AUC LLC
Reno Creek Project
NRC Pre-Submission Audit
Field Trip
November 2011

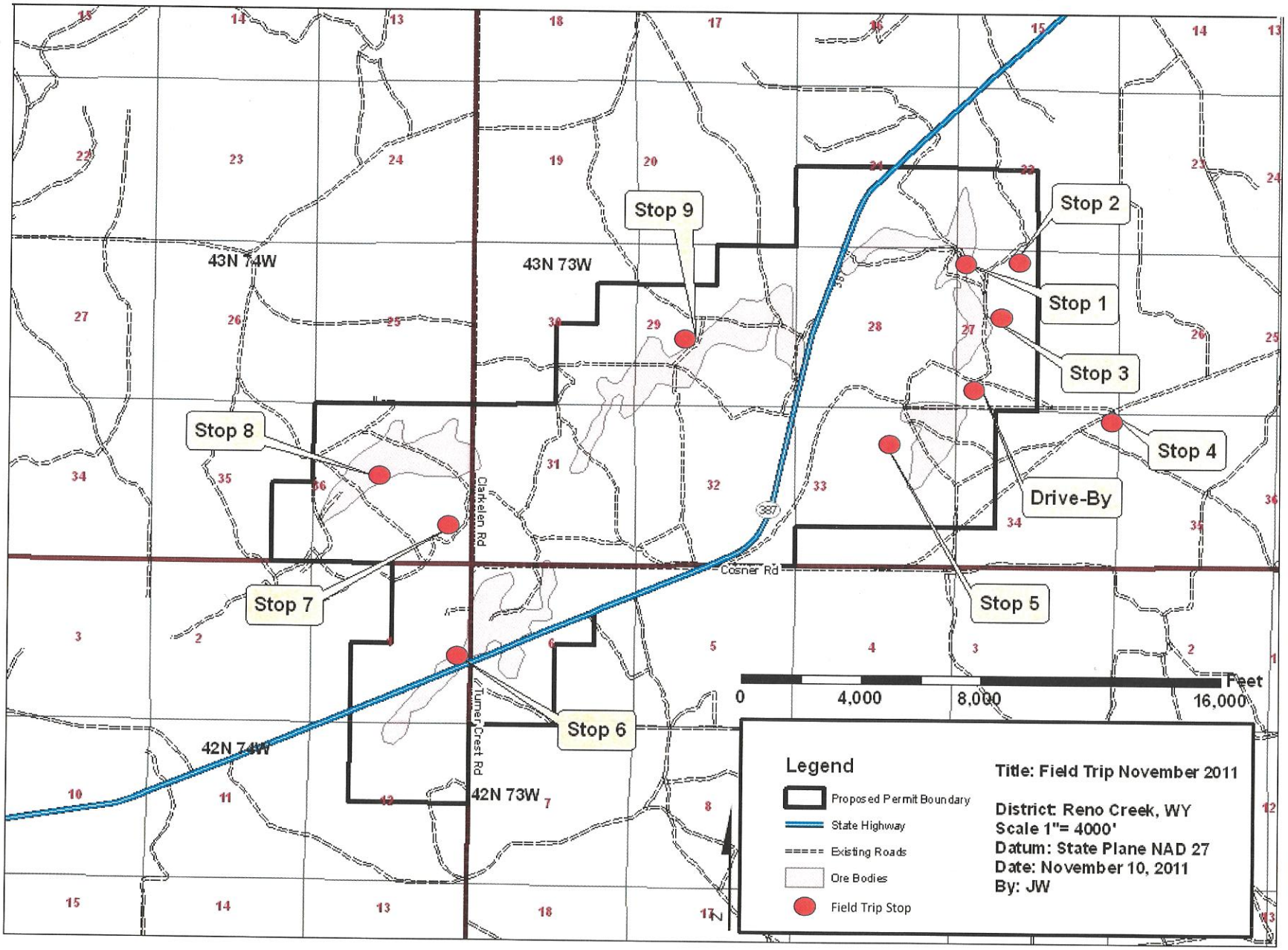
Reno Creek Project
November 2011 Field Trip Objective

The November 2011 Reno Creek Project Field Trip objective is to stop at selected project locations and give a detailed overview of field work conducted during 2010 and 2011, with the clear intent to aid document reviewers in achieving an overall understanding of the submitted draft documentation.

The Field Trip will include stops to show and/or discuss the following:

- The location of the historic USNRC-permitted Rocky Mountain Energy Uranium ISR Pilot Plant
- Results of the Reno Creek wildlife assessment and resulting maps
- Site dedicated Meteorological Station describing the technical setup and annual results
- An Air Particulate sampler location with a description of the setup and discussion of the data retrieval process.
- Baseline monitor well clusters at both the north and south Reno Creek areas, with a discussion of drilling results and reclamation activities, as well as hydrologic and geologic findings at different well clusters;
- Outcrop of both the Upper and Lower Felix Coal correlation marker beds that cover the Reno Creek Project, and
- Baseline sample locations of groundwater monitor wells, private livestock wells, soil, sediment, and vegetation.
- ***Planned stops will be adjusted based on time and weather conditions***

Reno Creek Project Field Trip Stops



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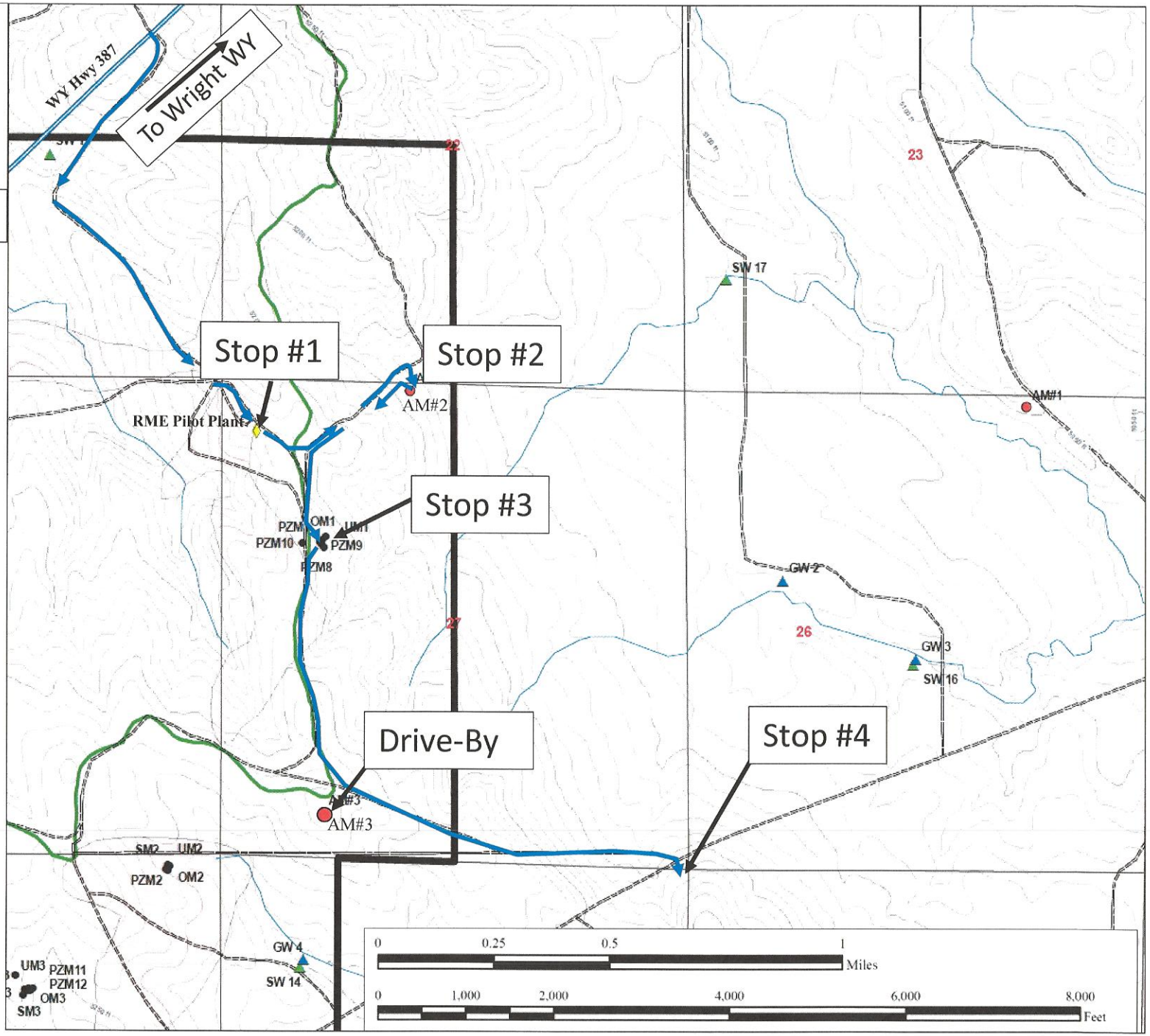
Stops #1 to #4



