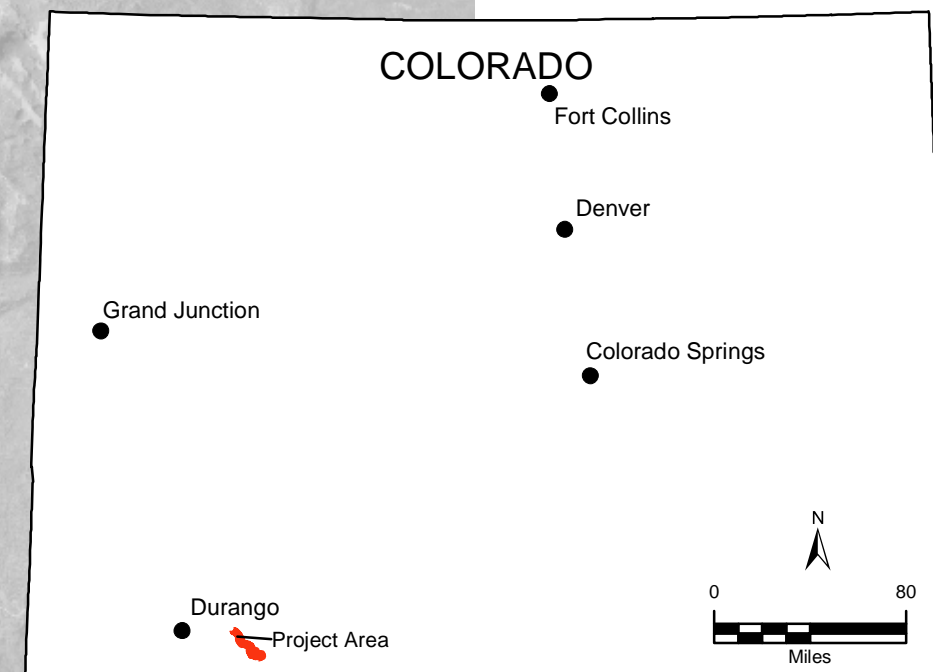
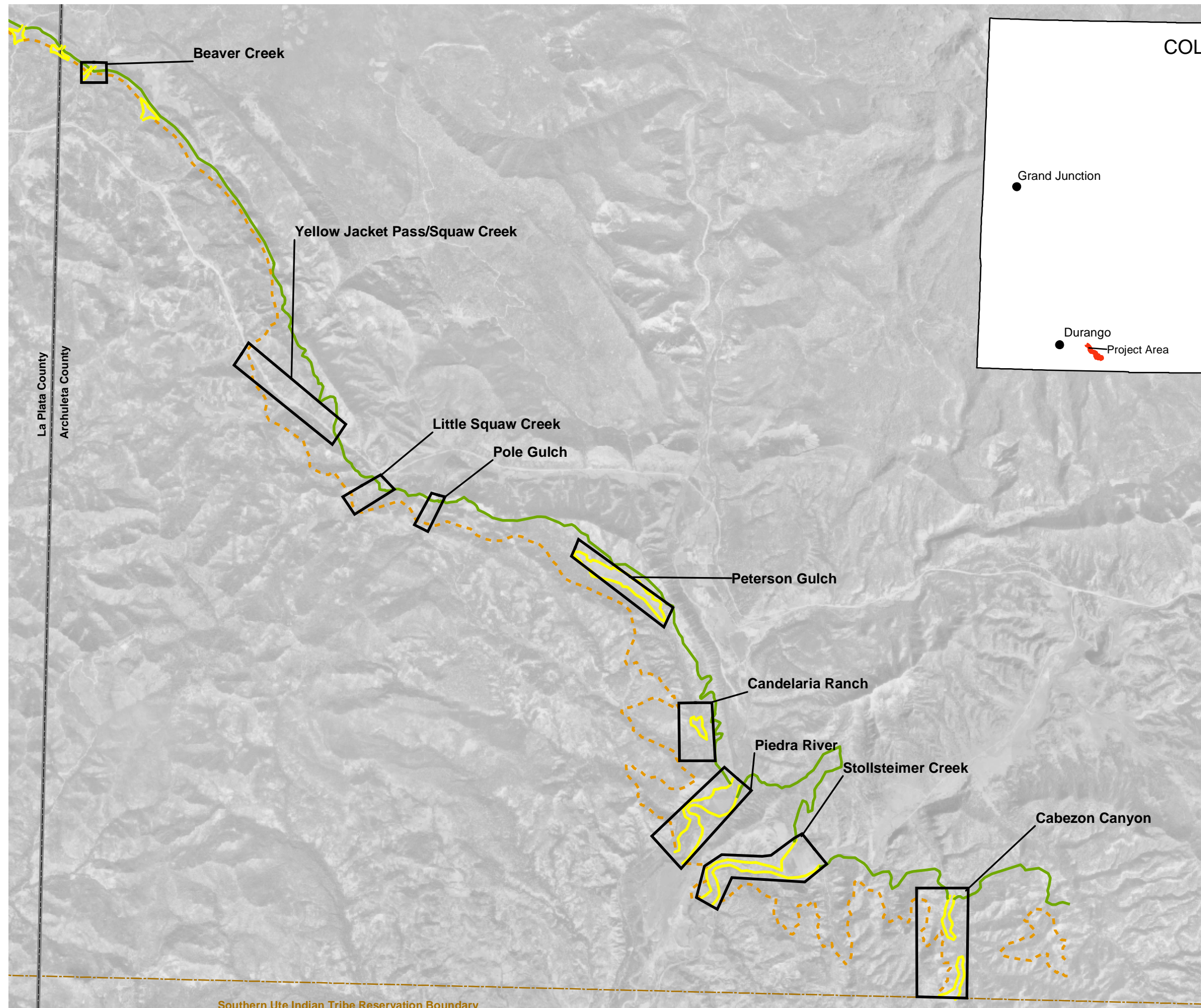


FIGURES



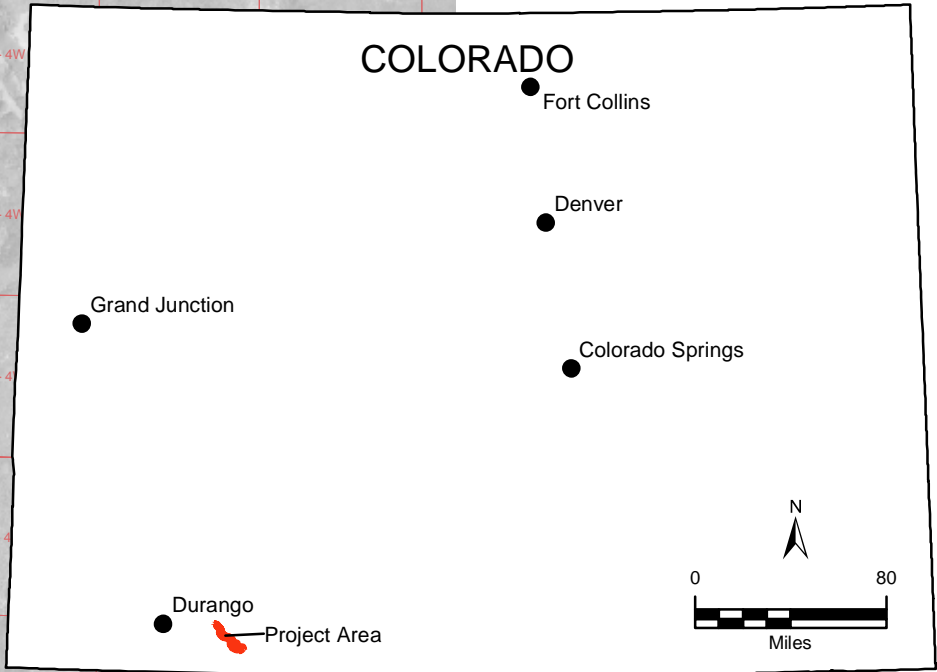
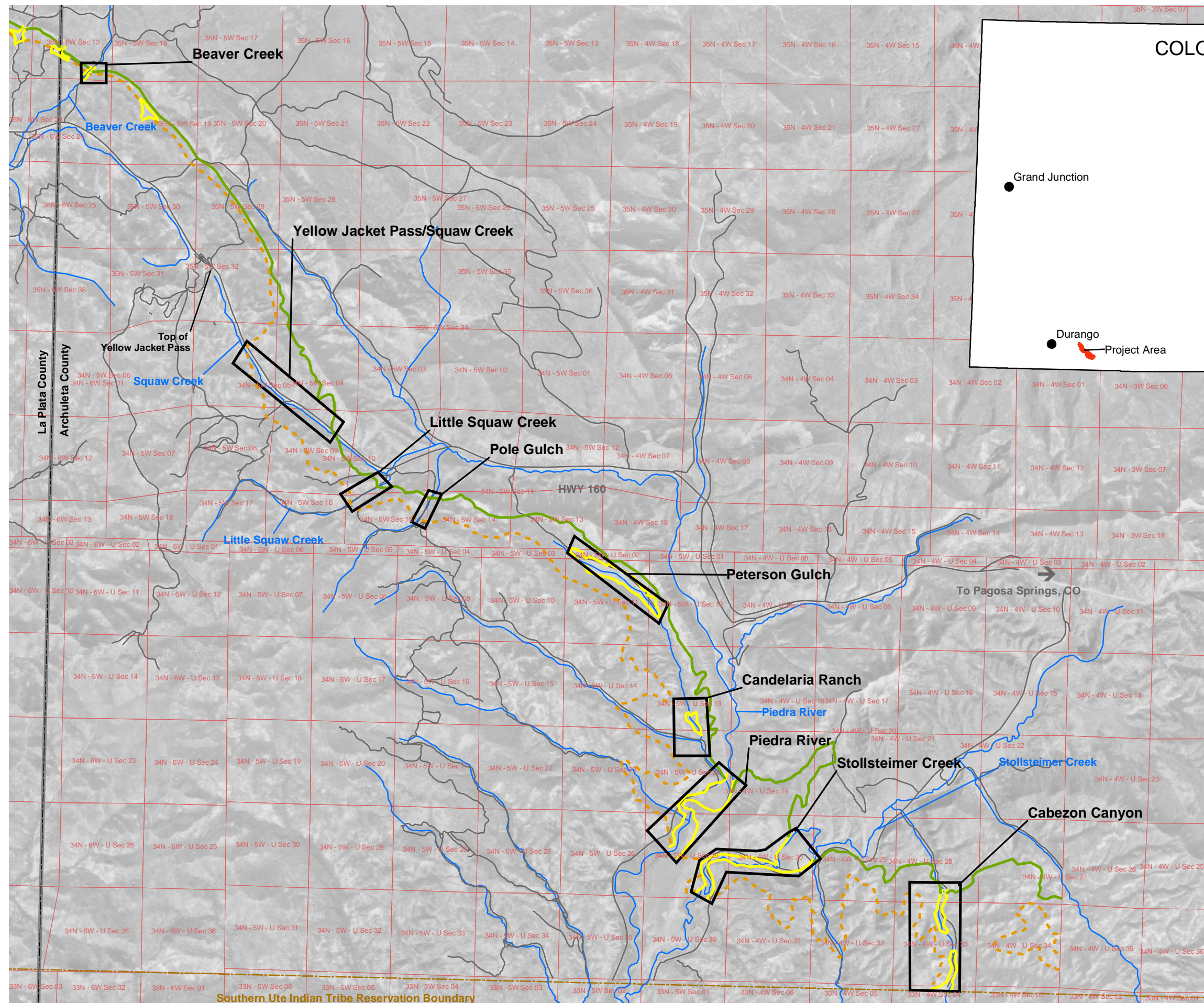


