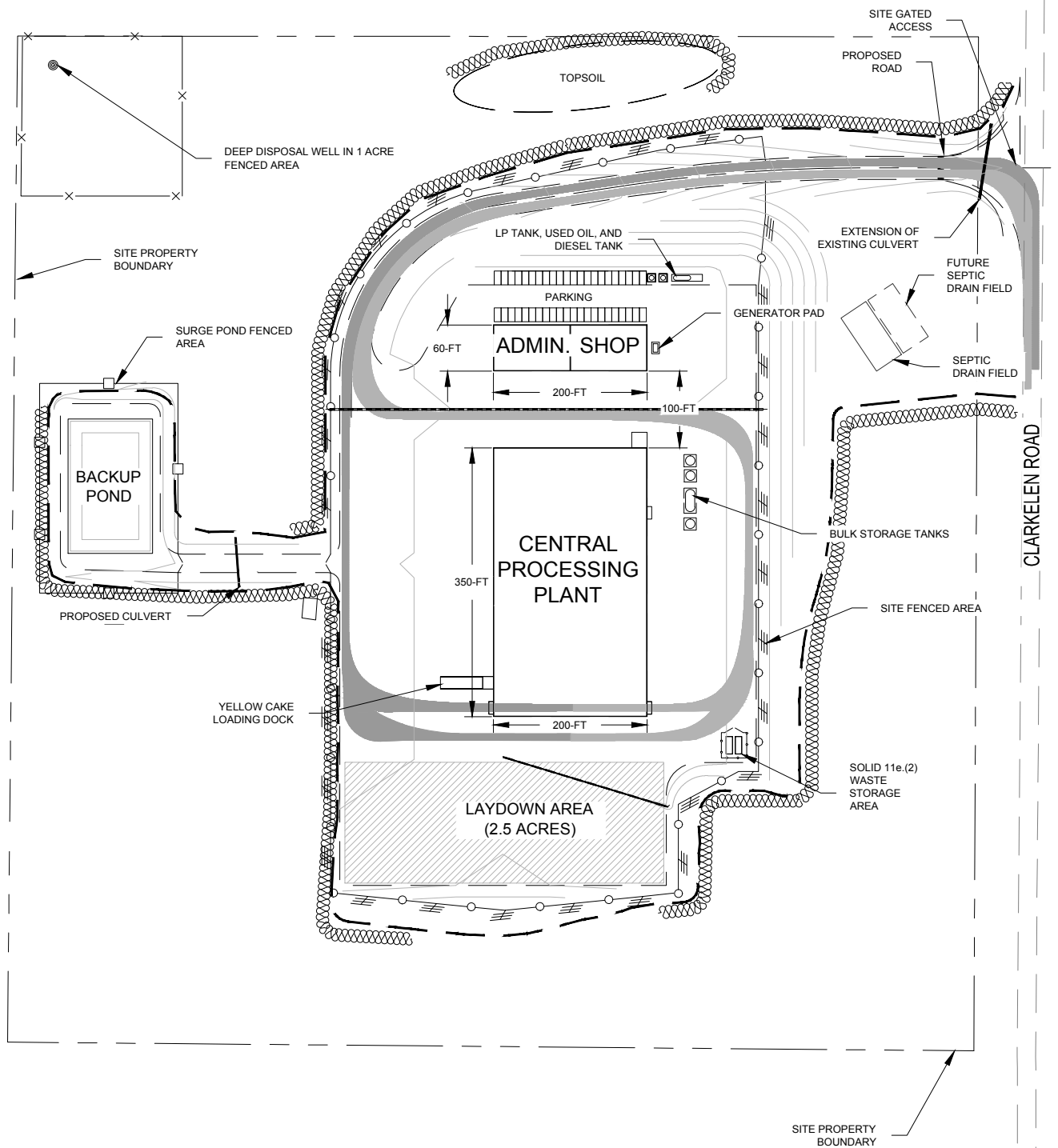
- Proposed Project Boundary
- Existing Primary and Secondary Access Road
- Major Road (Paved)
- Minor Road (Unpaved Existing Access Road)
- Proposed Header House Location
- Wellfield
- Proposed Powerline
- Proposed Trunkline
- Ore Body