Travel Route

Legend

- Proposed Reno Creek Project Boundary
- Proposed Central Processing Plant Location
- Residence
- Hydro Unit Boundary-12
- Surface Water Features
- Ephemeral Streams
- Ore Body
- Stock Well Sample Location
- Surface Water and Sediment Sample Location
- Air Monitor Sample Location
- Ground Water Well Sample Location
- Meteorological Station

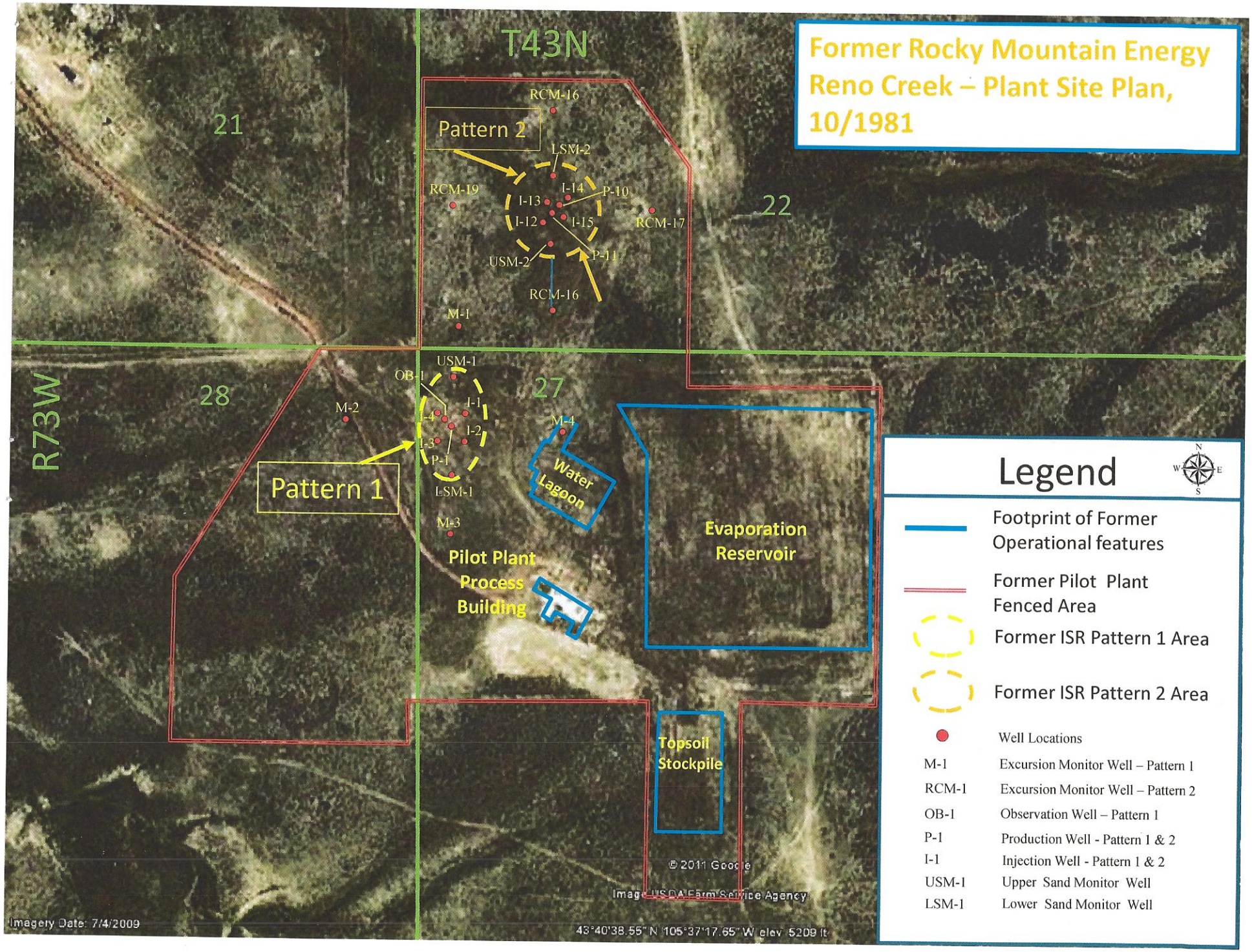
Roads

Road Classification

- Major (Paved)
- Local (Unpaved)