- Legend**
- Geology
- Fruitland Formation (Kf)
 - Fruitland Formation Tongue (Kft)
 - Kirtland Formation (Kk)
 - Pictured Cliffs Formation (Kpc)
 - Pictured Cliffs Formation Tongue (Kpct)
 - Quaternary Alluvium (Qa)
 - Quaternary Gravel (Qg)
 - Area of Interest
 - Southern Ute Indian Tribe Reservation Boundary
 - County Boundary



FIGURE 1A
PROJECT AREA MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





- Legend**
- Geology
- Fruitland Formation (Kf)
 - Fruitland Formation Tongue (Kft)
 - Kirtland Formation (Kk)
 - Pictured Cliffs Formation (Kpc)
 - Pictured Cliffs Formation Tongue (Kpct)
 - Quaternary Alluvium (Qa)
 - Quaternary Gravel (Qg)
 - Rivers
 - Roads
 - Area of Interest
 - Township Range Section
 - Southern Ute Indian Tribe Reservation Boundary
 - County Boundary

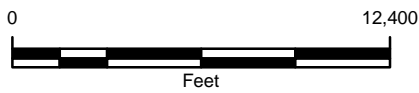
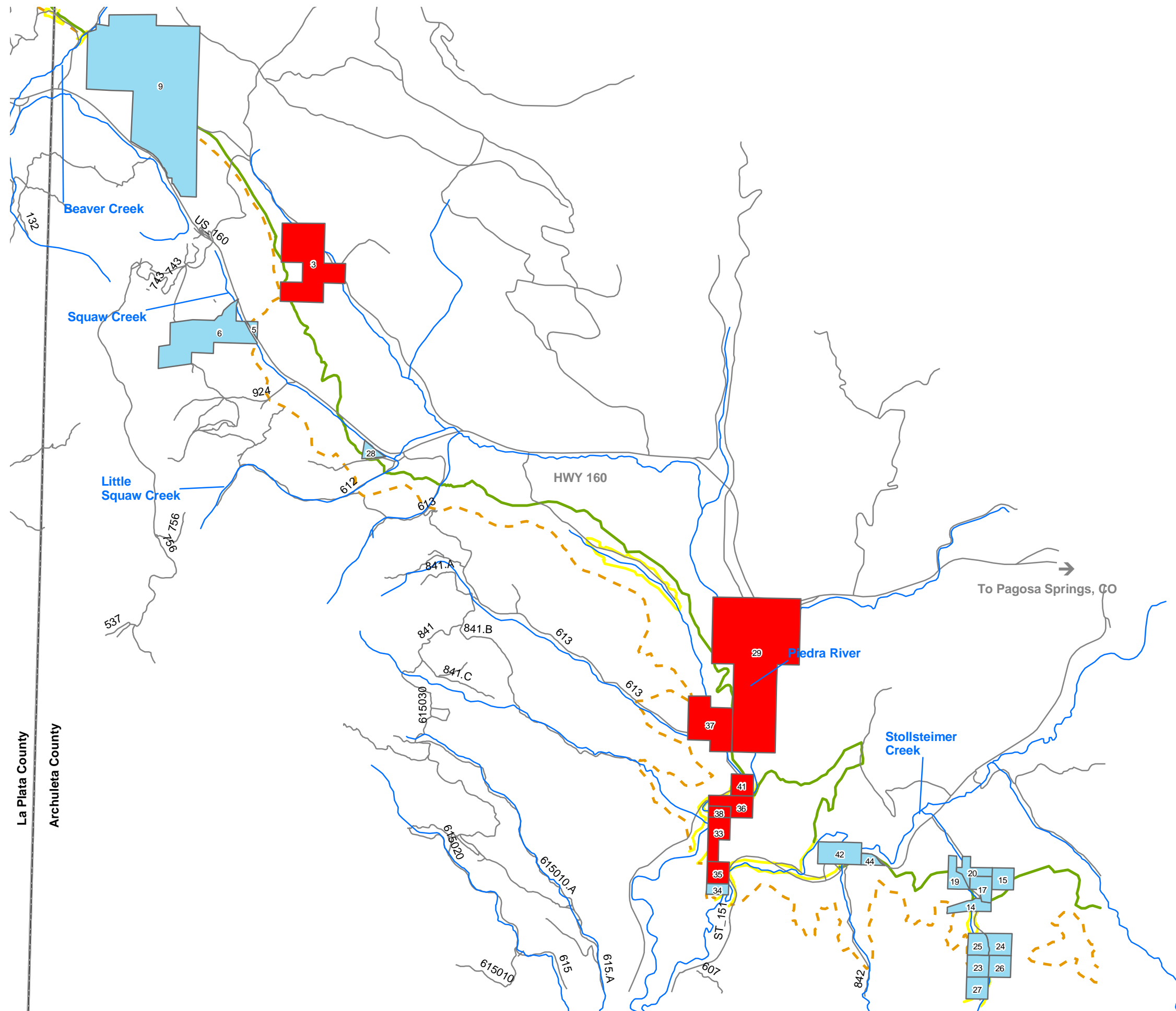


FIGURE 1B
PROJECT AREA MAP - DETAIL
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

Rivers
Roads

Geology

- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)

9 No Access
6 No Response to Access Request

All other areas gave approval to access or are located on Public Lands.
Number listed on parcel refers to ownership listing in Table 1.

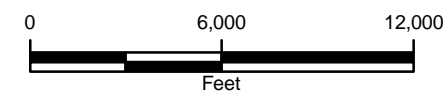
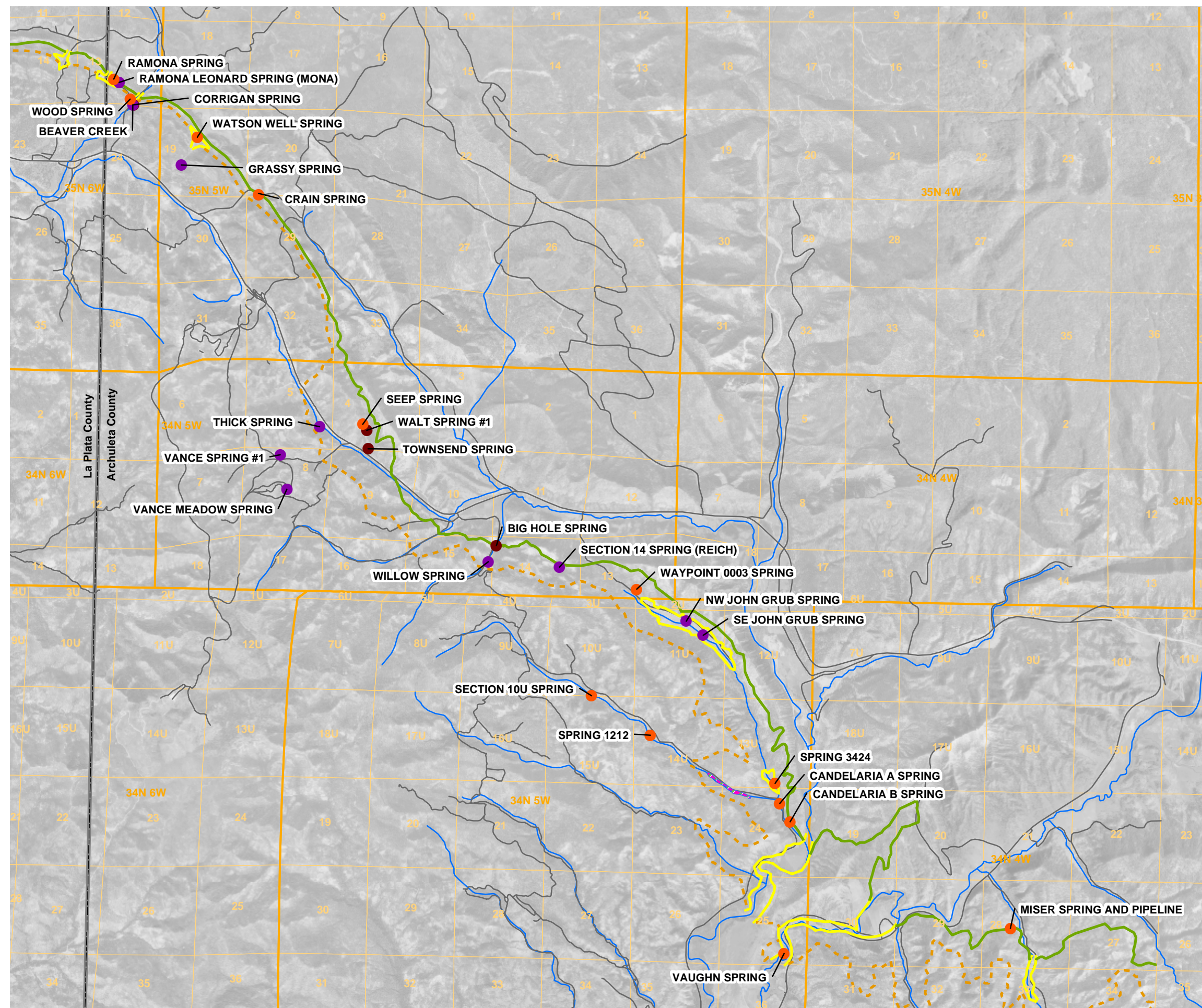


