

LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Methane Flux Location (mol/m² • day)
- 0.0000
- 0.0001 - 0.5000
- 0.5001 - 1.0000
- 1.0001 - 10.0000
- 10.0001 - 50.0000
- 50.0001 - 100.0000
- 100.0001 - 1175.0000
- Methane Flux Contour in mol/m² • day (Interval Varies)
- 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
- Flux points not labeled are 0.0000 mol/m² • day Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

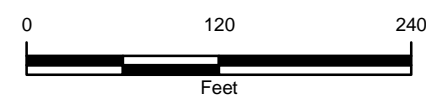
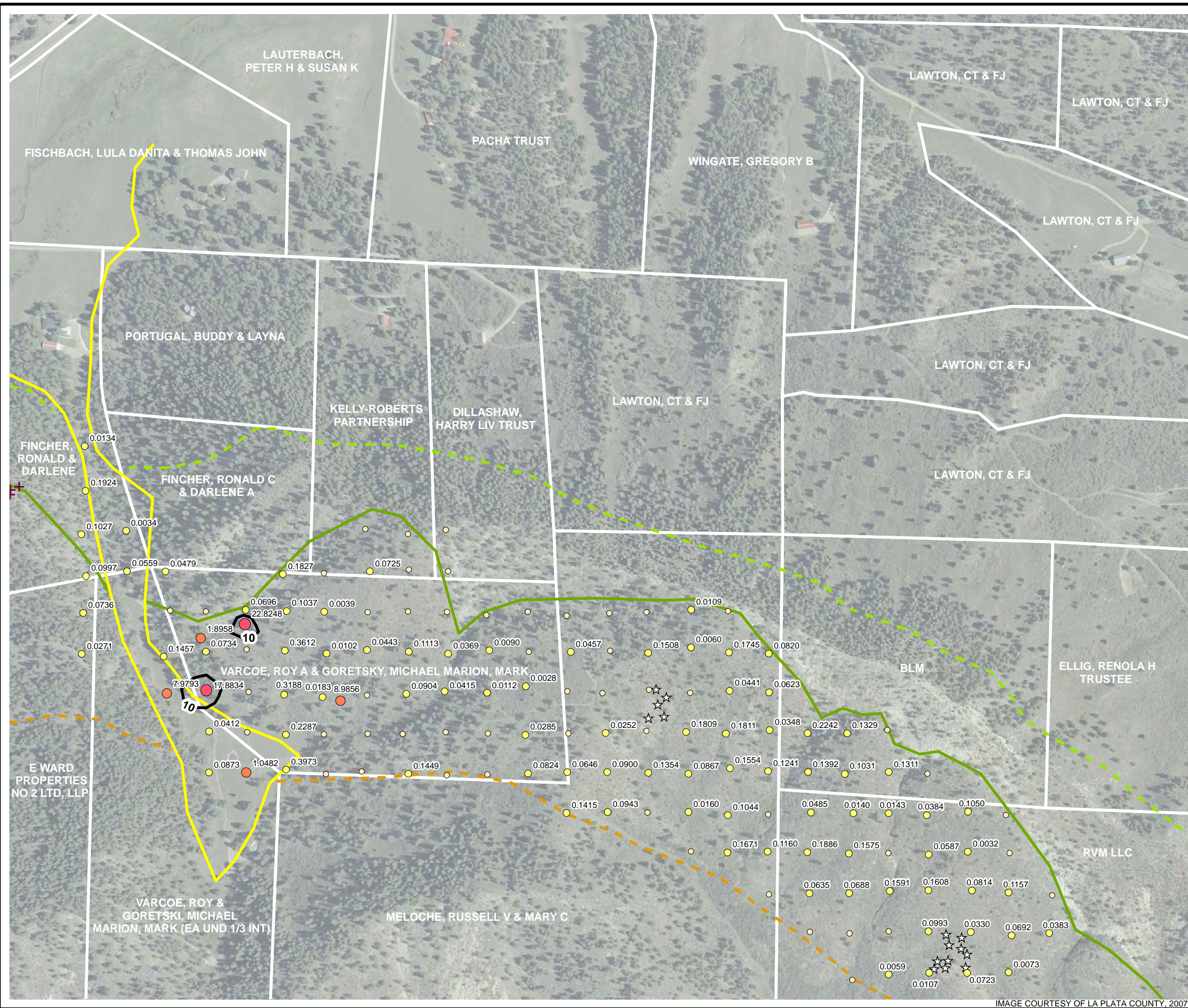


FIGURE 40
METHANE FLUX CONTOURS
SOUTH FORK TEXAS CREEK CENTRAL
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007



LEGEND

- ☆ Subsurface Methane Measurement
- ✚ Gas Monitoring Probes
- ★ Gas Flux Chambers
- Parcel Boundary & Owner (white)

Methane Flux Location ($\text{mol/m}^2 \cdot \text{day}$)

- 0.0000
- 0.0001 - 0.5000
- 0.5001 - 1.0000
- 1.0001 - 10.0000
- 10.0001 - 50.0000
- 50.0001 - 100.0000
- 100.0001 - 1175.0000

— Methane Flux Contour in $\text{mol/m}^2 \cdot \text{day}$ (Interval Varies)

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)

$\text{mol/m}^2 \cdot \text{day}$ - moles per square meter per day
ppm - parts per million

Flux points not labeled are 0.0000 $\text{mol/m}^2 \cdot \text{day}$ Methane

All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.