NAD83, Wyoming State Plane East

0 0.25 0.5 0.75 1 Miles







## LEGEND

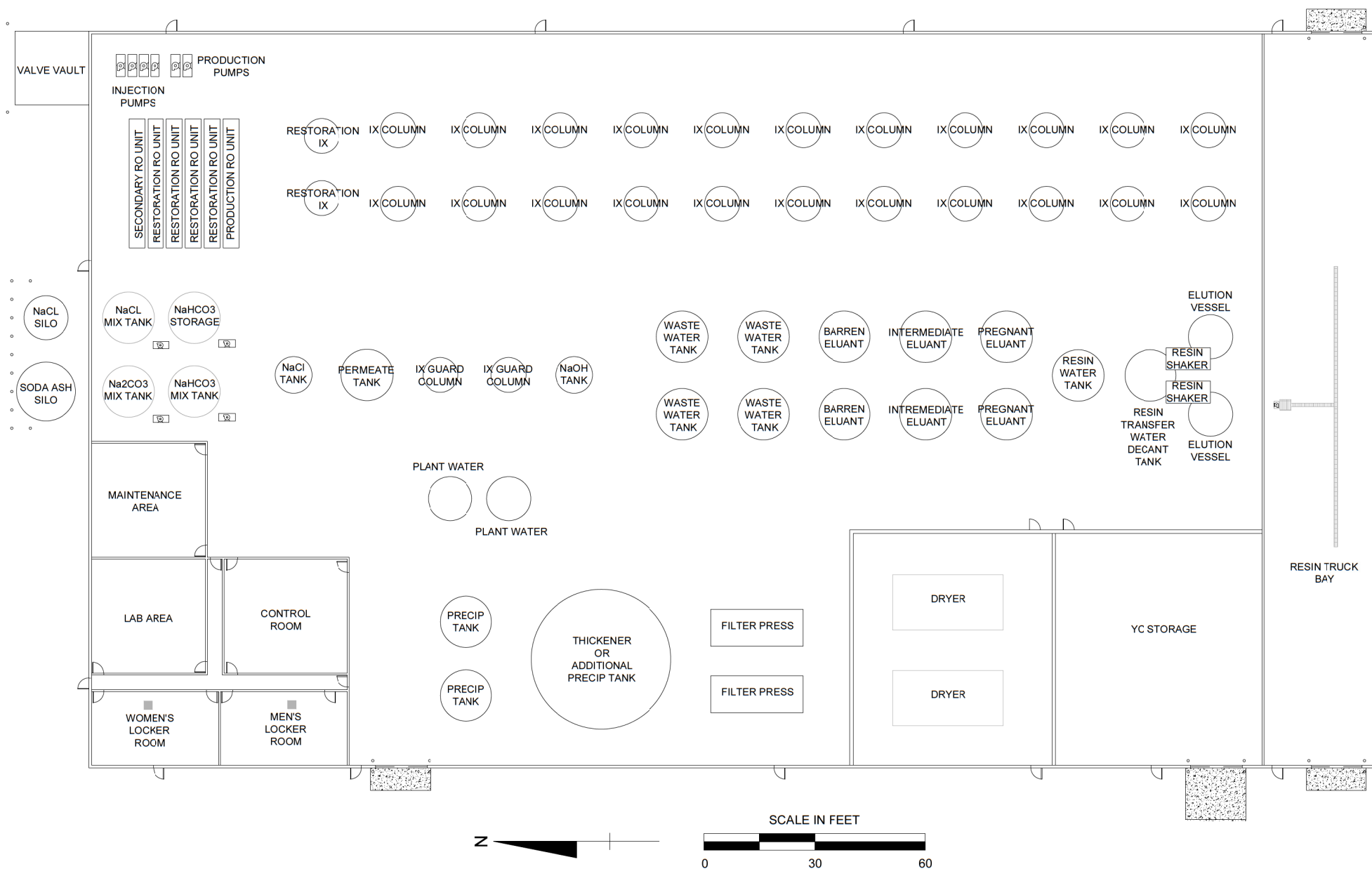
	8' HIGH SITE SECURITY FENCE
	8' HIGH POND GAME FENCE
	LIMITS OF GRADING DISTURBANCE
	SEDIMENT AND EROSION CONTROL BARRIERS
	SITE LAYDOWN AREA
	INBOUND TRUCK PATH (WB-67)
	OUTBOUND TRUCK PATH (WB-67)

CONCEPTUAL  
SUBJECT TO CHANGE



SCALE IN FEET





## **PURPOSE:**

This Index of Change documents the modifications requested by the NRC per the additional non-RAI information needs. The following methods are a listing of the specific RAI requests and the modifications made to the original application figures in response to those requests.