FIGURE 2
PROPERTY ACCESS MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





- Legend**
- NATURAL SPRING LOCATION**
- SAMPLED
 - NOT SAMPLED
 - DRY
 - Wetland Area, No Channel Flow
- Geology**
- Fruitland Formation (Kf)
 - Fruitland Formation Tongue (Kft)
 - Kirtland Formation (Kk)
 - Pictured Cliffs Formation (Kpc)
 - Pictured Cliffs Formation Tongue (Kpct)
 - Quaternary Alluvium (Qa)
 - Quaternary Gravel (Qg)
- Other Features:**
- Roads
 - Rivers
 - County Boundary
 - Southern Ute Indian Tribe Reservation Boundary
 - Township and Ranges Lines
 - Section

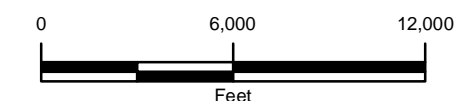
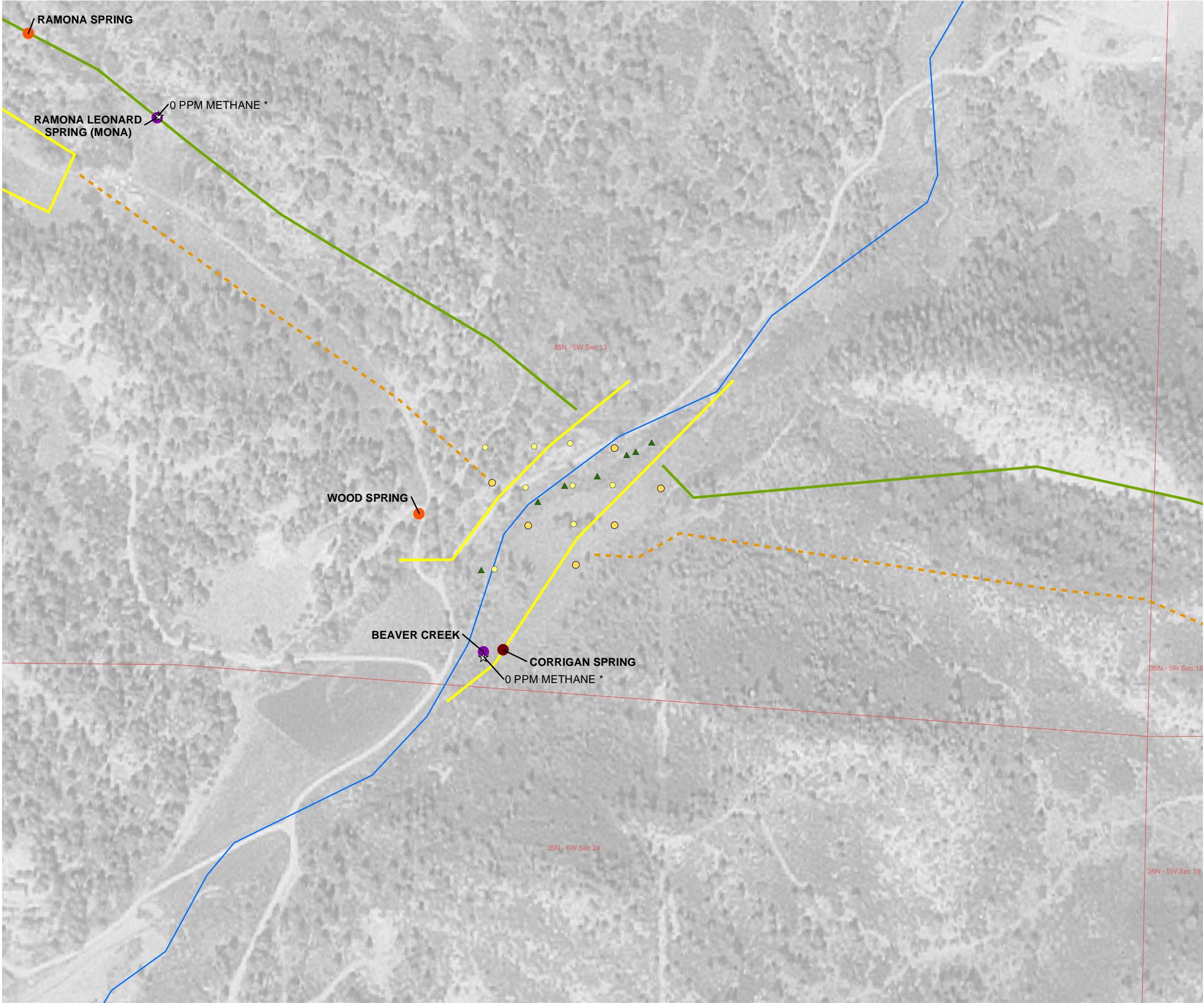


FIGURE 3
NATURAL SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
 ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

☆ Subsurface Methane Measurement

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Methane Flux Measurements (mol/m² day)

- 0.000 - 0.100
- 0.101 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- 10.01 - 30.00

Surface Water Methane Measurements

- 0 ppm
- 1 ppm - 500 ppm
- 501 ppm - 5%
- 6% - 15%
- 16% - 25%
- 26% - 50%
- 51% - 75%
- 76% - 100%

Surface water methane measurements collected by holding funnel directly above surface water.

mol/m² day - moles per square meter per day
ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

— Rivers

Geology

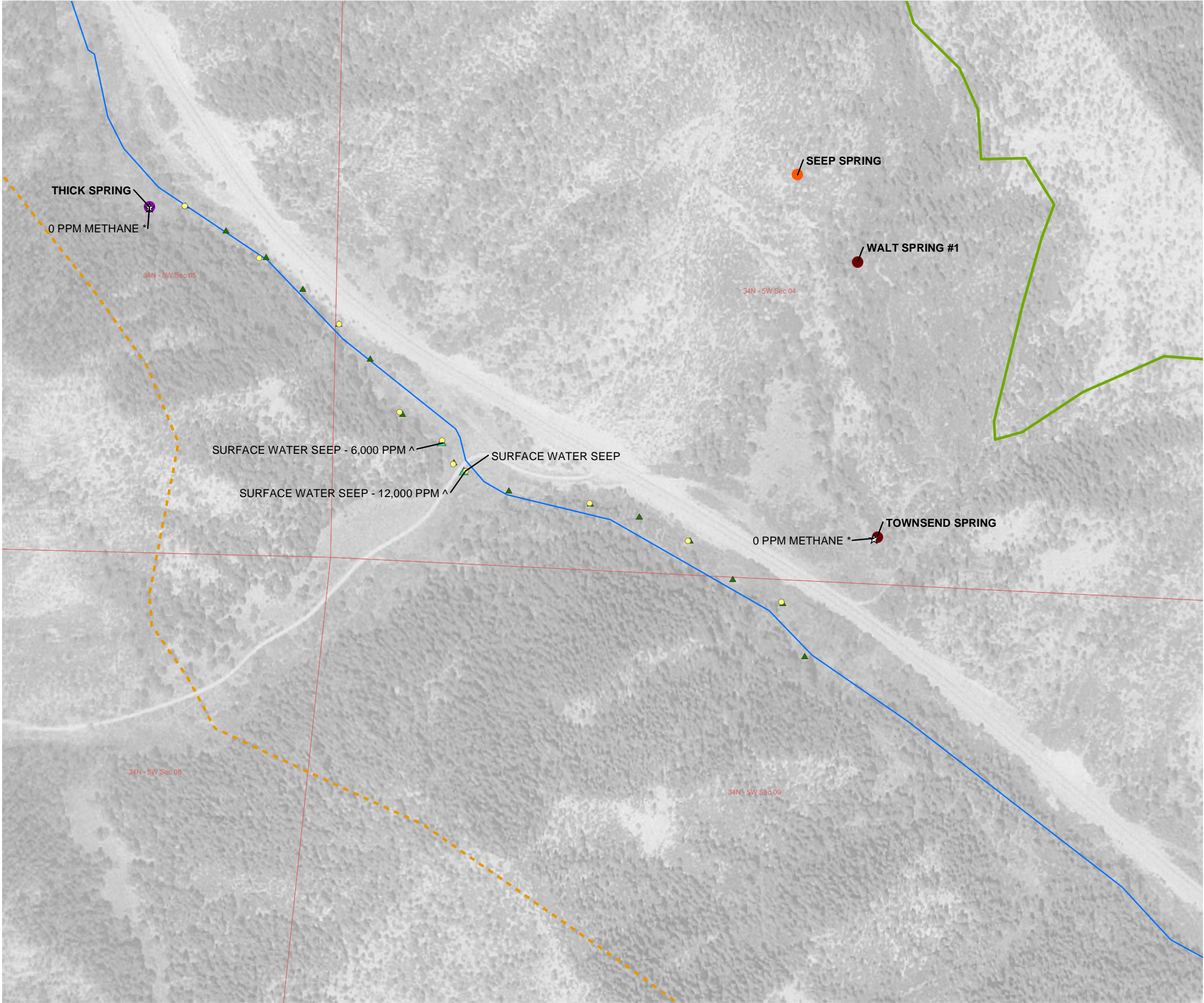
- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

0 250 500
Feet

N

FIGURE 4
BEAVER CREEK
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

☆ Subsurface Methane Measurement

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Methane Flux Measurements (mol/m² day)

- 0.000 - 0.100
- 0.101 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- 10.01 - 30.00

Surface Water Methane Measurements

- ▲ 0 ppm
- ▲ 1 ppm - 500 ppm
- ▲ 501 ppm - 5%
- ▲ 6% - 15%
- ▲ 16% - 25%
- ▲ 26% - 50%
- ▲ 51% - 75%
- ▲ 76% - 100%

Surface water methane measurements collected by holding funnel directly above surface water.

mol/m² day - moles per square meter per day
ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

^ Gas concentration measured after disturbance of stream bed.