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

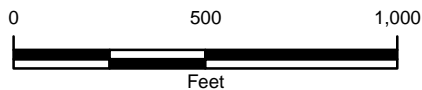
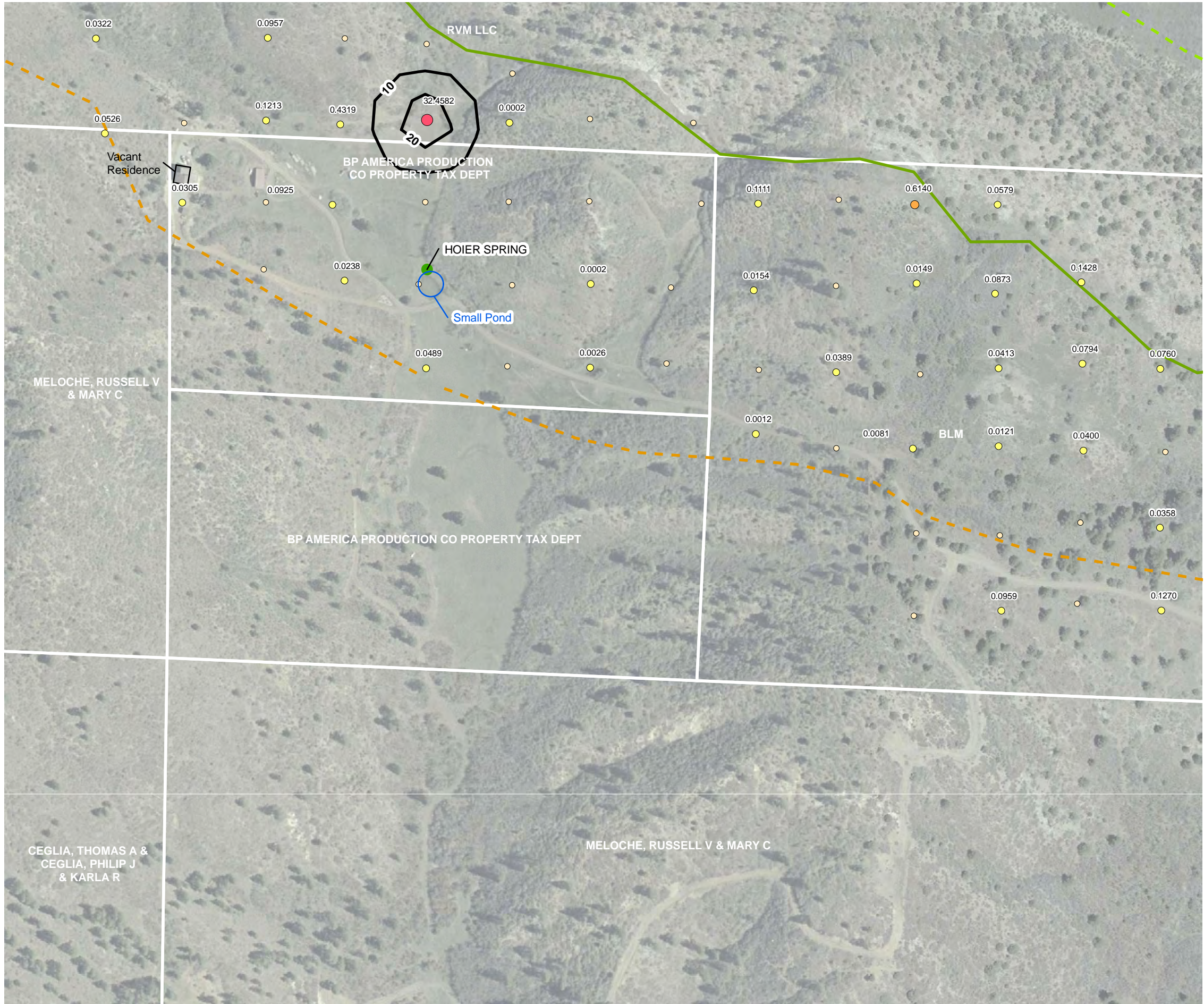


FIGURE 41
METHANE FLUX CONTOURS
SOUTH FORK TEXAS CREEK EAST
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP





LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- Parcel Boundary & Owner (white)

Natural Spring Location

- Sampled
- Field Parameters Only
- Dry
- Not Located
- No Access

Methane Flux Location (mol/m² • day)

- 0.0000
- 0.0001 - 0.5000
- 0.5001 - 1.0000
- 1.0001 - 10.0000
- 10.0001 - 50.0000
- 50.0001 - 100.0000
- 100.0001 - 1175.0000

— Methane Flux Contour in mol/m² • day (Interval Varies)

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

Flux points not labeled are 0.0000 mol/m² • day Methane

All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.