## **METHODS:**

### **AIR QUALITY**

Figure 3.6-1: NWS and Coal Mine Meteorological Stations (ER page 3.6-35)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Enlarge to full portrait page

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

### **AIR QUALITY**

Figure 3.6-13: Casper Airport 8-Year Wind Rose (ER page 3.6-47)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

### **AIR QUALITY**

Figure 3.6-14: Antelope Mine 25-Year Wind Rose (ER page 3.6-48)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

#### AIR QUALITY

Figure 3.6-15: Glenrock Mine 14-Year Wind Rose (ER page 3.6-49)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

#### AIR QUALITY

Figure 3.6-24: Reno Creek Project Wind Rose (ER page 3.6-58)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

#### AIR QUALITY

Figure 3.6-25: Proposed Project Wind Rose: 1st Quarter (ER page 3.6-59)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## AIR QUALITY

Figure 3.6-26: Proposed Project Wind Rose: 2nd Quarter (ER page 3.6-60)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## AIR QUALITY

Figure 3.6-27: Proposed Project Wind Rose: 3rd Quarter (ER page 3.6-61)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## AIR QUALITY

Figure 3.6-28: Proposed Project Wind Rose: 4th Quarter (ER page 3.6-62)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## AIR QUALITY

Figure 3.6-33: Antelope Mine Short and Long-Term Wind Roses (ER page 3.6-67)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- Add gradient for wind rose

- Rotate to Landscape and enlarge.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## AIR QUALITY

Figure 3.6-45: Proposed Project Meteorological Monitoring Map (ER page 3.6-79)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## AIR QUALITY

Figure 5-1: Energy Developments (ER page 5-30)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Adjusted map scale to fit page
- Changed ISR symbology – colors, sizes, triangle style to accommodate b/w color scheme
- Turned off ESRI Terrain basemap service
- Changed Uranium, Oil/Gas and Coal occurrence symbology to accommodate b/w color scheme

## PUBLIC AND OCCUPATIONAL HEALTH

TR Figure 1-3, Project Schedule

This is similar to a request found in the General section:

### GENERAL

*TR Addendum 2.6A-8, Figure 2.6A-3, Generalized Stratigraphic Column for the Powder River Basin:*

- Change to b/w Increase size of labels, legend text and symbols, and scale for readability

AUC has elected to use the figure request from the General section to fulfill both requests.

#### PUBLIC AND OCCUPATIONAL HEALTH

TR Figure 3-10, Vacuum Dryer.

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

#### PUBLIC AND OCCUPATIONAL HEALTH

ER Figure 2.9-1. , Rad Site Characterization Sampling Locations

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Added additional air monitoring and soil sampling locations

#### PUBLIC AND OCCUPATIONAL HEALTH

ER Figure 3.1-3, Residences within Two Miles of the Project Area.

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

#### TRANSPORTATION

ER Fig 3.2-1, Automated Traffic Count Sampling Locations:

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Turned off ESRI Shaded Relief Base map service
- Added 30 m hillshade draped on top of a 90 m hillshade (with 5x elevation exaggeration) to add more relief/contrast to the topography.

## WASTE MANAGEMENT

TR Fig 2.1-3, Conceptual Site Plan with Deep Disposal Well Infrastructure:

- This is large figure with a significant amount of information. It would be useful if it could be collapsed for 8.5x11 page, converted to b/w, with emphasis on waste management related information such as locations of production units, central processing plant, deep disposal wells, deep disposal well pipelines, roads

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Added Production units layer
- Added CPP footprint layer
- Added Deep Disposal Well layer
- Added Deep Disposal Well pipeline layer
- Added secondary roads and tertiary roads layers
- Turned off Elevation Contours for clarity

## LAND USE

ER Figure 3.1-1, Land Use within Five Miles.