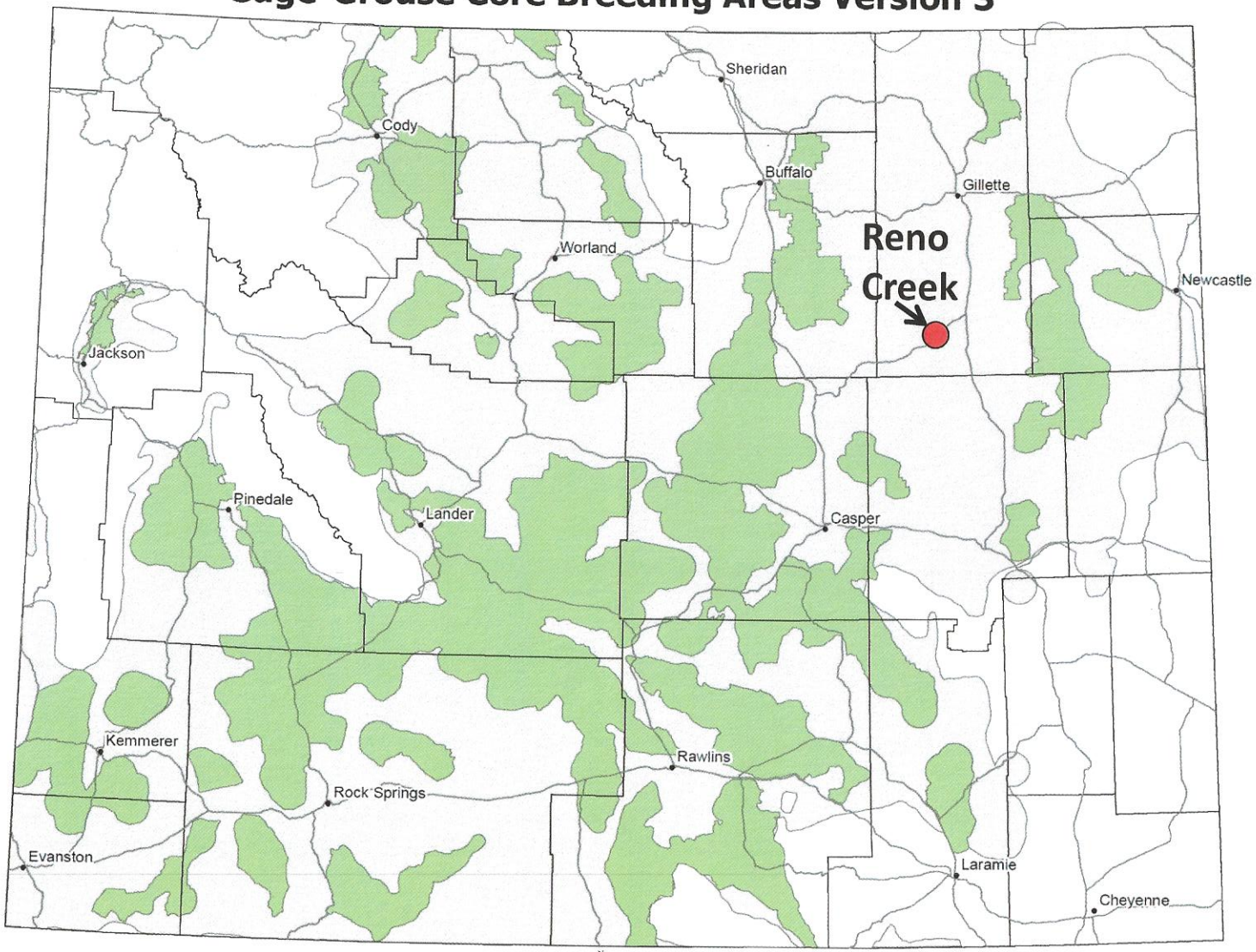
Contour Interval = 10 feet

N
W
E
S


Former Rocky Mountain Energy
Reno Creek – Plant Site Plan,
10/1981
T43N
R73W
21
22
27
28
Pattern 1
Pattern 2
RCM-16
LSM-2
RCM-19
I-14
P-10
I-13
I-12
I-15
RCM-17
USM-2
P-11
RCM-16
M-1
USM-1
OB-1
I-1
I-4
I-2
I-3
P-1
LSM-1
M-2
M-3
M-4
Water Lagoon
Evaporation Reservoir
Pilot Plant Process Building
Topsoil Stockpile
© 2011 Google
Image USDA Farm Service Agency
Imagery Date: 7/4/2009
43°40'38.55" N 105°37'17.65" W elev 5209 ft
Legend
Footprint of Former Operational features
Former Pilot Plant Fenced Area
Former ISR Pattern 1 Area
Former ISR Pattern 2 Area
Well Locations
M-1 Excursion Monitor Well – Pattern 1
RCM-1 Excursion Monitor Well – Pattern 2
OB-1 Observation Well – Pattern 1
P-1 Production Well - Pattern 1 & 2
I-1 Injection Well - Pattern 1 & 2
USM-1 Upper Sand Monitor Well
LSM-1 Lower Sand Monitor Well

Reno Creek Project - Sage Grouse Area Map - WY

Sage-Grouse Core Breeding Areas Version 3



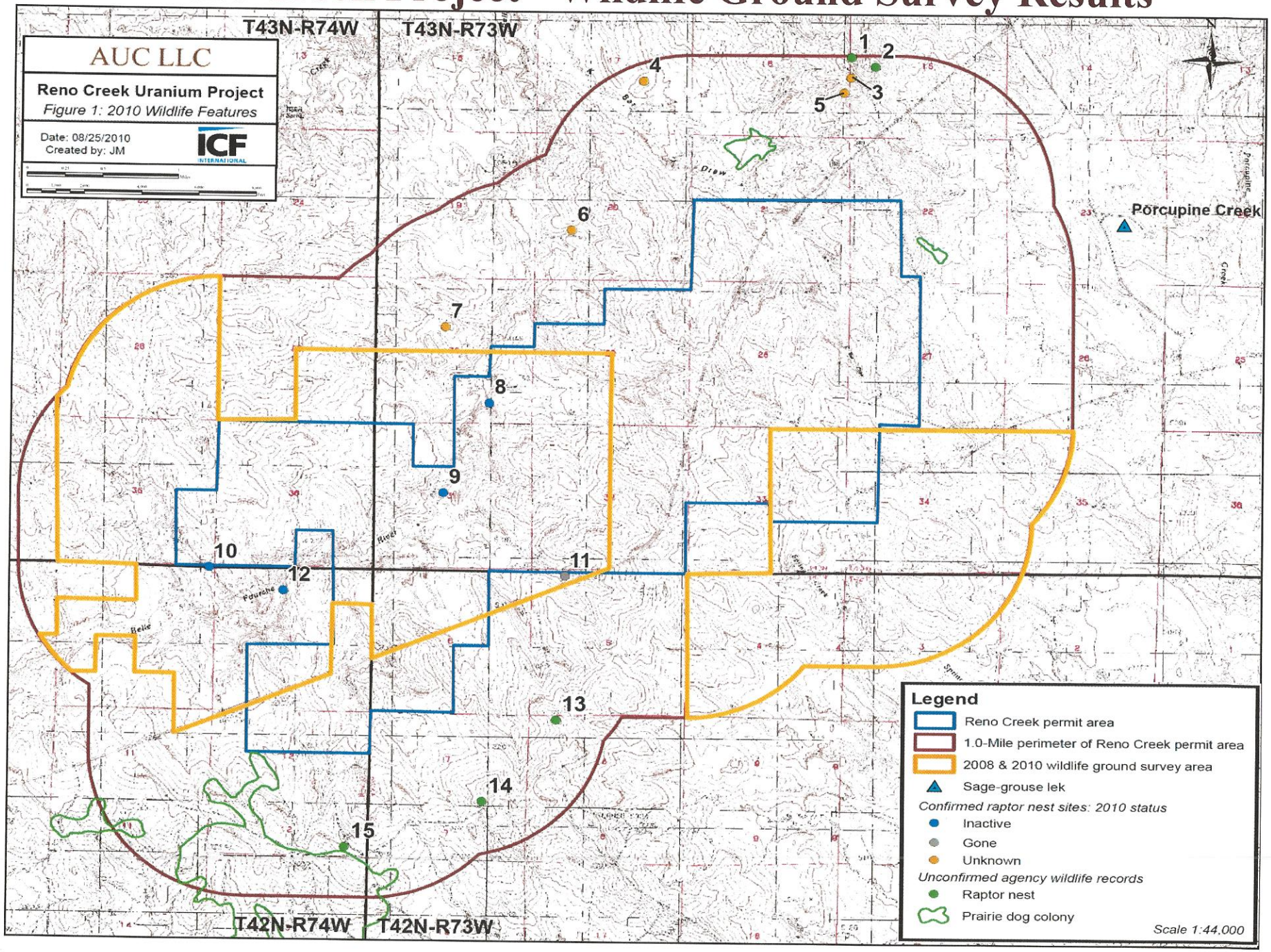
Nyssa Whitford
Sage-Grouse GIS Analyst
Lander Regional Office
06.30.10

0 15 30 60 90 120 Miles

Core Areas shown were updated from the version two core areas. The version three core areas were updated under the direction of the Governor by the Sage-Grouse Local Working Groups and the Sage-Grouse Implementation Team. The version 3 core areas were finalized on 06.29.10.