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

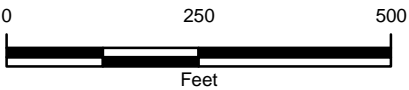
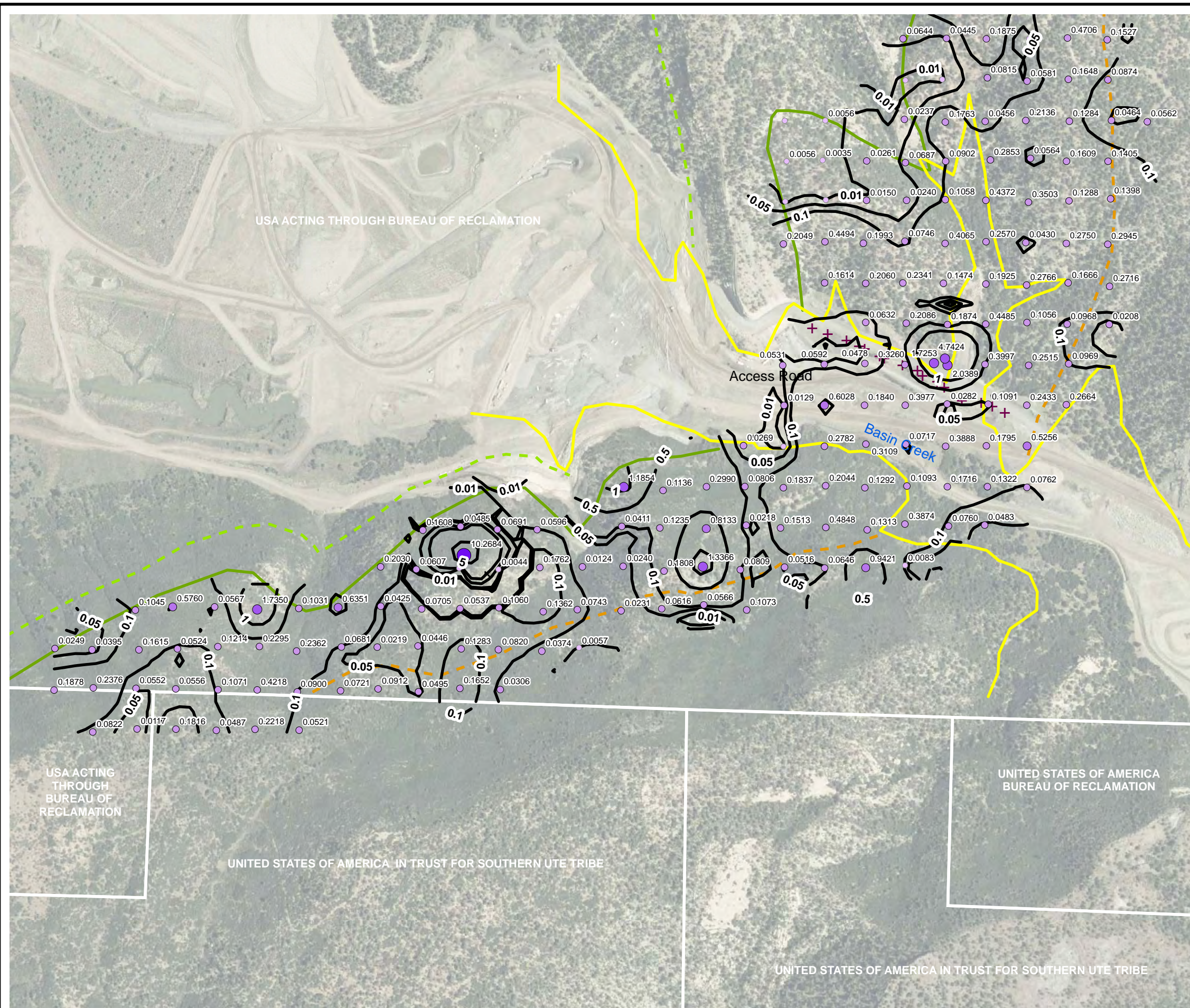


FIGURE 42
METHANE FLUX CONTOURS
BP HIGHLANDS
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007



LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ★ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location ($\text{mol/m}^2 \cdot \text{day}$)
 - 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in $\text{mol/m}^2 \cdot \text{day}$ (Interval Varies)
- 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)
- $\text{mol/m}^2 \cdot \text{day}$ - moles per square meter per day
- ppm - parts per million
- Flux points not labeled are 0.0000 $\text{mol/m}^2 \cdot \text{day}$ Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

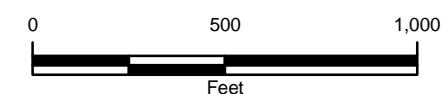
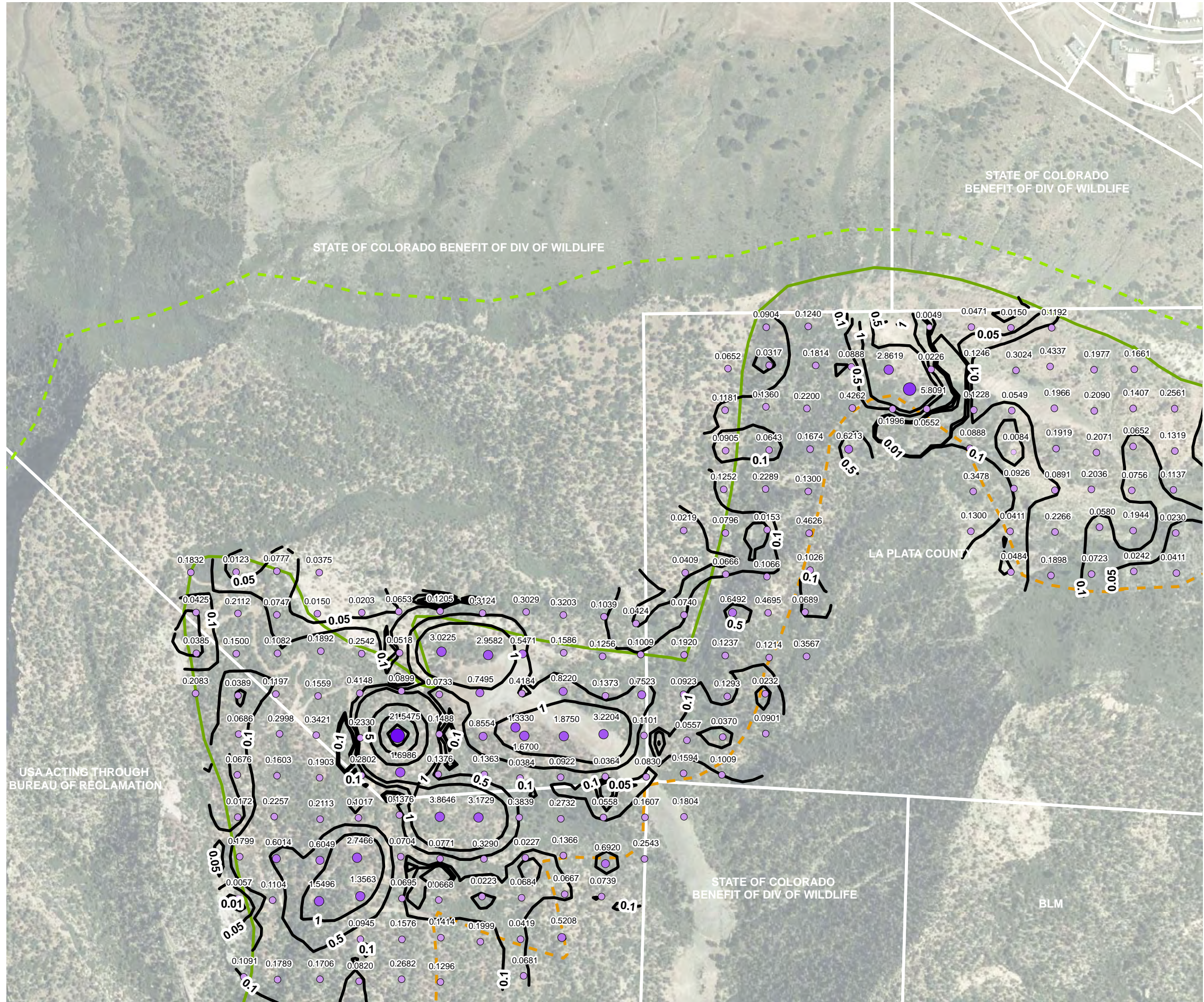