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Changed symbology of Pipelines to accommodate b/w color scheme
- Changed land use description of “Non-Agricultural” to “Agricultural”

## LAND USE

ER Figure 1-3, Surface Ownership

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.



The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Darkened contour symbology
- Labeled index contours only

#### LAND USE

ER Figure 1-4, Mineral Ownership

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Darkened contour symbology
- Labeled index contours only

#### LAND USE

ER Figure 3.1-2, Existing CBM Infrastructure

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Grouped water lines, electric lines and gas lines together as 'Underground Utility' for clarity
- Changed symbology of Pipelines to accommodate b/w color scheme
- Turned off 'Sections' labels for clarity

#### LAND USE

ER Figure 3.1-5, Non-CBM Oil and Gas Wells within 10 Miles

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## GEOLOGY

### TR Figure 2.6A-1, Geologic Map of Pumpkin Buttes Uranium District

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## GEOLOGY

### TR Figure 2.6A-3, Generalized Stratigraphic Column for the Powder River Basin

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Highlighted the host rock formation

This is similar to a request found in the Groundwater section:

#### GROUNDWATER

*TR Addendum 2.6A-8, Figure 2.6A-3, Generalized Stratigraphic Column for the Powder River Basin:*

- Change to b/w
- Need to modify the figure to clearly identify the host rock formation

AUC has elected to use the figure request from the Groundwater section to fulfill both requests.

## GEOLOGY

### TR Figure 2.6A-9, Typical Geophysical Log RC0003 (Southeast)

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## GEOLOGY

### TR Figure 2.6A-14, Structural Cross Section, C-C'

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## NOISE

ER Figures 3.7-1, Nearest Residence and Construction Noise Level

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Changed the label style of the Noise Level rings

## NOISE

ER Figure 3.1-4, Nearby Recreation Areas

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## NOISE

ER Figure 3.1-6, Uranium Recovery Facilities within 50 Miles of the Project Area

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## NOISE

ER Figure 1-5, **Conceptual Site Plan**

- Change to b/w. Increase size of labels, legend text and symbols, and scale for readability

The 'Conceptual Site Plan' figure contains too much detail to be readable at a scale that fits 8.5x11 paper size and is in black and white. This request, however, can be fulfilled by the three figures that were produced for the following:

#### GENERAL

*Conceptual Site Plan (TR Fig. 2.1-3) (wellfield maps)*

- *Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.*
- *There is too much in this figure. Please separate out the layers of this image and make into separate figures*
  - *1-showing only the wellfield locations with simplified CPP, trunk lines and power lines*
  - *1-showing wellfield locations and monitoring wells*

#### WASTE MANAGEMENT

*TR Fig 2.1-3, Conceptual Site Plan:*

- *This is large figure with a significant amount of information. It would be useful if it could be collapsed for 8.5x11 page, converted to b/w, with emphasis on waste management related information such as locations of production units, central processing plant, deep disposal wells, deep disposal well pipelines, roads*

- All of the layers found on ER Figure 1-5 "Conceptual Site Plan" are accounted for collectively amongst the three figures mentioned below:

Conceptual Site Plan with Wellfield Infrastructure

Conceptual Site Plan with Wellfield Locations and Monitoring Wells

Conceptual Site Plan with Deep Disposal Well Infrastructure

#### GROUNDWATER

ER Figure 3.1-6

- Gray-scale figure to represent general conceptualizations of the site hydrostratigraphy for the: (i) fully saturated PZA region, and (ii) partially saturated PZA region based on Figures 2.7B-16 through 2.7B-19. Information from Figures 2.6A-11 through 2.6A-33 could also be used.
  - a. Staff understands that developing a "general conceptualization" may be difficult given the spatial variability. If that is the case, then just modifying Figures 2.7B-16 through 2.7B-19 with the following aspects is also acceptable.
    - i. Delete the borehole logs.
    - ii. Show the most recent Potentiometric Surface (i.e., water table location) to scale.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- AUC has produced the following b/w figures with a reduced page size of 8.5x11:

TR\_Fig2\_6A-17\_OreBodyAreas\_XSectionLocations.pdf  
TR\_2\_6A-18\_CrossSection\_F\_SEIS.pdf  
TR\_2\_6A-19\_CrossSection\_G\_SEIS.pdf  
TR\_2\_6A-20\_CrossSection\_H\_SEIS.pdf  
TR\_2\_6A-21\_CrossSection\_I\_SEIS.pdf  
TR\_2\_6A-22\_CrossSection\_J\_SEIS.pdf  
TR\_2\_6A-23\_CrossSection\_K\_SEIS.pdf