- Cities
- Roads
- Counties
- Core Areas Version 3
- Current Sage-Grouse Distribution

Reno Creek Project - Wildlife Ground Survey Results



Stop #2

Air Particulate Monitor #2 (AM#2)

Six Air Particulate Monitors Installed at the Reno Creek Project

- Completed over 1 year of data generation for 5 monitor locations
- Added 1 additional Monitor Station (AM1) in August 2011

All Monitors Include the following components:

- Low volume samplers (F&J Specialty Products - Model DF-40L-AC).
- Solar powered with charge to battery
- 4" filter - The AUC method and rationale to use the 4" filter instead of a 2" diameter air filter would extend the baseline air sample filter replacement frequency from weekly to monthly. This proposed sampling protocol change was submitted in writing and approved by the USNRC .

Air Monitor Collected Data Analyzed for:

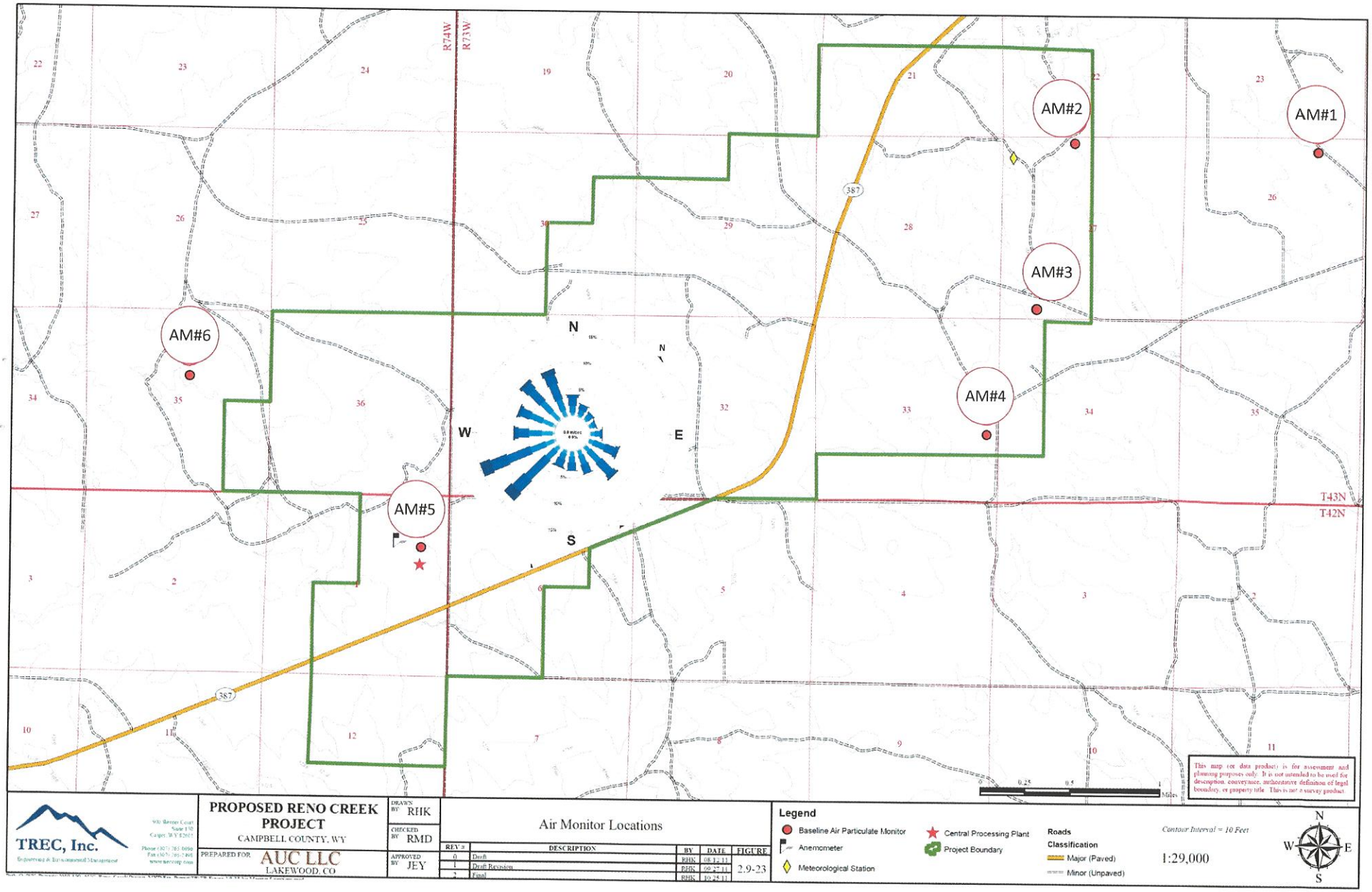
- Uranium, Radium-226, Thorium-230 and Lead-210,
- Radon – (using Track-Etch radon cups - exchanged semiannually), and
- Gamma
- Discrete grab samples of soil samples collected at the six air particulate stations and
- Sediment samples collected at the same baseline surface water sampling locations

- Data results used for estimating radon from the process operations using MILDOS-AREA modeling

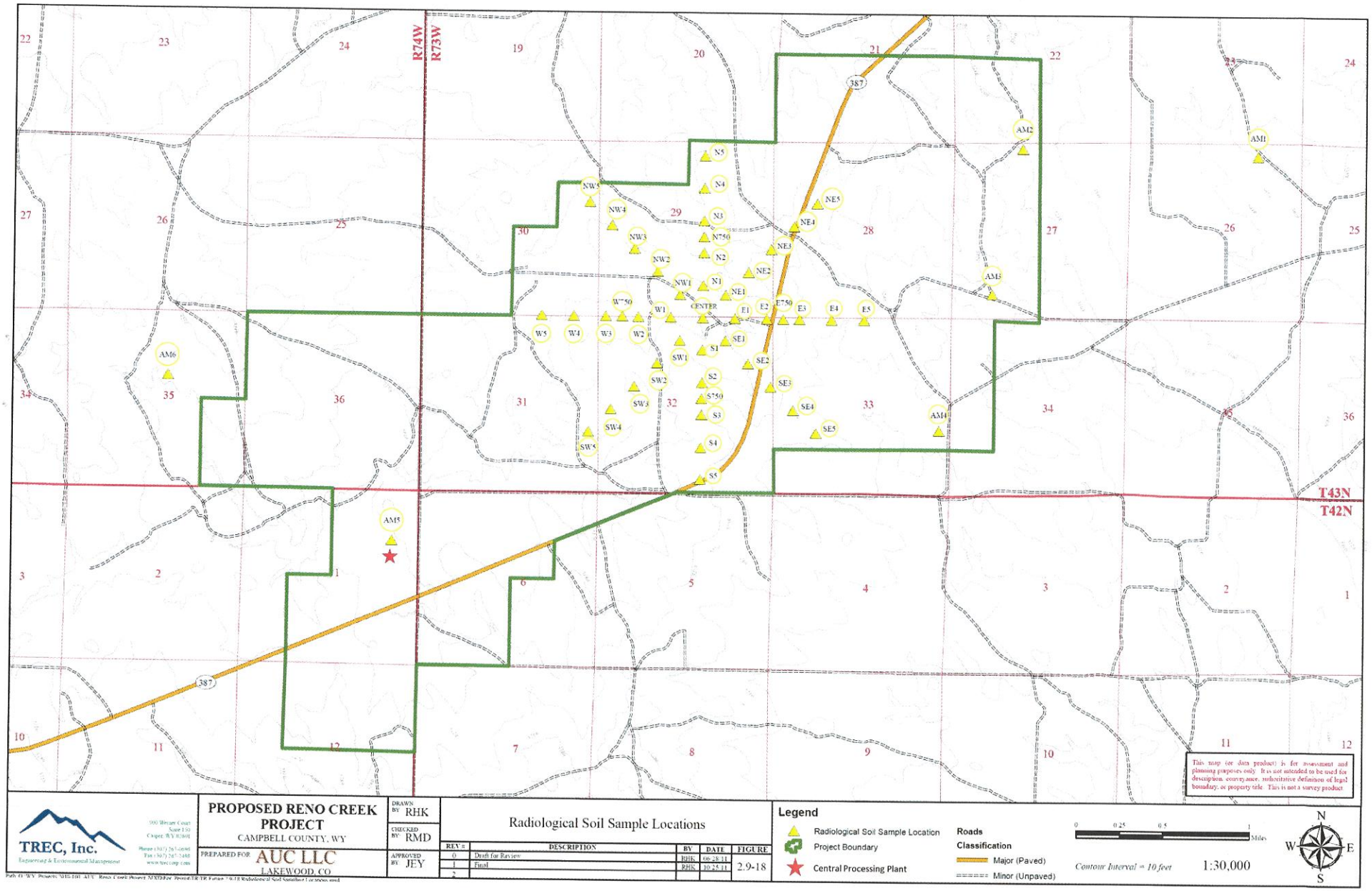
AUC Suggestions:

- Collect continued 6-station **quarterly** radon monitoring indefinitely, and
- Not conduct Tissue Sampling - Should be no particulate radionuclide releases (to vegetation, then to cattle) from any part of an ISL operation.

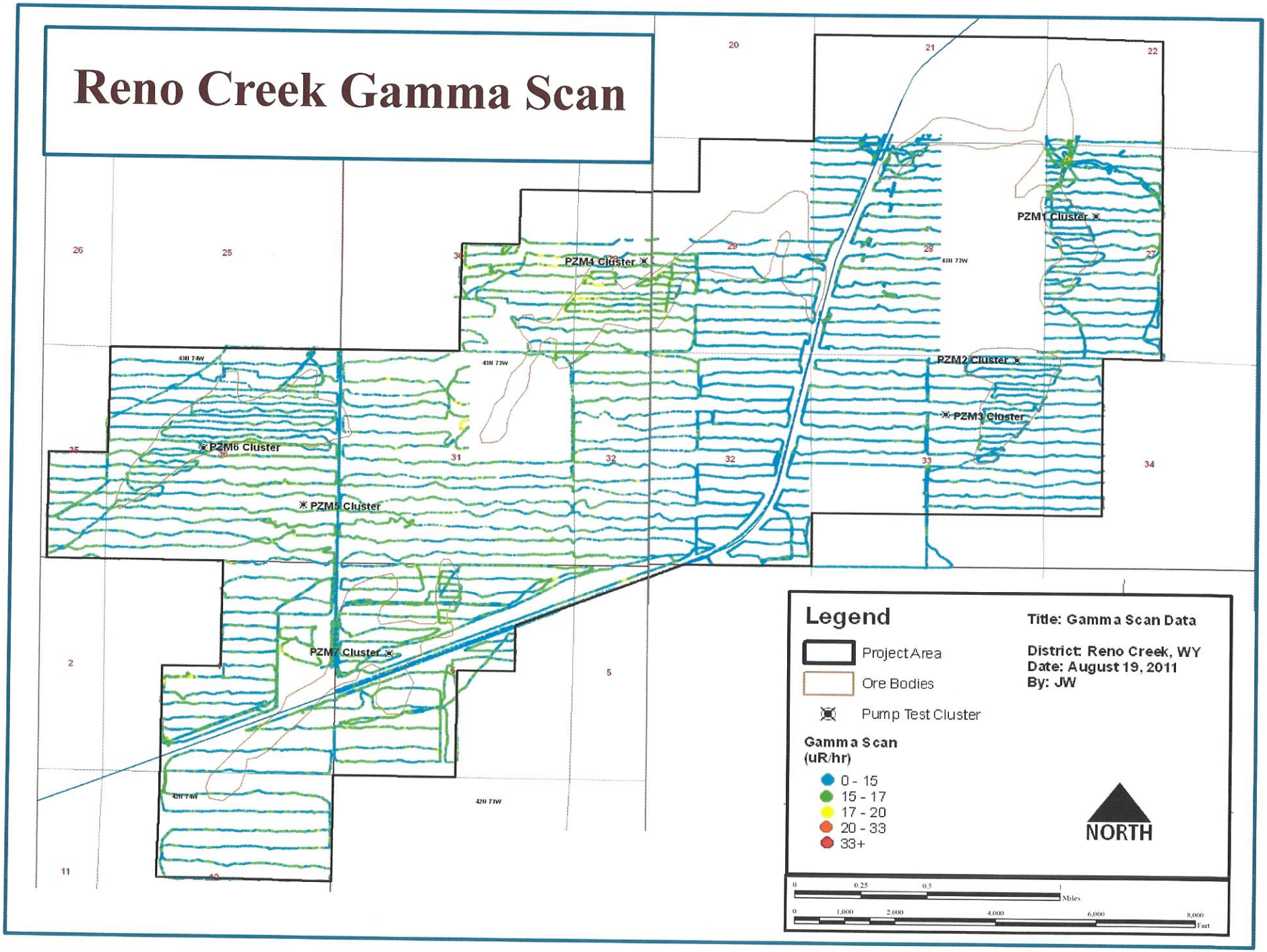
Reno Creek Project - Air Monitor Locations & Annual Wind Rose



Reno Creek Project – Radiological Soil Sample Locations



Reno Creek Gamma Scan



Stops #3 & #4

PZM1 Monitor Well Cluster & Felix Coal Outcrop

Stop#3 **- PZM1 cluster**

- Installed Monitor Wells PZM1, OM1 and UM1,
- Installed three PZA observation wells PZM8, PZM9 and PZM10
- Attempted completion of water table well SM1 but no shallow water-bearing sand was present
- Drill sites restored (graded and seeded) using Rancher and WDEQ-LQD approved seed mix
- Production Zone Aquifer (PZA) is Partially Saturated at PZM1 Cluster
- Drainage Divide – (Belle Fourche Drainage north and west and Cheyenne River Drainage east and south)
- Conducted Long Term pump tests on PZM1,
- Discharged into the Cheyenne River Drainage(east) under WYPDES Temporary Discharge Permit, and
- Conducted single well pump tests on OM1 and UM1