FIGURE 44
CARBON DIOXIDE FLUX CONTOURS
BASIN CREEK
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF USDA/NRCS, 2005

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LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location (mol/m² • day)
 - 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in mol/m² • day (Interval Varies)
- 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
- Flux points not labeled are 0.0000 mol/m² • day Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

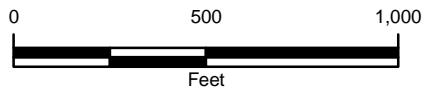
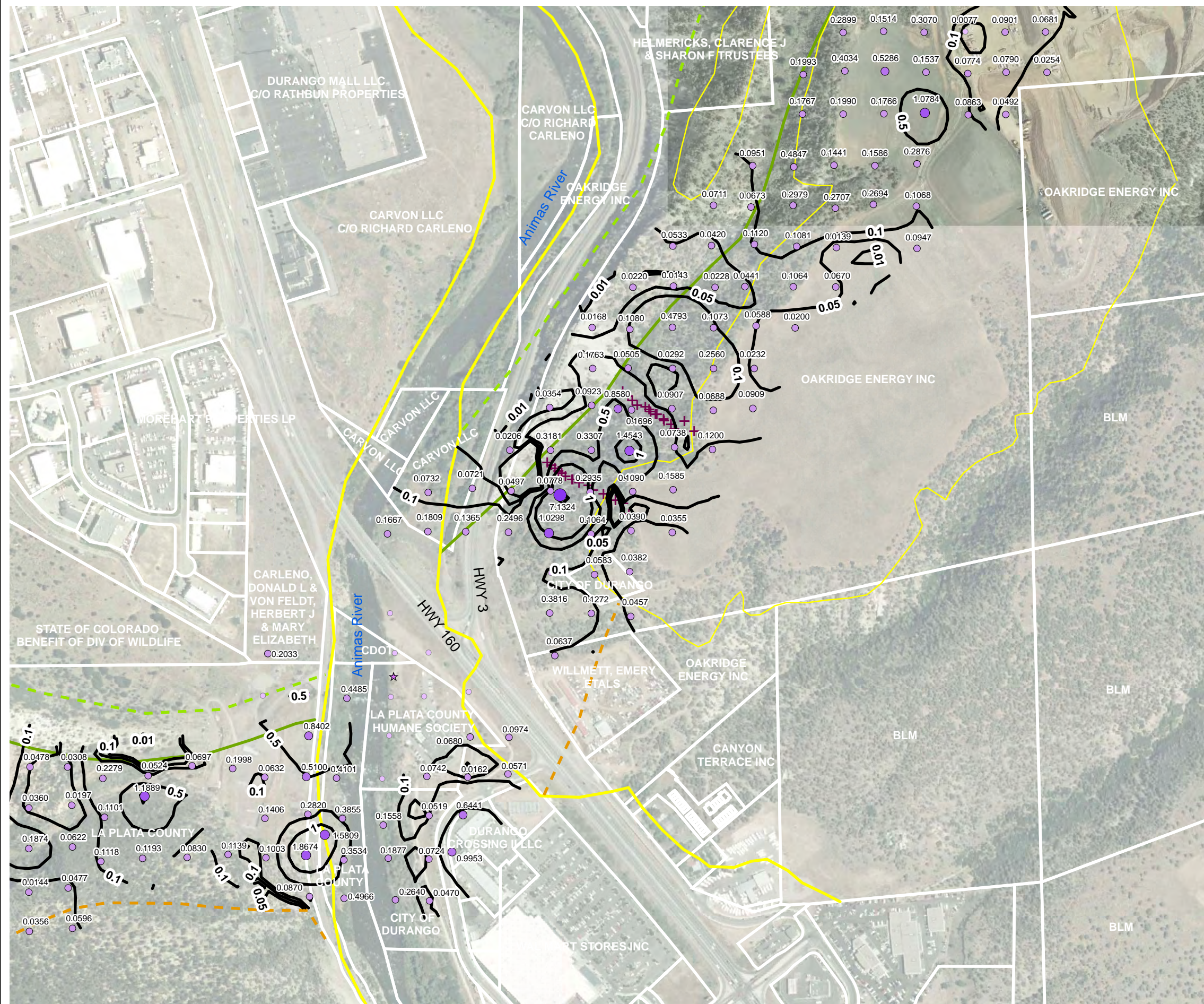


FIGURE 45
CARBON DIOXIDE FLUX CONTOURS
BASIN CREEK NORTH
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF USDA/NRCS, 2005