## GROUNDWATER

TR Addendum 2.6A-8, Figure 2.6A-3 Generalized Stratigraphic Column for the Powder River Basin

- Change to b/w
- Need to modify the figure to clearly identify the host rock formation

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Highlighted the host rock formation

This is similar to a request found in the Geology section:

### GEOLOGY

*TR Figure 2.6A-3:*

- *Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.*

AUC has elected to use this figure to fulfill both requests

## SURFACE WATER

TR Addendum (pg.) 2.7A-39, Figure 2.7A-1, Drainages

- Reduce size to 8.5" x 11"
- Increase contrasts for contours
- Increase size of labels, legend text and symbols, and figure text for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Turned off ESRI Topographic Base map service
- Added 30 m hillshade draped on top of a 90 m hillshade (with 5x elevation exaggeration) to add more relief/contrast to topography as requested
- Applied hatch symbology to the Mud Spring Creek and Lower Antelope Creek watersheds
- Additionally, delineated the Upper Antelope Creek watershed

- Applied 2 mile Review Area boundary layer
- Corrected the labels for Upper Porcupine – Antelope Creek and Spring Creek – Antelope Creek as they were previously incorrectly labeled
- Inserted an inset map to provide a regional reference of the watershed and project area locations.

## SURFACE WATER

TR Addendum (pg.) 2.7A-40, Figure 2.7A-2, Gaging Site Locations

- Reduce size to 8.5" x 11"
- Increase contrasts for contours
- Increase size of labels, legend text and symbols, and figure text for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Turned off ESRI Shaded Relief Base map service
- Added 30 m hillshade draped on top of a 90 m hillshade (with 5x elevation exaggeration) to add more relief/contrast to terrain
- Assigned hatch fill to Reno Creek Project area to make it stand out.
- Changed color of 'Counties' layer and county labels to white

## SURFACE WATER

TR Addendum, Figure 2.7A-8, Baseline Radiological Sampling Locations

- Reduce size to 8.5" x 11"
- Increase contrasts for contours
- Increase size of labels, legend text and symbols, and figure text for readability

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Added additional air monitoring and soil sample locations

This is the same request found under Public and Occupational Health:

### PUBLIC AND OCCUPATIONAL HEALTH

*TR Fig 2.9-1, Rad Site Characterization Sampling Locations:*

- *(note: this is a large figure with a significant amount of info, if possible, modified to fit on 8.5x11 page and b/w).*

AUC has elected to use the figure request from the Public and Occupational Health section to fulfill both requests

## ECOLOGY - Vegetation

Black/white figure from map in ER Addendum 3.5-E that fits on one 8.5"x11" page including legend, north arrow and scale. This figure will show the baseline vegetation communities mapped at the proposed Reno Creek project area. Do not need to include all of ½ mile buffer, but identify it on parts that are included in the figure. Include tree stand and noxious weed locations. Do not include sample locations or habitat survey points.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

### ECOLOGY – Vegetation

Using this veg map as a base, create a new figure showing the proposed facilities (well fields, ponds, well, pipelines, roads, structures, etc.) and facilities for the proposed alternatives (backup storage pond, etc.) (see Dewey Burdock Figs. 4.6-1 and 4.6-3 as an example).

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

### ECOLOGY – Biological Resources

Black/white figure that fits on one 8.5"x11" page, including legend, north arrow and scale showing site boundary. Show the proposed Reno Creek project area and 1-mile wildlife survey buffer (could use ER Figure 3.5-1 as a base). Add WGFD Crucial Habitat Priority Area and an Enhancement Habitat Priority Area for the sagebrush/mixed grassland habitat within Greater sage-grouse complexes (Find these shapefiles. Do not know if they are at <http://gf.state.wy.us/web2011/wildlife-1000819.aspx>- different from the pronghorn habitat range). Add sage grouse lek locations (160 Acre, Porcupine Creek, and Spring Creek) that are known within 4 miles. Add the 13 raptor nest locations from ER Figure 3.5-1 and identify by species. [there may be updated lek and raptor information provided by WGFD, BLM, etc. that will need to be added to this figure]