— Rivers

Geology

- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- - - Kirtland Formation (Kk)
- - - Pictured Cliffs Formation (Kpc)
- == Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

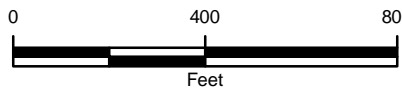
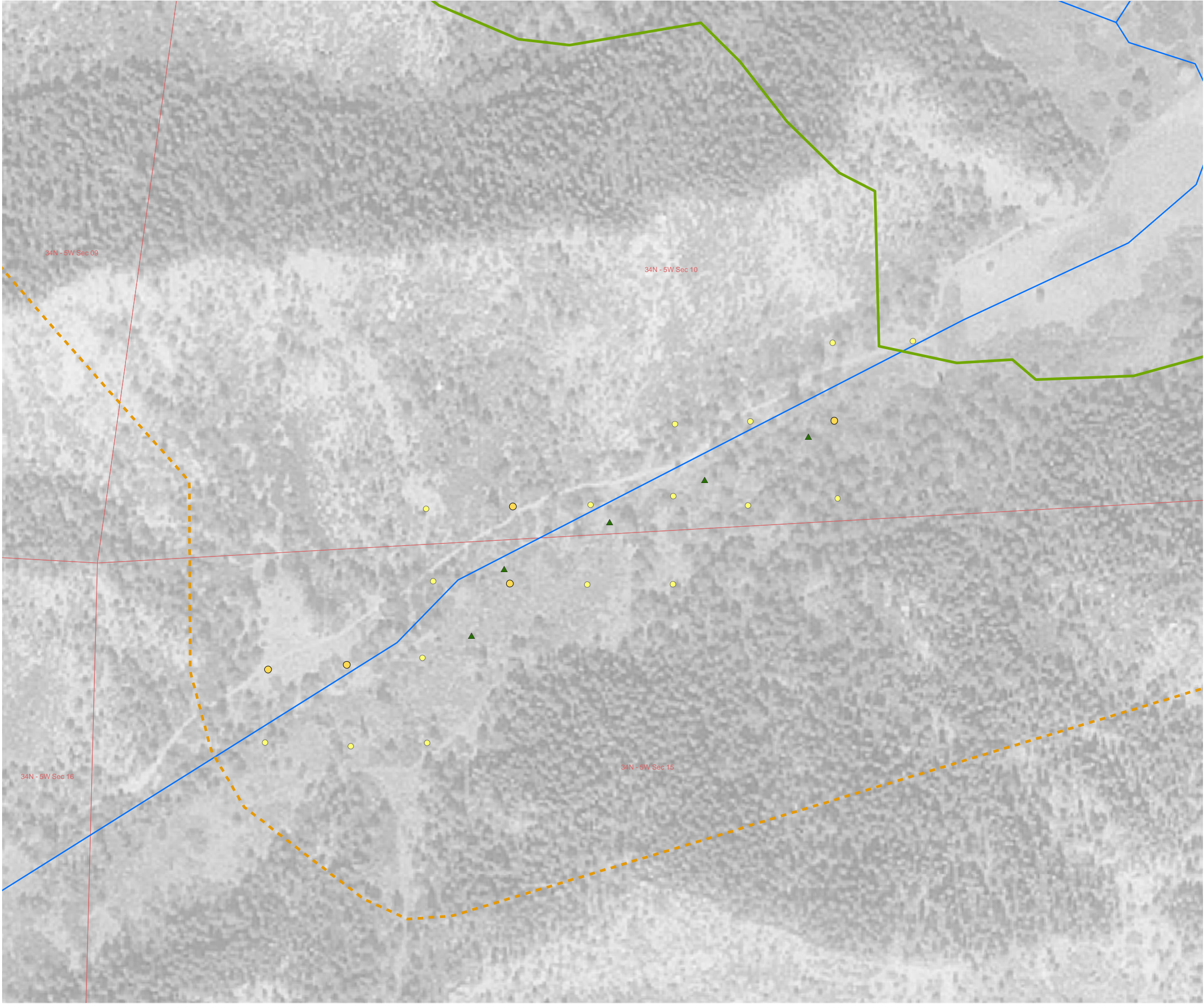


FIGURE 5
SQUAW CREEK
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

Methane Flux Measurements (mol/m² day)

- 0.000 - 0.100
- 0.101 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- 10.01 - 30.00

Surface Water Methane Measurements

- 0 ppm
- 1 ppm - 500 ppm
- 501 ppm - 5%
- 6% - 15%
- 16% - 25%
- 26% - 50%
- 51% - 75%
- 76% - 100%

Surface water methane measurements collected by holding funnel directly above surface water.

mol/m² day - moles per square meter per day
ppm - parts per million

— Rivers

Geology

- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

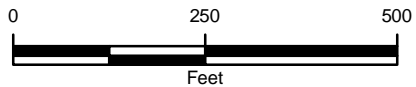
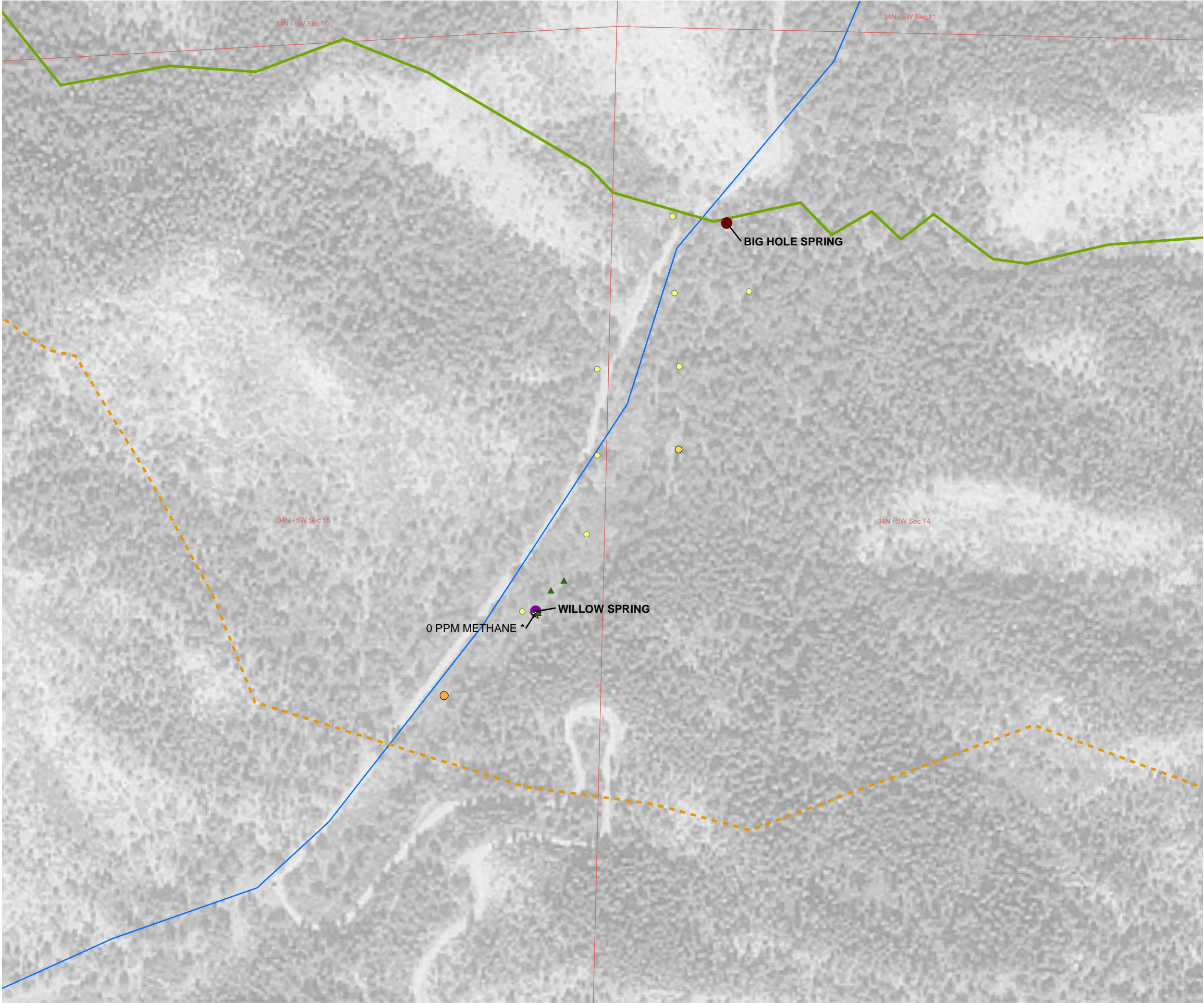


FIGURE 6
LITTLE SQUAW CREEK
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

☆ Subsurface Methane Measurement

Natural Spring Location

● Sampled

● Not Sampled

● Dry

Methane Flux Measurements (mol/m² day)

● 0.000 - 0.100

● 0.101 - 0.25

● 0.26 - 0.50

● 0.51 - 1.00

● 1.01 - 5.00

● 5.01 - 10.00

● 10.01 - 30.00

Surface Water Methane Measurements

▲ 0 ppm

▲ 1 ppm - 500 ppm

▲ 501 ppm - 5%

▲ 6% - 15%

▲ 16% - 25%

▲ 26% - 50%

▲ 51% - 75%

▲ 76% - 100%

Surface water methane measurements collected by holding funnel directly above surface water.

mol/m² day - moles per square meter per day

ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

— Rivers

Geology

— Fruitland Formation (Kf)

=== Fruitland Formation Tongue (Kft)

- - - Kirtland Formation (Kk)

- - - Pictured Cliffs Formation (Kpc)

=== Pictured Cliffs Formation Tongue (Kpct)

— Quaternary Alluvium (Qa)

— Quaternary Gravel (Qg)