LEGEND

- ☆ Subsurface Methane Measurement
 - + Gas Monitoring Probes
 - ★ Gas Flux Chambers
 - Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location (mol/m² • day)
- 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in mol/m² • day (Interval Varies)
- 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
- Flux points not labeled are 0.0000 mol/m² • day Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

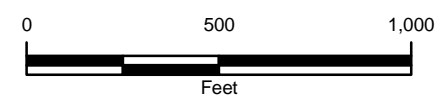
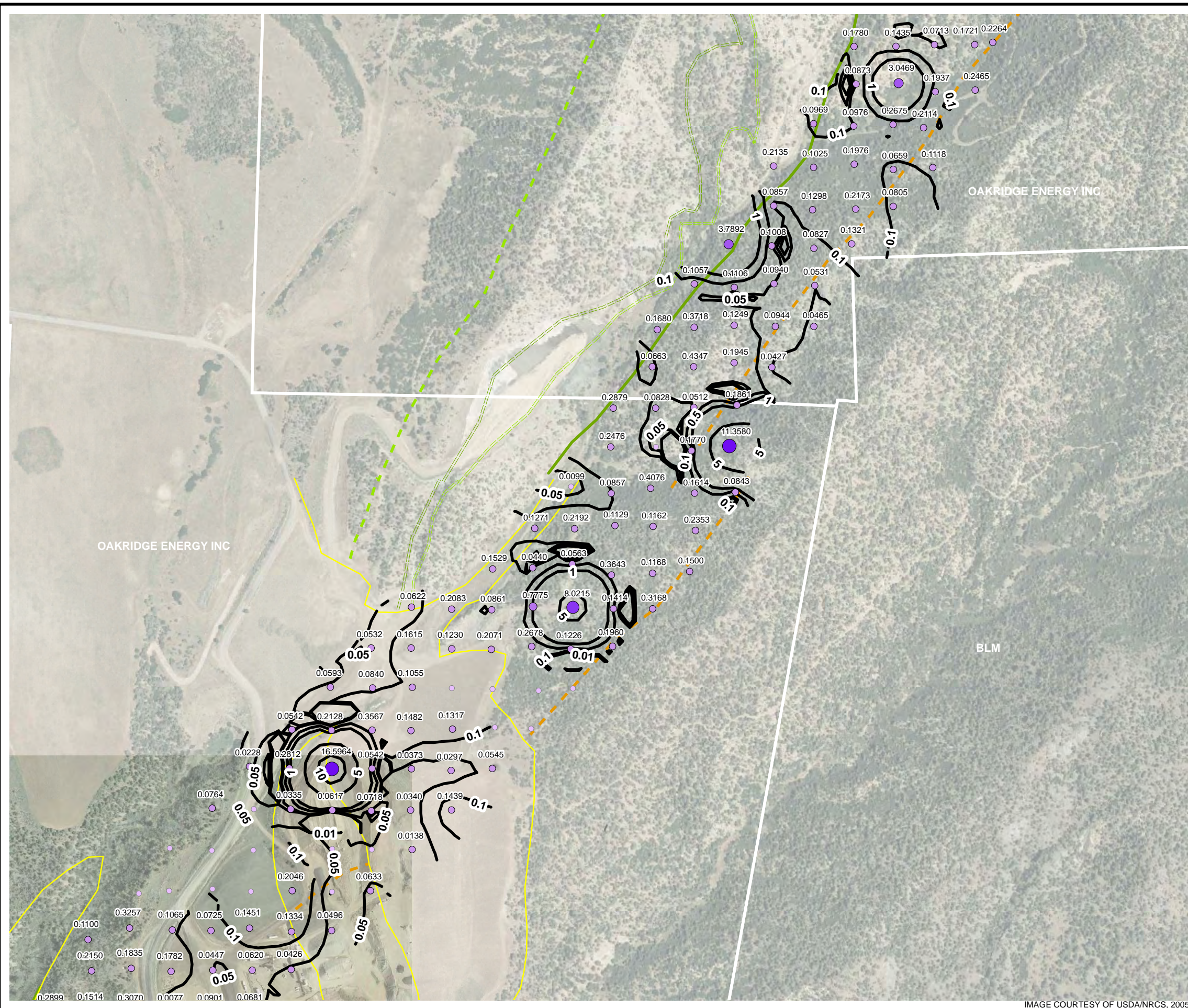


FIGURE 46
CARBON DIOXIDE FLUX CONTOURS
CARBON JUNCTION
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF USDA/NRCS, 2005



LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ★ Gas Flux Chambers
- Parcel Boundary & Owner (white)

Carbon Dioxide Flux Location (mol/m² • day)

- 0.0000 - 0.0100
- 0.0101 - 0.5000
- 0.5001 - 1.0000
- 1.0001 - 5.0000
- 5.0001 - 10.0000
- 10.0001 - 25.0000

Carbon Dioxide Flux Contour in mol/m² • day (Interval Varies)

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

Flux points not labeled are 0.0000 mol/m² • day Methane

All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.