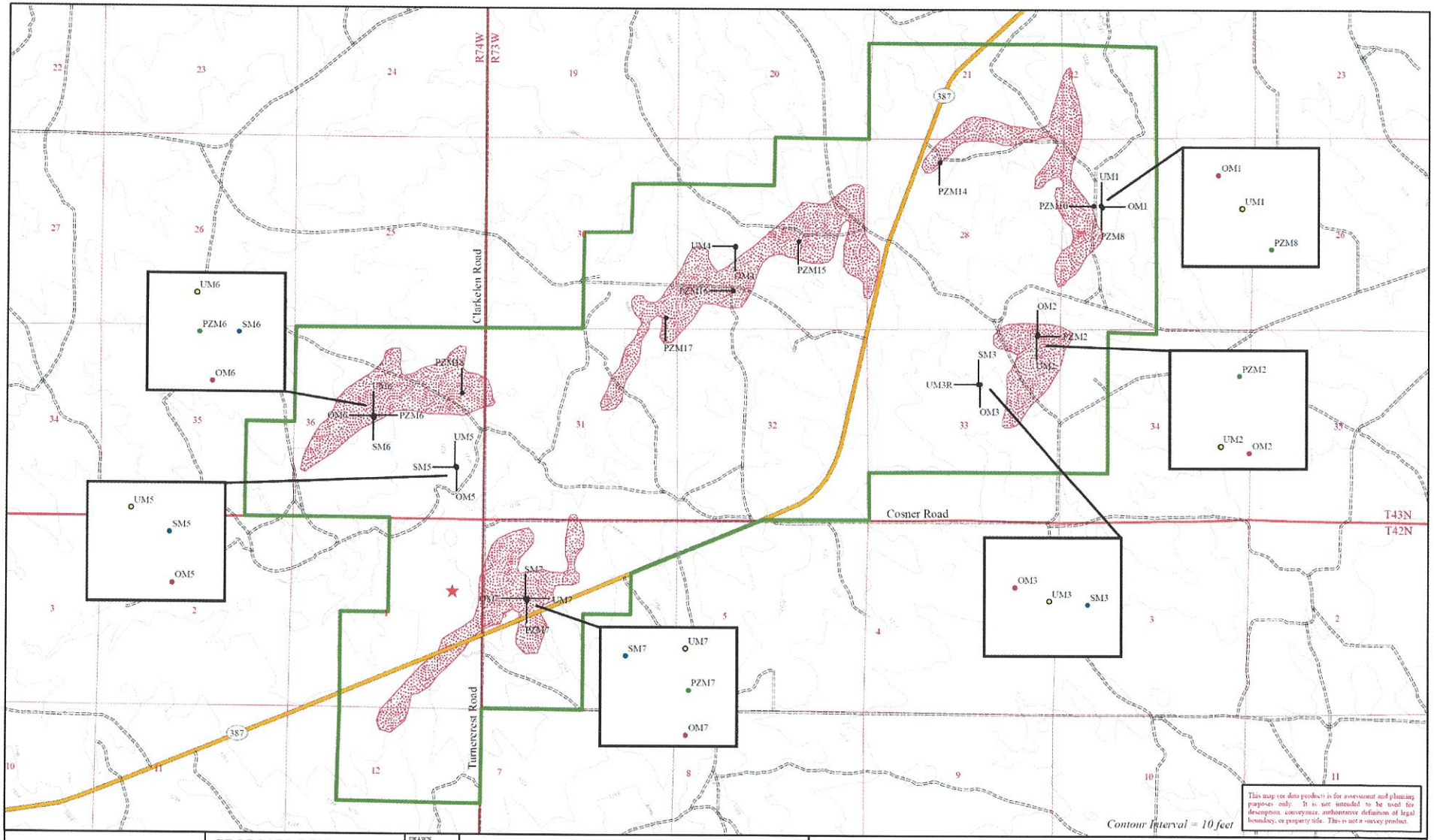
Drive-By – No Stop –Air Monitor #3 location south of road

Stop#4 **– Felix Coal Outcrop along Cosner Road**

- Outcrops of both Felix Coal seams (upper and lower)
- Selenite (Gypsum - $CaS0_4$) crystals precipitate at surface)
- GW stock wells (GW2 and GW3) to the northeast used for baseline water quality sampling
- AM#1 air monitor on Leavitt Property to the northeast

Drive-By – No Stop – Air Monitor #4 location west of access road to PZM3 Cluster off of Cosner Road

Reno Creek Baseline Water Quality Well Locations



TREC, Inc.
Engineering & Environmental Management

PROPOSED RENO CREEK PROJECT
CAMPBELL COUNTY, WY

PREPARED FOR: AUC LLC
LAKEWOOD, CO

DRAWN BY: RHK
CHECKED BY: RMD
APPROVED BY: JEY

Baseline Ground Water Sampling Locations

REV #	DESCRIPTION	BY	DATE
0	Draft - ER	RHK	08.25.11
1	Revised Draft for Review	RHK	09.27.11
2	Final	RHK	10.21.11

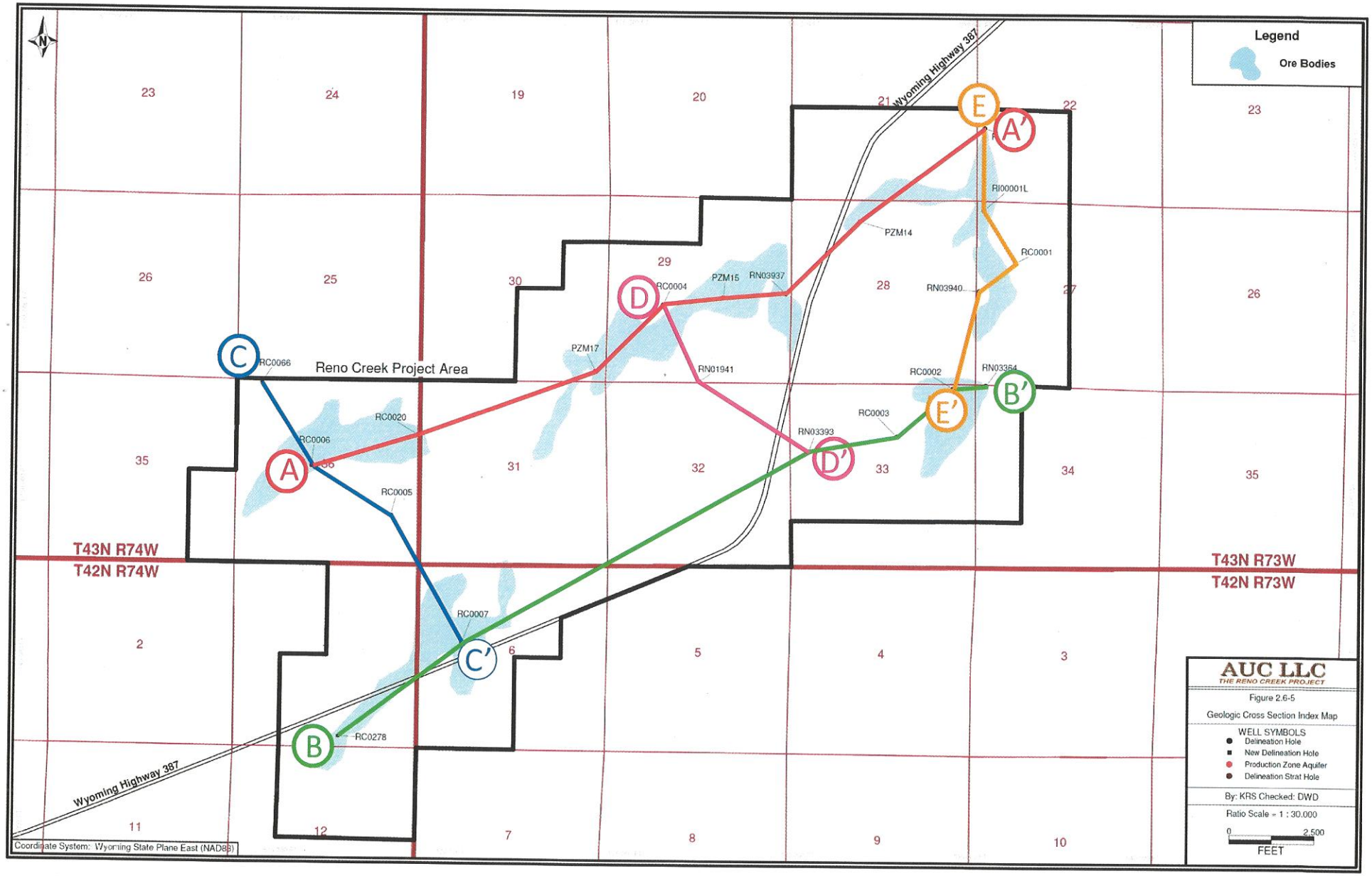
FIGURE: 3.4B-1

Legend
- Central Processing Plant
- Ground Water Well Location
- Proposed Reno Creek Project Boundary
- Ore Body
- Roads Classification: Major (Paved); Minor (Unpaved)
- Ground Water Well Location Aquifer Zone: SM, OM, PZM, UM