□ Township Range Section

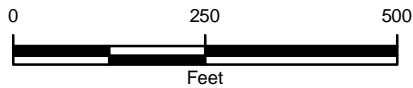
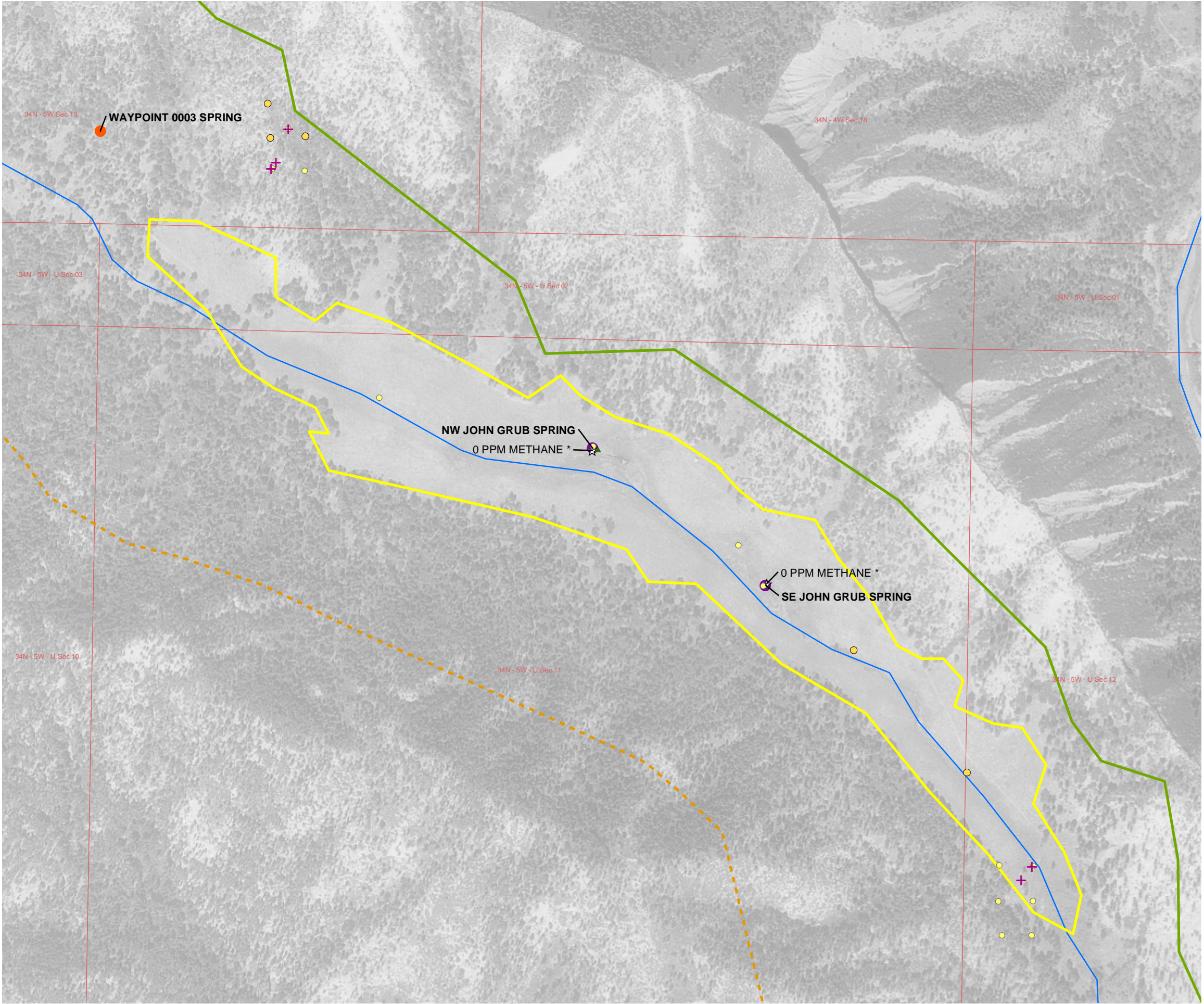


FIGURE 7
POLE GULCH
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

- + Permanent Gas Monitoring Probe
- ☆ Subsurface Methane Measurement

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Methane Flux Measurements (mol/m² day)

- 0.000 - 0.100
- 0.101 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- 10.01 - 30.00

Surface Water Methane Measurements

- ▲ 0 ppm
- ▲ 1 ppm - 500 ppm
- ▲ 501 ppm - 5%
- ▲ 6% - 15%
- ▲ 16% - 25%
- ▲ 26% - 50%
- ▲ 51% - 75%
- ▲ 76% - 100%

Surface water methane measurements collected by holding funnel directly above surface water.

Methane concentration collected from all permanent gas monitoring probes equal 0 ppm.

mol/m² day - moles per square meter per day
ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

— Rivers

Geology

- Fruitland Formation (Kf)
- === Fruitland Formation Tongue (Kft)
- - - Kirtland Formation (Kk)
- - - Pictured Cliffs Formation (Kpc)
- - - Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

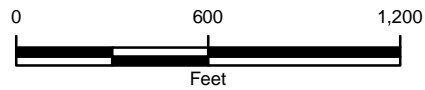
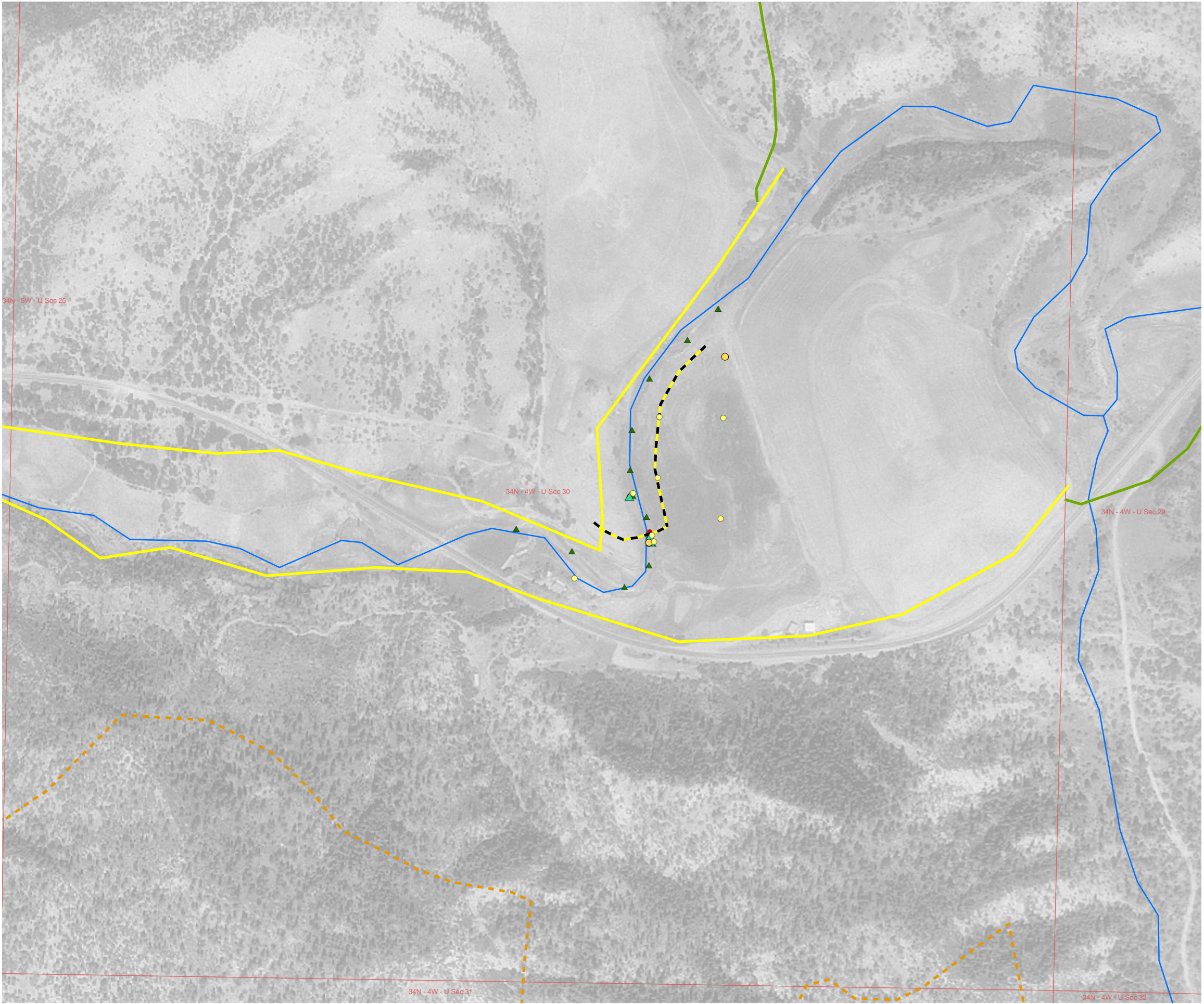


FIGURE 8
PETERSON GULCH
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

- Surface Water Seep
- Gas Pipeline - Xcel Energy
- Methane Flux Measurements (mol/m² day)**
 - 0.000 - 0.100
 - 0.101 - 0.25
 - 0.26 - 0.50
 - 0.51 - 1.00
 - 1.01 - 5.00
 - 5.01 - 10.00
 - 10.01 - 30.00

- Surface Water Methane Measurements**
 - ▲ 0 ppm
 - ▲ 1 ppm - 500 ppm
 - ▲ 501 ppm - 5%
 - ▲ 6% - 15%
 - ▲ 16% - 25%
 - ▲ 26% - 50%
 - ▲ 51% - 75%
 - ▲ 76% - 100%

Surface water methane measurements collected by holding funnel directly above surface water.

mol/m² day - moles per square meter per day
ppm - parts per million
— Rivers

- Geology**
 - Fruitland Formation (Kf)
 - === Fruitland Formation Tongue (Kft)
 - - - Kirtland Formation (Kk)
 - - - Pictured Cliffs Formation (Kpc)
 - === Pictured Cliffs Formation Tongue (Kpct)
 - Quaternary Alluvium (Qa)
 - Quaternary Gravel (Qg)
 - Township Range Section