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

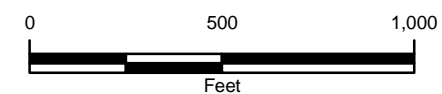
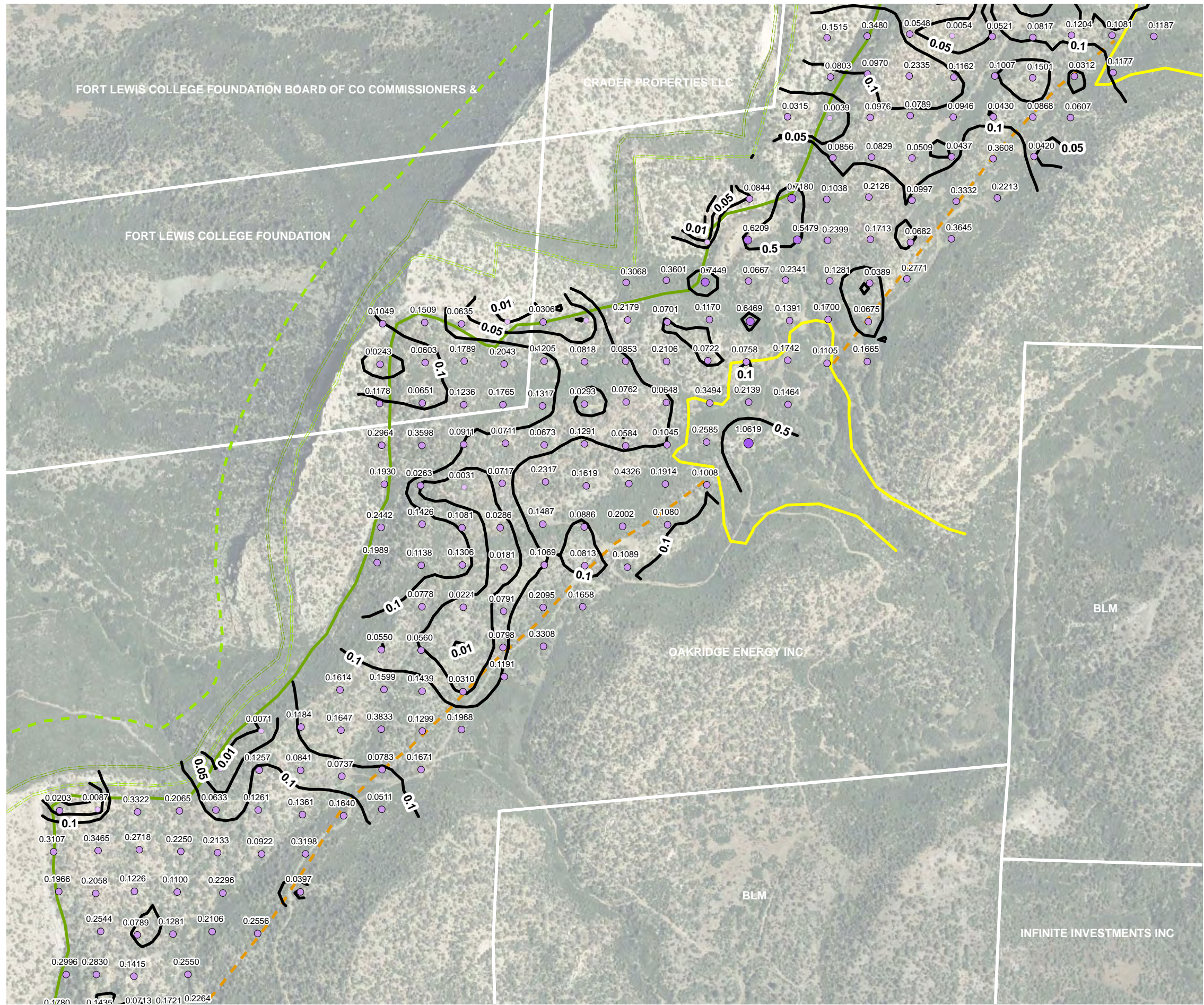


FIGURE 47
CARBON DIOXIDE FLUX CONTOURS
HORSE GULCH SOUTH
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF USDA/NRCS, 2005



LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ★ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location (mol/m² • day)
 - 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in mol/m² • day (Interval Varies)
 - 0.01
 - 0.05
 - 0.1
 - 0.5
- 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
- Flux points not labeled are 0.0000 mol/m² • day Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

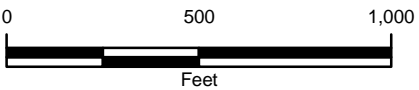
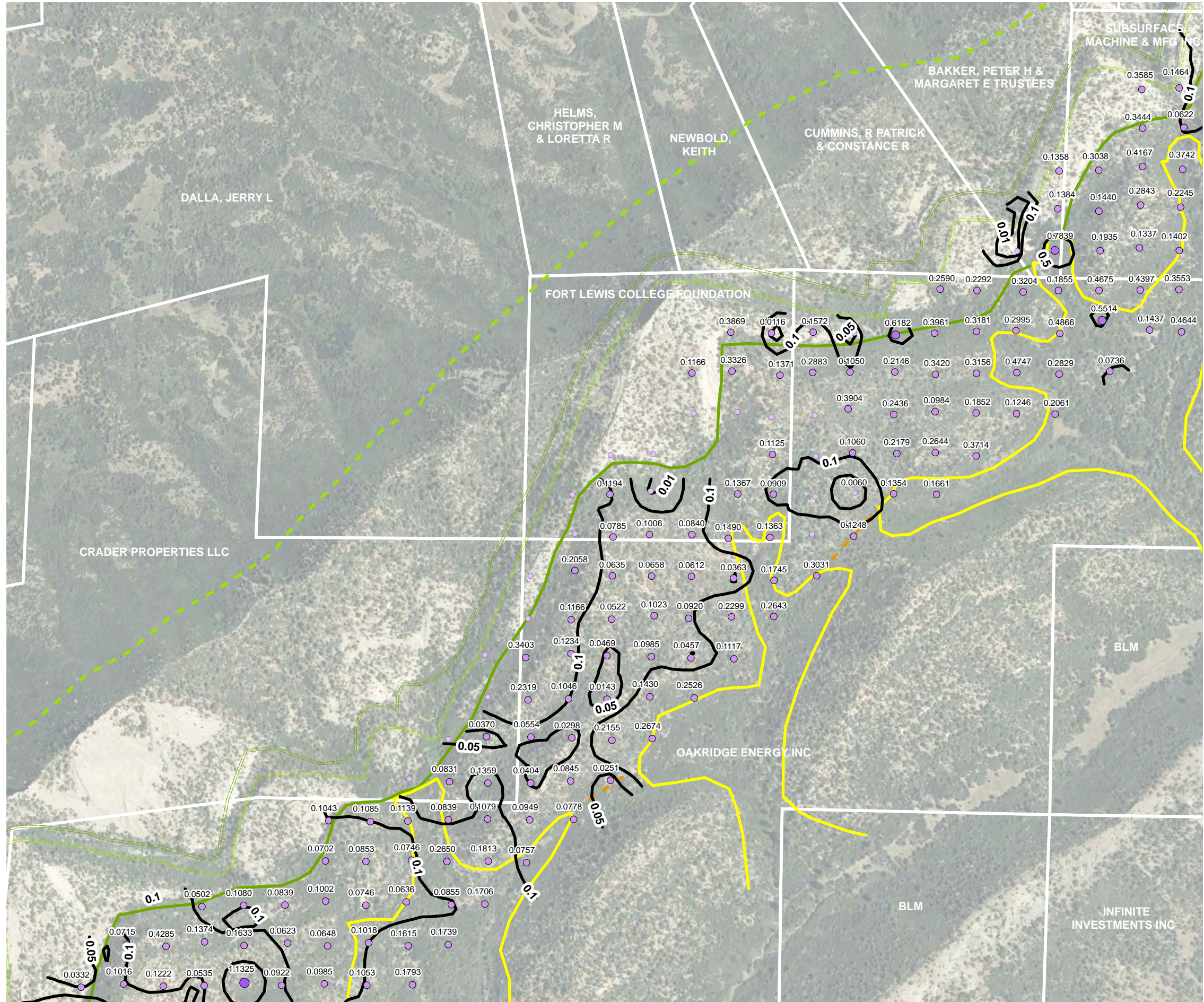