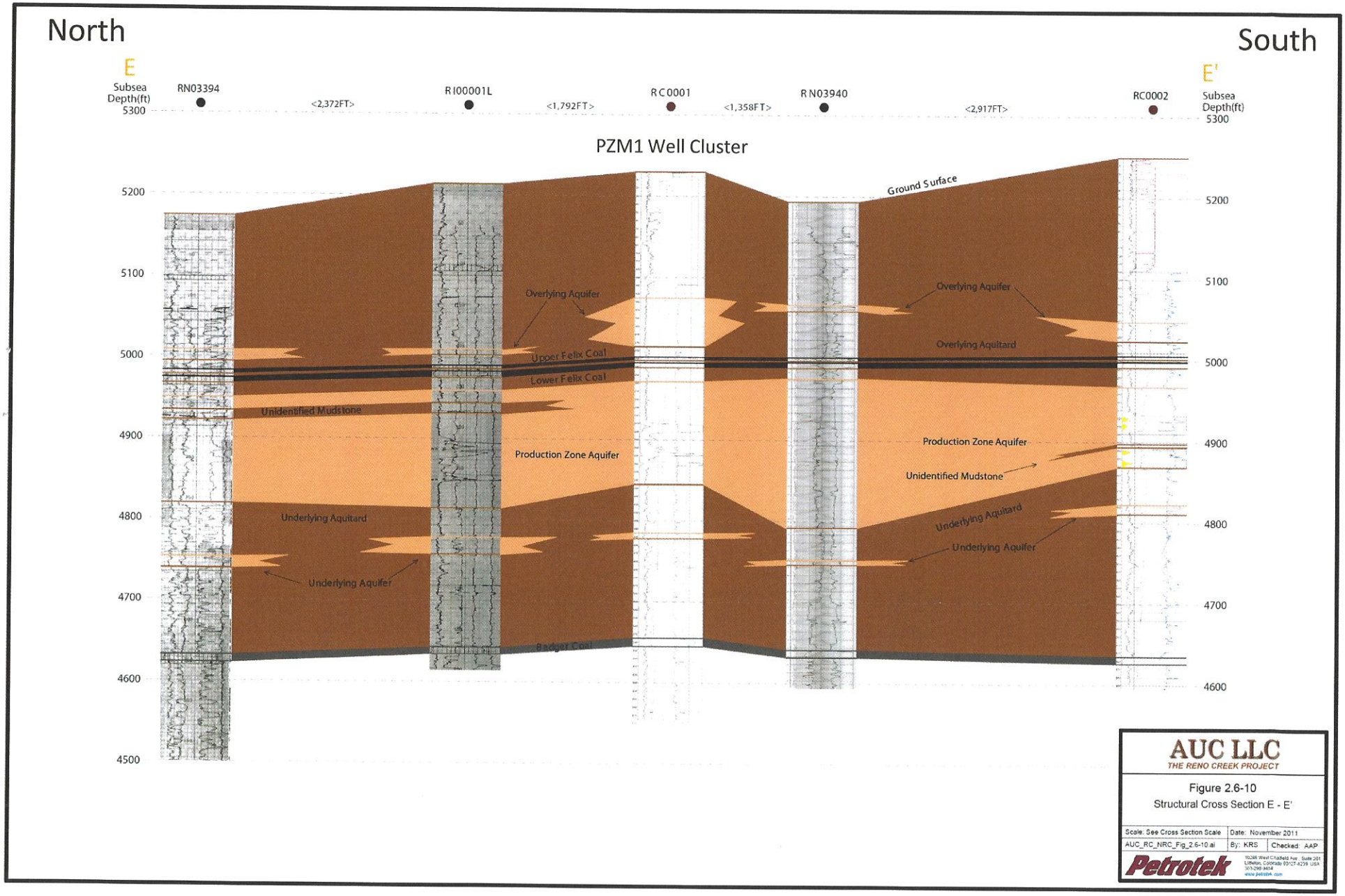
1:29,000

N W E S

Reno Creek Project – Geologic Cross Section Index Map



Reno Creek Project – Structural Cross Section E – E'



AUC LLC
THE RENO CREEK PROJECT

Figure 2.6-10
Structural Cross Section E - E'

Scale: See Cross Section Scale	Date: November 2011
AUC_RC_NRC_Fig_2.6-10.ai	By: KRS Checked: AAP

Petrotek

Stop #5

PZM3 Monitor Well Cluster & Drive-By PZM2 Cluster

***Stop#5* - PZM3 Cluster**

- Installed PZM3, SM3,OM3, and UM3R
- Installed three PZA observation wells (PZM11, PZM12 and PZM13)
- Drill sites graded but not seeded (due to weather). Will use Rancher and WDEQ-LQD approved seed mix
- Cheyenne River Drainage to the south
- PZA is Partially Saturated at PZM3 Cluster
- Conducted the Long Term pump test on PZM3
- Conducted single well pump tests on OM and UM3R
- Discharged into the Cheyenne River Drainage(south) under WYPDES Temporary Discharge Permit

Drive to PZM 2 Cluster

***Drive-By* – PZM2 cluster**

- Installed three baseline monitoring wells PZM2, OM2, and UM2
- Drill sites restored (graded and seeded) using Rancher and WDEQ-LQD approved seed mix
- Attempted completion of water table well SM2 but no shallow water-bearing sand was present
- Cheyenne River Drainage south
- PZA is Partially Saturated at PZM2 Cluster

Drive back to Cosner Road, to Hwy 387 and go west to Clarkellen Road

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Stop #5

Travel Route

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- Air Monitor Sample Location
- Ground Water Well Sample Location
- Meteorological Station