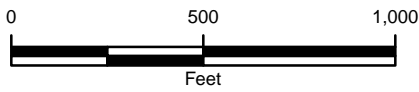
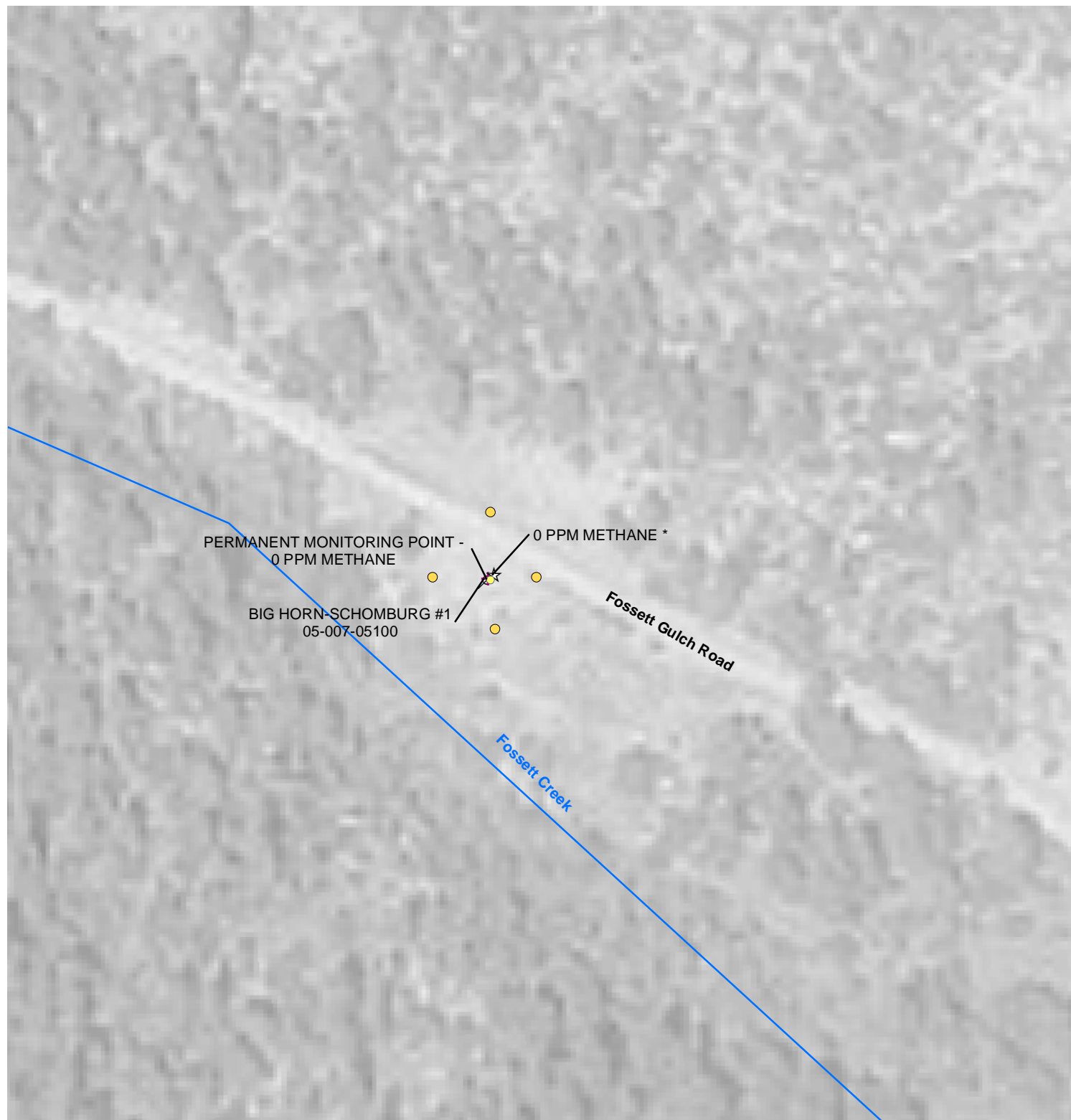


FIGURE 9
STOLLSTEIMER CREEK
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

- ☆ Subsurface Methane Measurement
- ✦ Permanent Monitoring Probe
- ⌵ Abandoned Oil and Gas Well

Methane Flux Measurements (mol/m² day)

- 0.000 - 0.100
- 0.101 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- 10.01 - 30.00

Geology

- Fruitland Formation (Kf)
- === Fruitland Formation Tongue (Kft)
- - - Kirtland Formation (Kk)
- - - Pictured Cliffs Formation (Kpc)
- - - Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)

mol/m² day - moles per square meter per day
ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

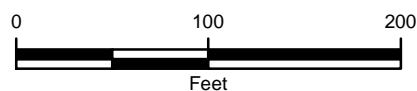
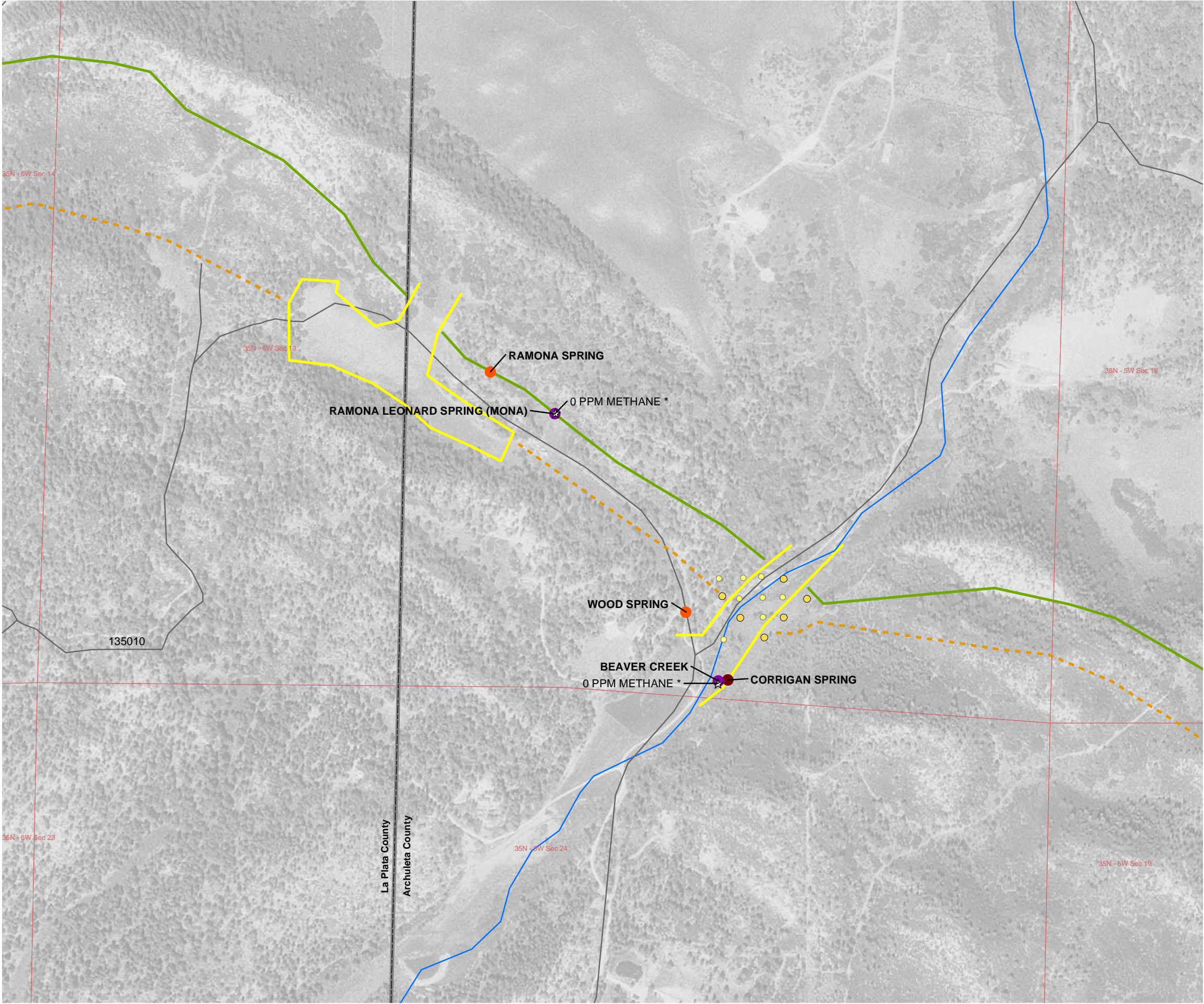


FIGURE 10
BIG HORN-SCHOMBURG #1 (API 05-007-05100)
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

☆ Subsurface Methane Measurement

Natural Spring Location

● Sampled

● Not Sampled

● Dry

Methane Flux Measurements (mol/m² day)

● 0.000 - 0.100

● 0.101 - 0.25

● 0.26 - 0.50

● 0.51 - 1.00

● 1.01 - 5.00

● 5.01 - 10.00

● 10.01 - 30.00

mol/m² day - moles per square meter per day

ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

— Roads

— Rivers

Geology

— Fruitland Formation (Kf)

— Fruitland Formation Tongue (Kft)

— Kirtland Formation (Kk)

— Pictured Cliffs Formation (Kpc)

— Pictured Cliffs Formation Tongue (Kpct)

— Quaternary Alluvium (Qa)

— Quaternary Gravel (Qg)

▭ County Boundary

▭ Township Range Section

FIGURE 11A
DETAILED SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

☆ Subsurface Methane Measurement

Natural Spring Location

● Sampled

● Not Sampled

● Dry

ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

— Roads

— Rivers

Geology

— Fruitland Formation (Kf)

— Fruitland Formation Tongue (Kft)

— Kirtland Formation (Kk)

— Pictured Cliffs Formation (Kpc)

— Pictured Cliffs Formation Tongue (Kpct)

— Quaternary Alluvium (Qa)

— Quaternary Gravel (Qg)