FIGURE 48
CARBON DIOXIDE FLUX CONTOURS
HORSE GULCH CENTRAL
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF USDA/NRCS, 2005



LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location (mol/m² • day)
 - 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in mol/m² • day (Interval Varies)
- 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
- Flux points not labeled are 0.0000 mol/m² • day Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

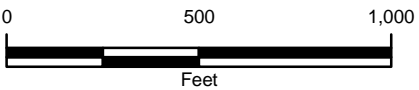
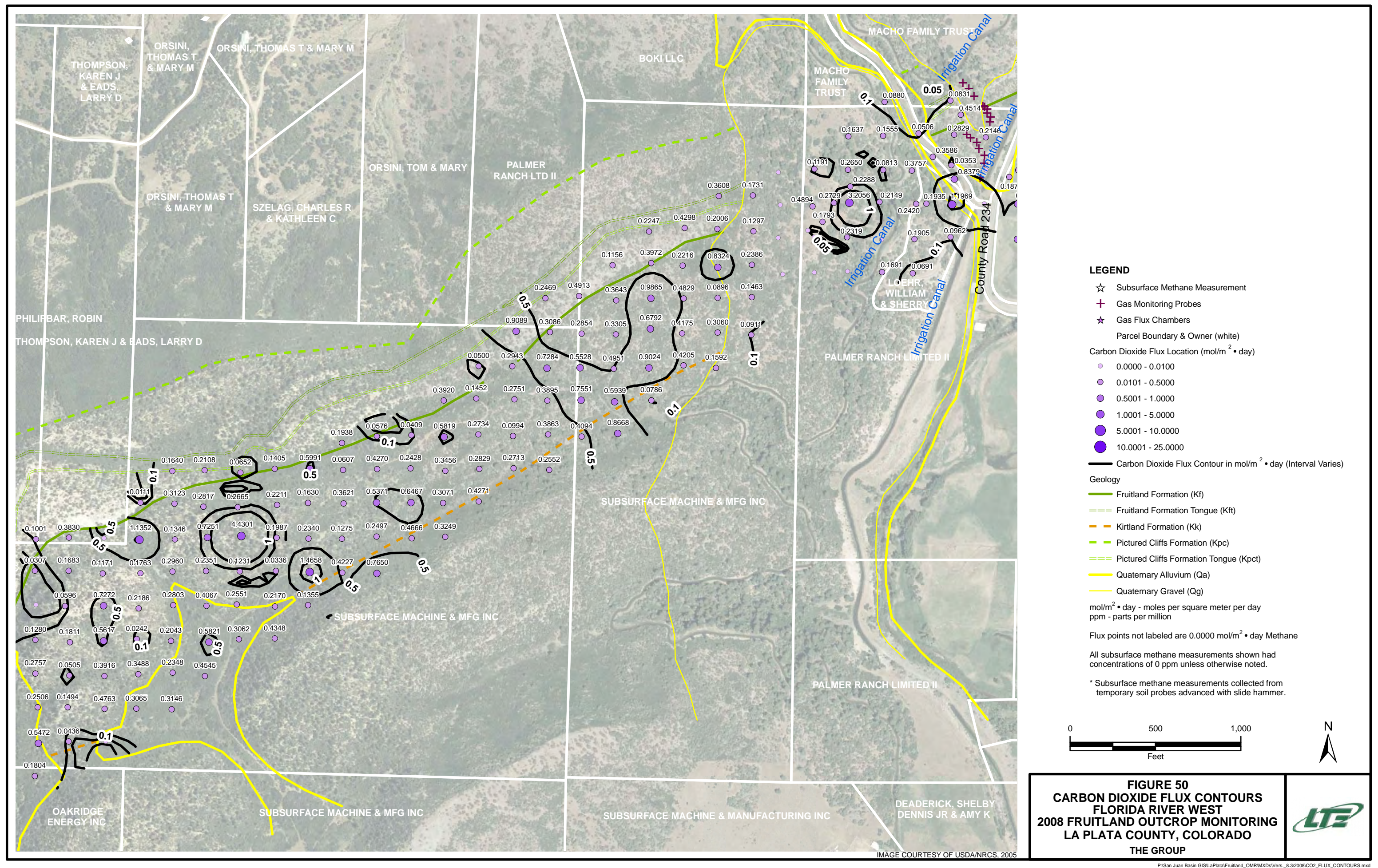