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Added Crucial Habitat Priority area (Terrestrial) – This was the only Habitat Priority area which intersected the AUC project area.
- Raptor nests and Lek sites remain unchanged

## ECOLOGY – Biological Resources

Using this map as a base (reference the file, 'Ecology\_Wildlife Features\_SEIS.pdf'), create a new figure only keeping the sage grouse lek locations and raptor nests. Place a 2-mile radius ring around the active leks, and add all planned and alternative facilities. The map area can be zoomed in to include just the boundaries of the 2-mile rings. (See Dewey figure 4.6-4 as an example) [there may be updated sage grouse lek and raptor spatial/timing information provided by WGFD, BLM, etc. that will need to be added to this figure]

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Added Deep Disposal Wells, Central Processing Plant, Access roads to the project area, well-field access roads & ore bodies
- Added proposed alternative facilities
- Raptor nests and sage grouse lek sites remain unchanged
- Added two mile sage grouse lek buffers

## WETLANDS

Black/white figure that fits on one 8.5"x11" page, showing jurisdictional wetlands and waters of the US and proposed facilities.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- No changes, aside from those listed above

## CULTURAL RESOURCES

GIS file with coordinates and elevation of the site and surrounding areas. If a GIS file is not available, provide a spreadsheet with x, y, z coordinates describing the site topography. Provide details such as coordinate system and type of elevation

- AUC has provided a 10 meter resolution, Digital Elevation Model (DEM) raster data file clipped to the 2 mile buffer around the project license area. The DEM was re-projected to Wyoming State Plane East (US Foot), NAD83. This file can be found in the provided Addenda



## GENERAL

### Proposed Reno Creek Project General Location Map:

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Turned off Hillshade and county labels in inset map
- Turned off ESRI Terrain Base Map Service
- Added 30 m hillshade draped on top of a 90 m hillshade (with 5x elevation exaggeration) to add more relief/contrast to terrain

## GENERAL

### Proposed Project Map

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- None, aside from those requested above

## GENERAL

### Site Surface Ownership

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- None, aside from those requested above

This is the same request found under Land Use:

### LAND USE

*ER Figure 1-3, Surface Ownership:*

- *Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.*

AUC has elected to use the figure request from the Land Use section to fulfill both requests.

## GENERAL

### Site Mineral Ownership

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- None, aside from those requested above

This is the same request found under Land Use:

### LAND USE

*ER Figure 1-4, Mineral Ownership:*

- *Change to b/w. Increase size of labels, legend text and symbols, and scale for readability.*

AUC has elected to use the figure request from the Land Use section to fulfill both requests.

## GENERAL

### Conceptual Site Plan (TR Fig. 2.1-3) (wellfield maps)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- There is too much in this figure. Please separate out the layers of this image and make into separate figures
  - 1-showing only the wellfield locations with simplified CPP, trunk lines and power lines
  -

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Added CPP footprint layer
- Added Trunklines layer
- Added Powerlines layer
- Added Wellfields layer
- Turned off Elevation contours for clarity
- Ensured coordinate system was assigned to NAD83, Wyoming State Plane East
- Ensured graticule was assigned to NAD83, Wyoming State Plane East

## GENERAL

### Conceptual Site Plan (TR Fig. 2.1-3) (wellfield maps)

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.
- There is too much in this figure. Please separate out the layers of this image and make into separate figures
  - 1-showing wellfield locations and monitoring wells

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Added CPP footprint layer
- Added Wellfields layer
- Added Monitoring Well Rings layer
- Turned off elevation contours for clarity
- Ensured coordinate system was assigned to NAD83, Wyoming State Plane East
- Ensured graticule was assigned to NAD83, Wyoming State Plane East

## GENERAL

### Proposed Project Schedule

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- Bar graph was adjusted to accommodate b/w color scheme.

## GENERAL

### CPP Facility Area Layout

- Remove contours
- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- None, aside from those requested above

## GENERAL

### CPP Building Layout

- Change to b/w. Increase size of labels, legend text and symbols, and figure text for readability.

The following changes or additions were made to the referenced figure, in addition to the above mentioned requests:

- None, aside from those requested above