Roads

Road Classification

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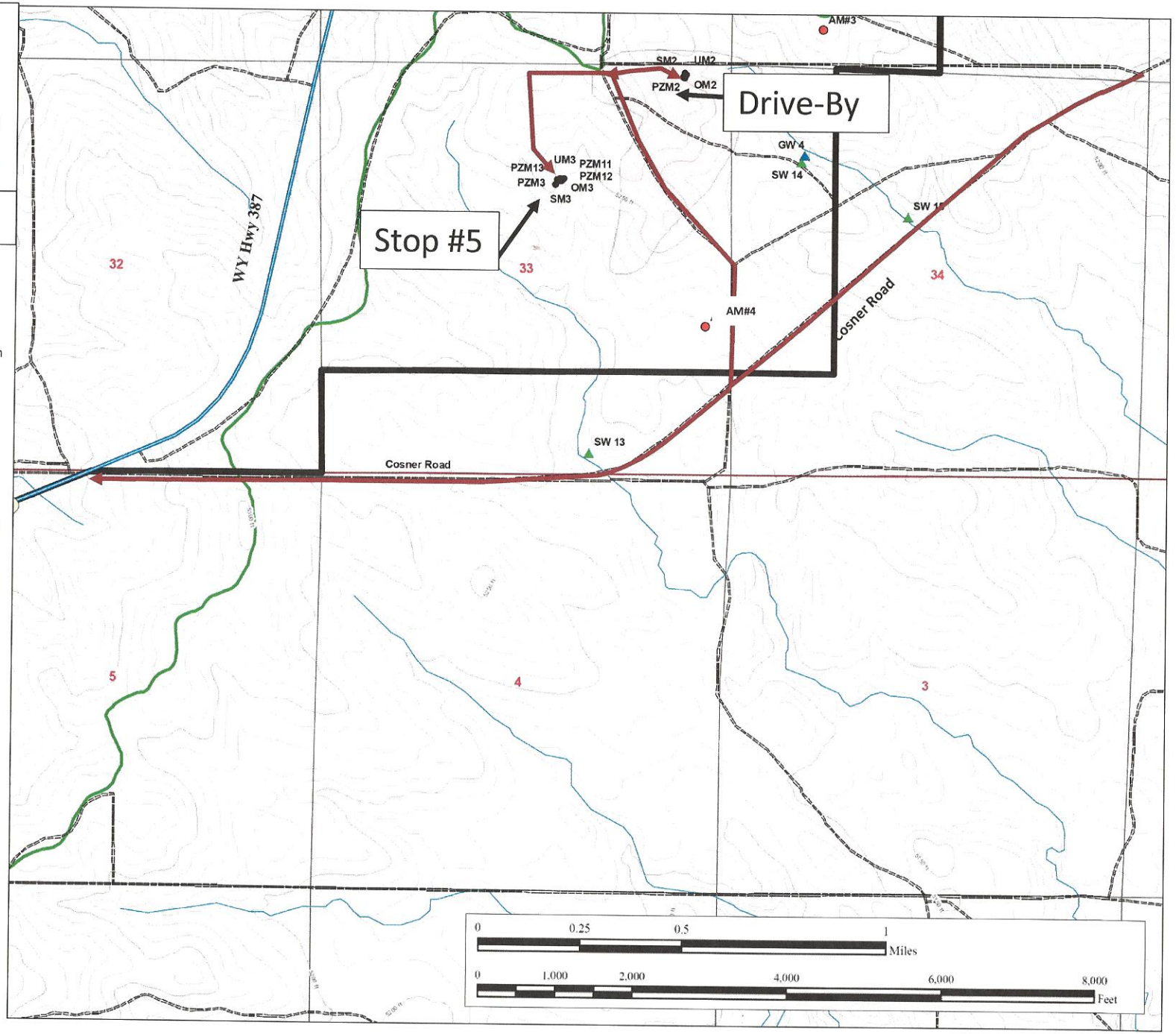


Stop #6

PZM7 Monitor Well Cluster & Drive-By PZM2 Cluster

***Stop#6* – Clarkellen Road and Hwy 387 intersection**

- PZM7 well cluster on Hill to the east of Clarkellen Road
- Installed PZM7, SM7,OM7, and UM7
- PZA fully saturated at PZM7 Cluster
- Drill sites restored (graded and seeded) using Rancher and WDEQ-LQD approved seed mix

Drive-by - Look west after driveway entrance to Taffner's property and see AM#5 Air Monitor and anemometer

- Taffner private well :
  - Completed in the PZA aquifer
  - Sampled for 4 quarters as part of baseline groundwater program
  - Water level monitored during PZM5 pump test

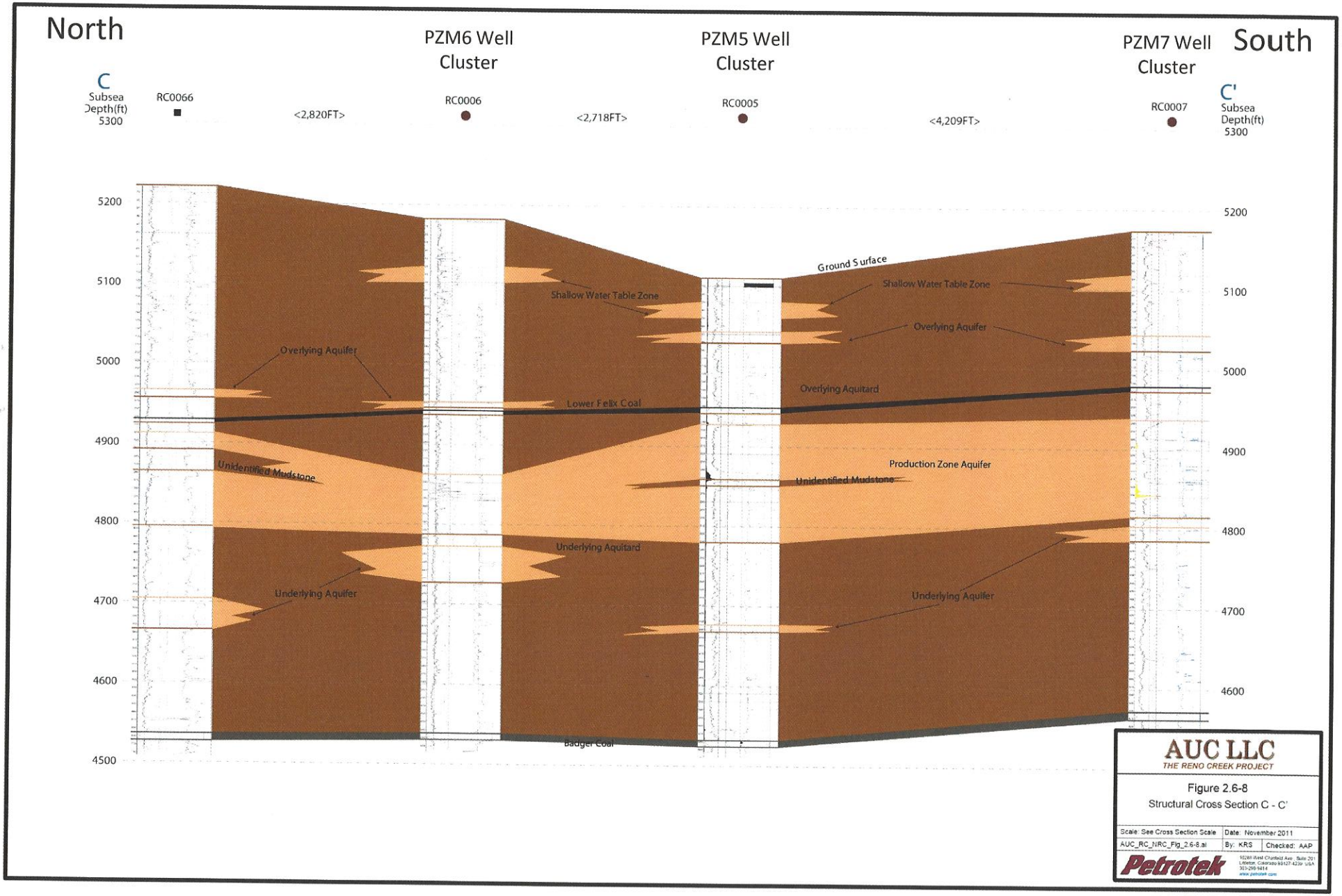
***Stop#7*- PZM5 cluster**

- Installed PZM5, SM5,OM5, and UM5
- Installed three PZA observation wells PZM18, PZM19 and PZM20
- All Section 36 PZA wells are under fully saturated conditions
- Drill sites restored (graded and seeded) using WDEQ-LQD approved seed mix for Section 36 drill pads
- Conducted the Long Term PZM5 pump test and single well pump tests on SM5, OM5 and UM5
- Discharged water into the Belle Fourche Drainage(north) under WYPDES Temporary Discharge Permit
- Only 1 Felix seam in SW Reno area

***Stop#8* – PZM6 cluster**

- Installed PZM6, SM6,OM6, and UM6
- Drill sites restored (graded and seeded) using WDEQ-LQD approved seed mix for Section 36 drill pads
- In Belle Fourche Drainage (south and east)
- Locations of All-night Creek Monitor wells in Section 36 SW of PZM6 cluster

Reno Creek Project – Structural Cross Section C – C'



Reno Creek Project – Structural Cross Section D - D'