— Township Range Section

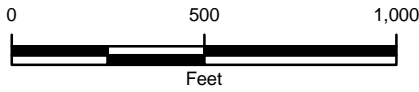
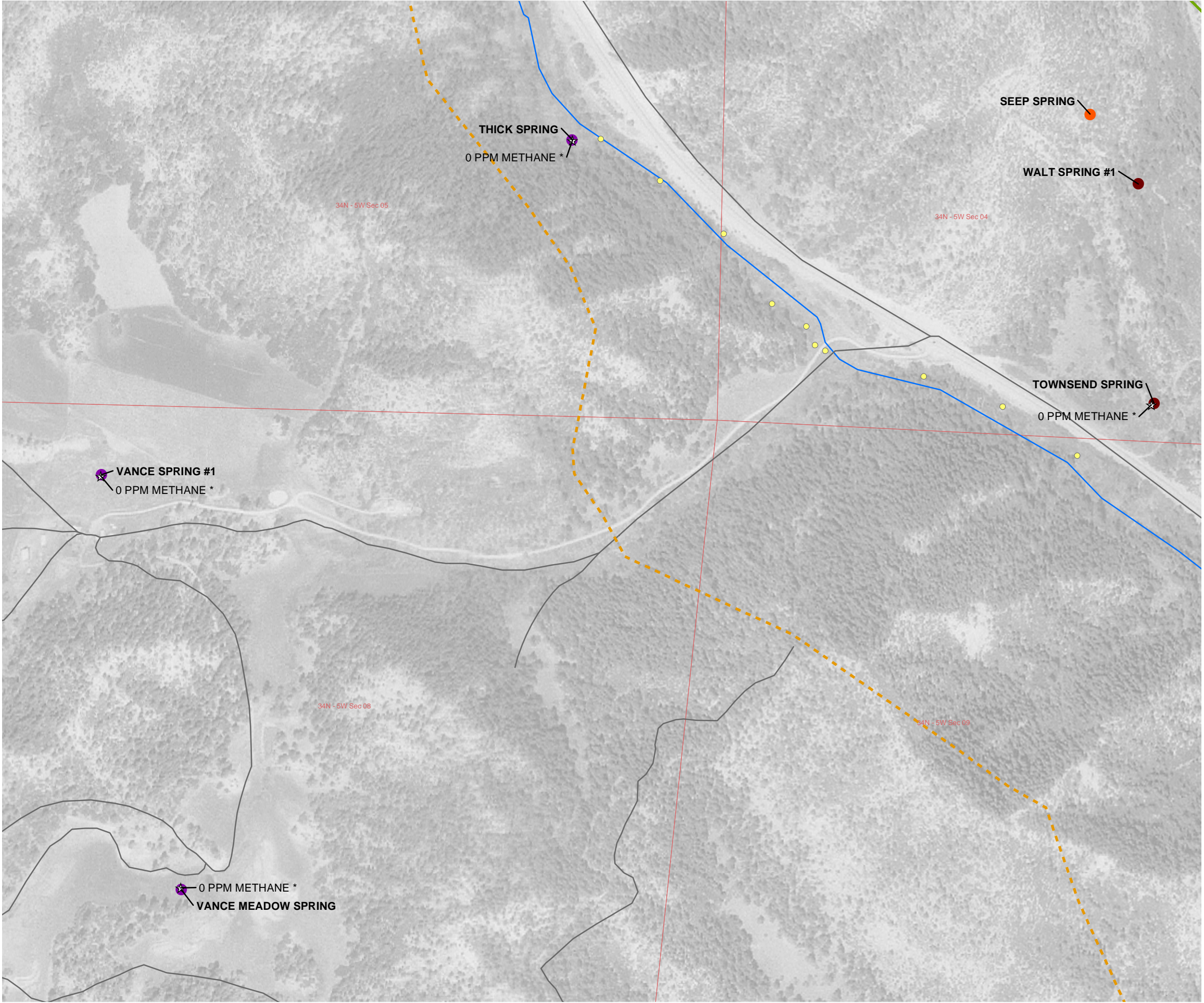


FIGURE 11B
DETAILED SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend
☆ Subsurface Methane Measurement
Natural Spring Location
● Sampled
● Not Sampled
● Dry
Methane Flux Measurements (mol/m² day)
● 0.000 - 0.100
● 0.101 - 0.25
● 0.26 - 0.50
● 0.51 - 1.00
● 1.01 - 5.00
● 5.01 - 10.00
● 10.01 - 30.00
mol/m² day - moles per square meter per day
ppm - parts per million

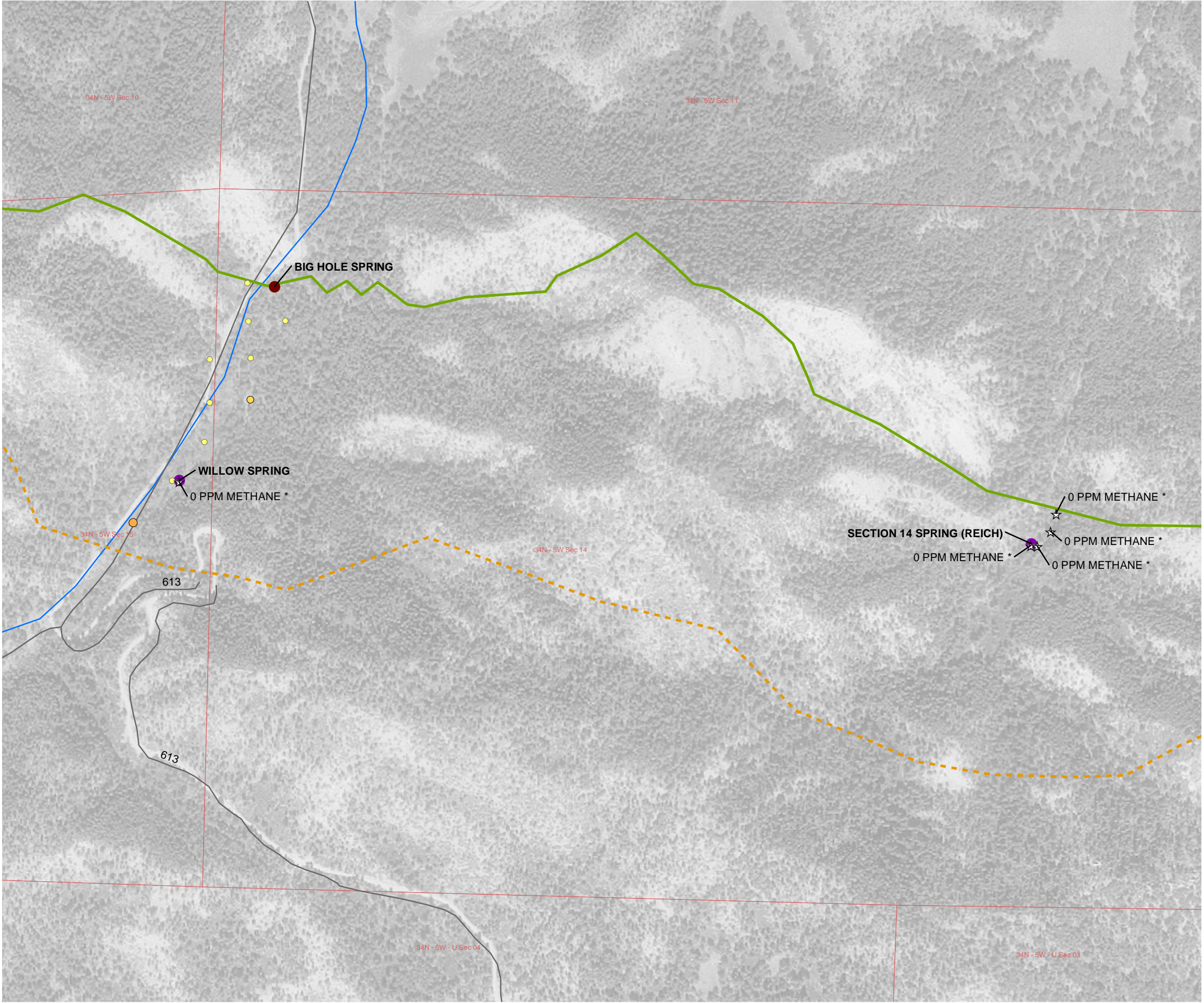
* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.
— Roads
— Rivers
Geology
— Fruitland Formation (Kf)
— Fruitland Formation Tongue (Kft)
— Kirtland Formation (Kk)
— Pictured Cliffs Formation (Kpc)
— Pictured Cliffs Formation Tongue (Kpct)
— Quaternary Alluvium (Qa)
— Quaternary Gravel (Qg)
□ Township Range Section

05001,000
Feet

N
↑

FIGURE 11C
DETAILED SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

☆ Subsurface Methane Measurement

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Methane Flux Measurements (mol/m² day)

- 0.000 - 0.100
- 0.101 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- 10.01 - 30.00

mol/m² day - moles per square meter per day
ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

— Roads

— Rivers

Geology

- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

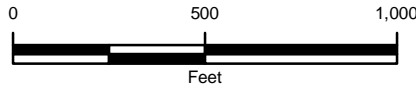
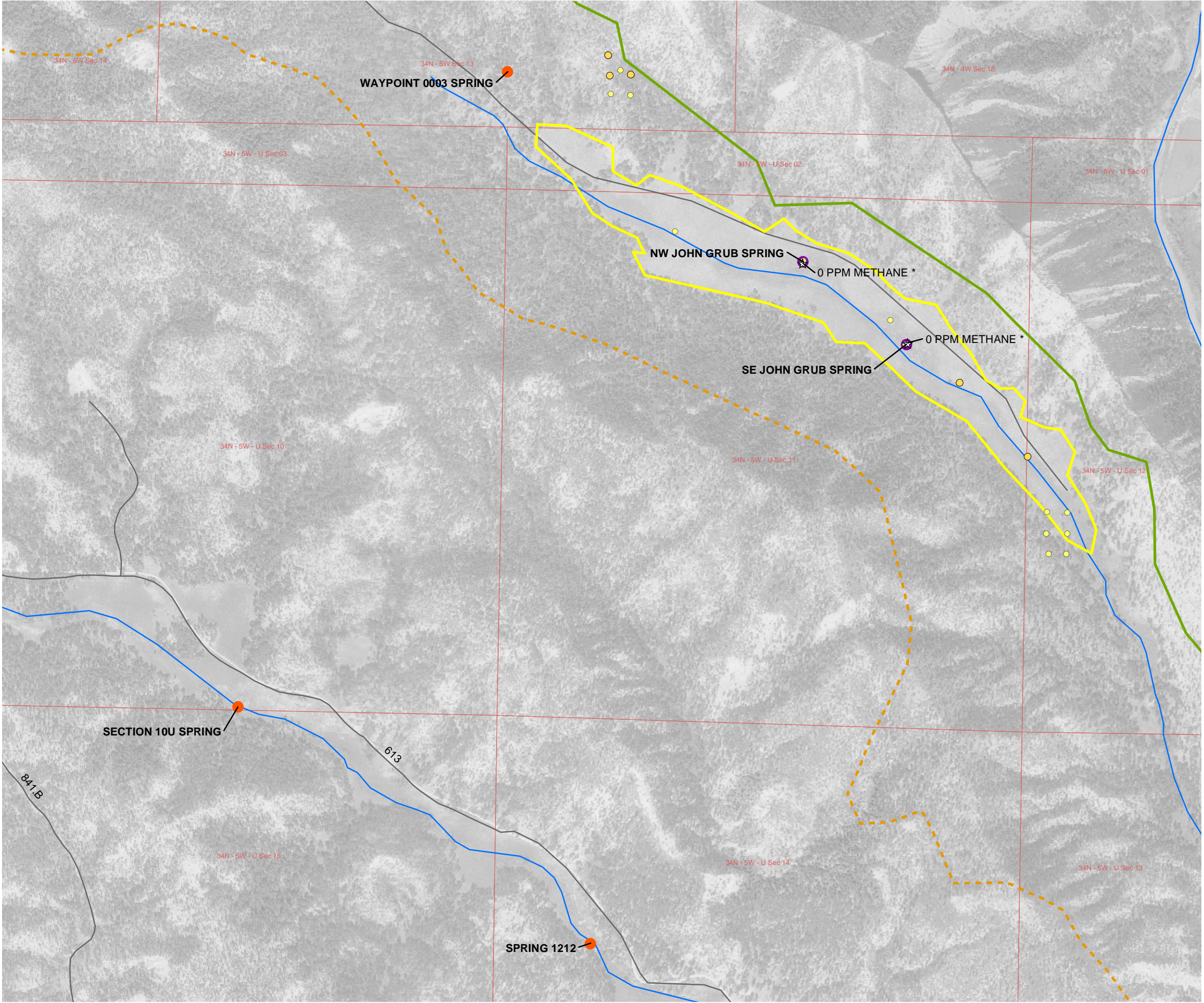


FIGURE 11D
DETAILED SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

☆ Subsurface Methane Measurement

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Methane Flux Measurements (mol/m² day)

- 0.000 - 0.100
- 0.101 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- 10.01 - 30.00

mol/m² day - moles per square meter per day
ppm - parts per million

* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

— Roads
— Rivers

Geology

- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

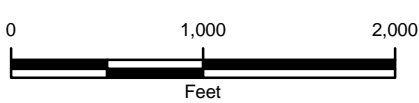
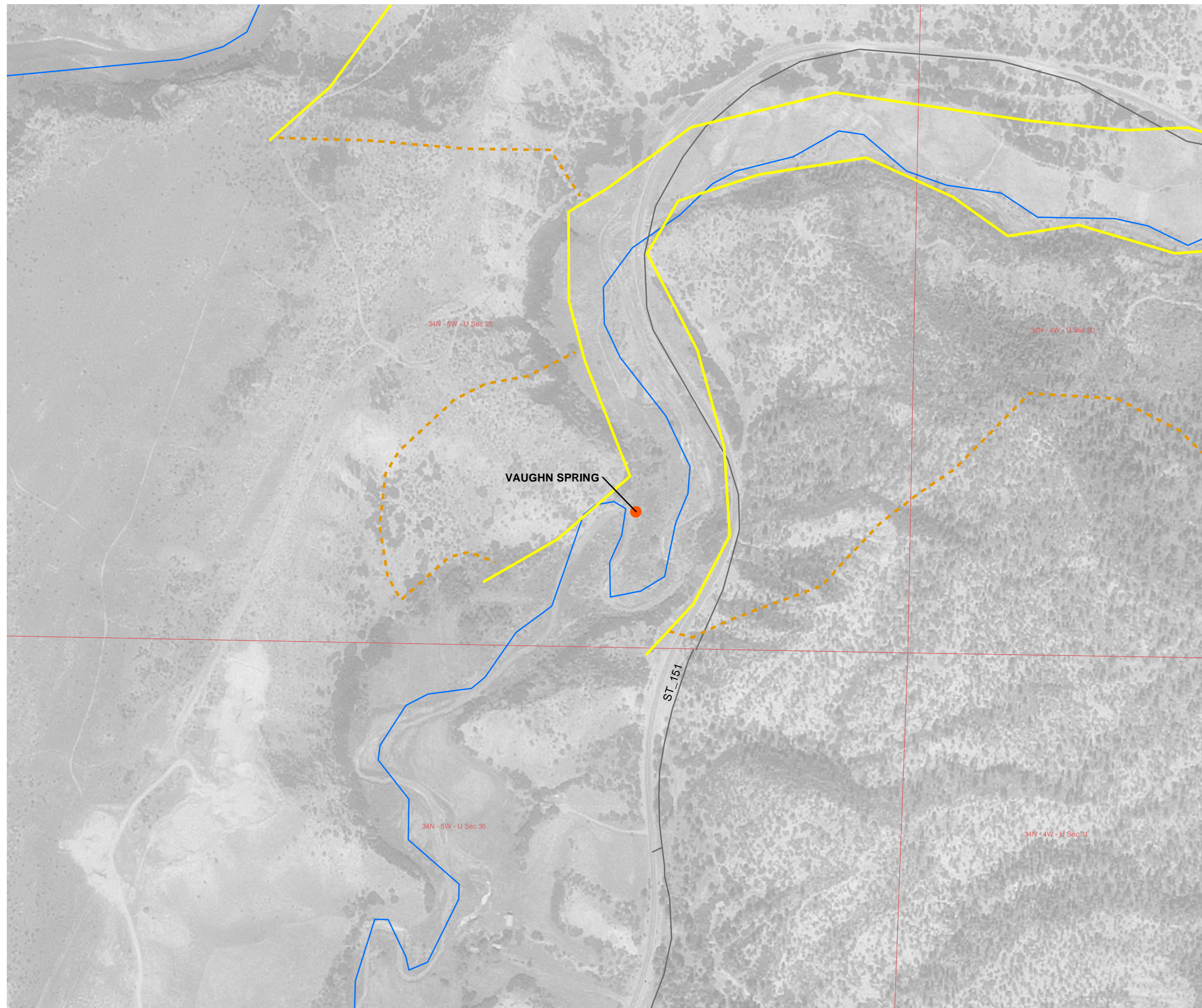


FIGURE 11E
DETAILED SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry
- Roads
- Rivers

Geology

- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

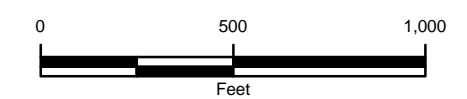
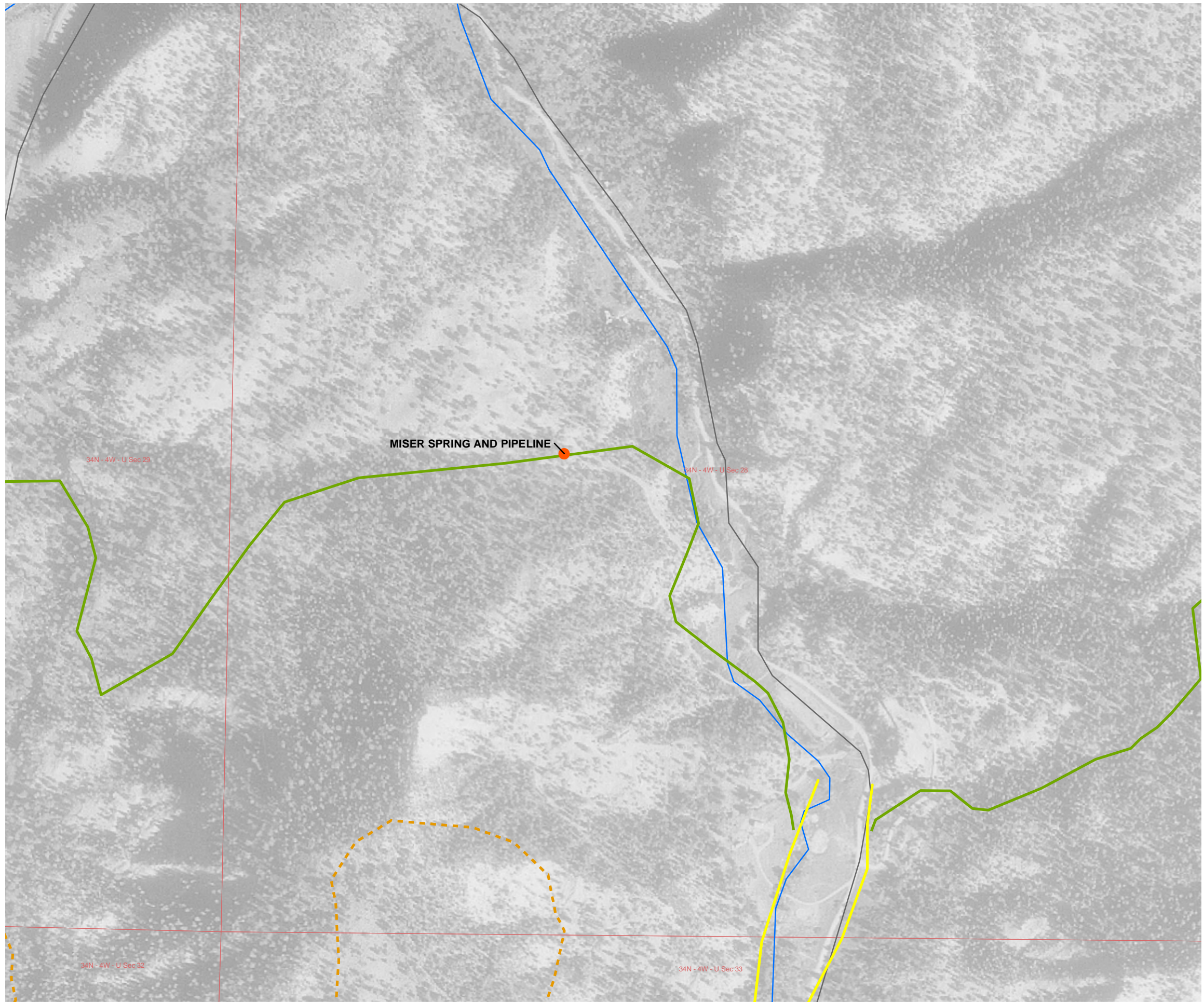


FIGURE 11F
DETAILED SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
 ELM RIDGE RESOURCES AND PETROX RESOURCES





Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry
- Roads
- Rivers

Geology

- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

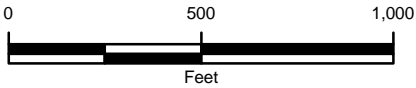


FIGURE 11G
DETAILED SPRING LOCATION MAP
2007 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO
ELM RIDGE RESOURCES AND PETROX RESOURCES