FIGURE 49
CARBON DIOXIDE FLUX CONTOURS
HORSE GULCH NORTH
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF USDA/NRCS, 2005





LEGEND

- ☆ Subsurface Methane Measurement
 - + Gas Monitoring Probes
 - ☆ Gas Flux Chambers
 - Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location ($\text{mol/m}^2 \cdot \text{day}$)
- 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in $\text{mol/m}^2 \cdot \text{day}$ (Interval Varies)
- 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)
- $\text{mol/m}^2 \cdot \text{day}$ - moles per square meter per day
ppm - parts per million
- Flux points not labeled are 0.0000 $\text{mol/m}^2 \cdot \text{day}$ Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

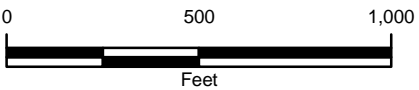
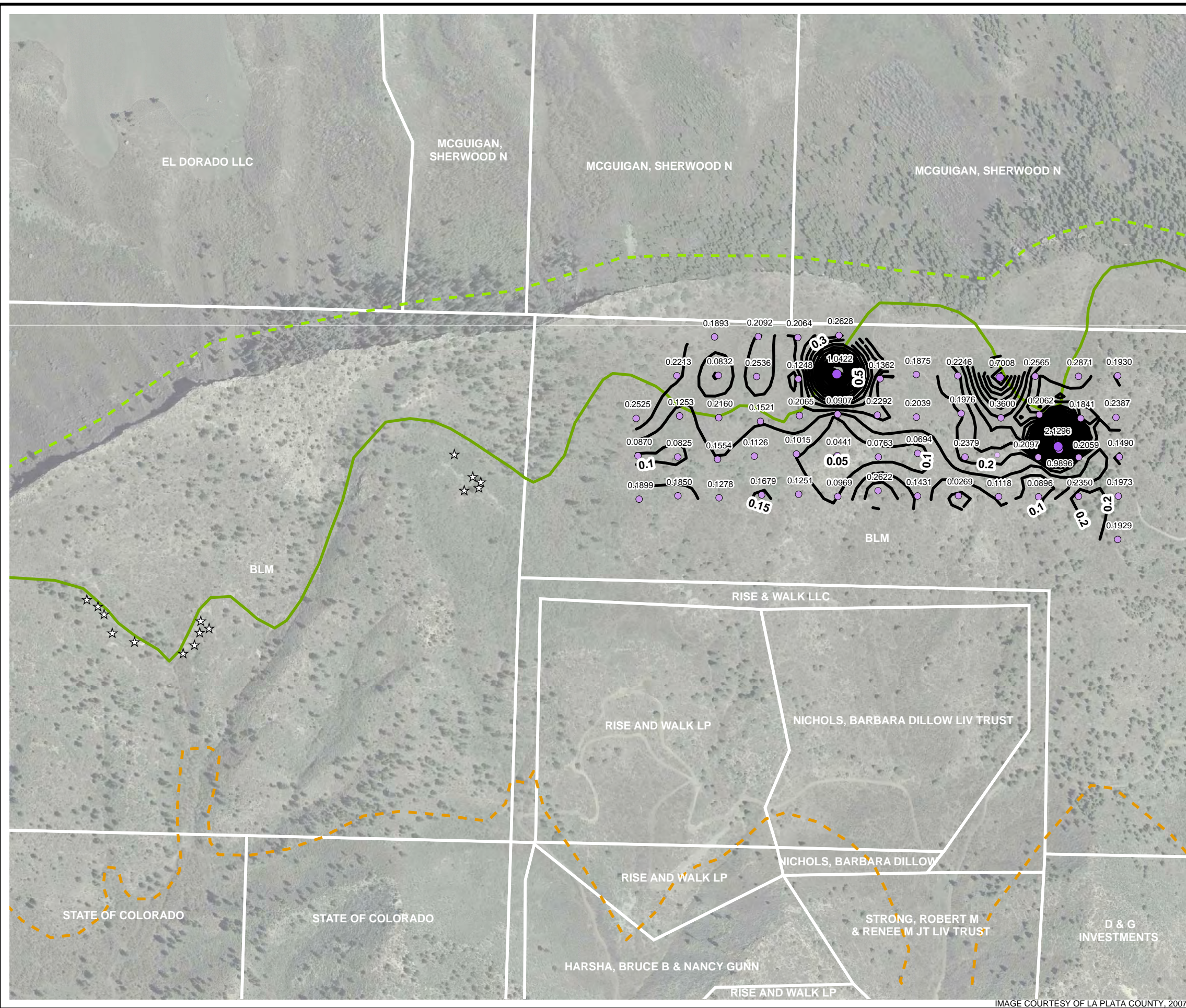


FIGURE 51
CARBON DIOXIDE FLUX CONTOURS
FLORIDA RIVER EAST
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF USDA/NRCS, 2005



LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- Parcel Boundary & Owner (white)

Carbon Dioxide Flux Location (mol/m² • day)

- 0.0000 - 0.0100
- 0.0101 - 0.5000
- 0.5001 - 1.0000
- 1.0001 - 5.0000
- 5.0001 - 10.0000
- 10.0001 - 25.0000

Carbon Dioxide Flux Contour in mol/m² • day (Interval Varies)

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

Flux points not labeled are 0.0000 mol/m² • day Methane

All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.

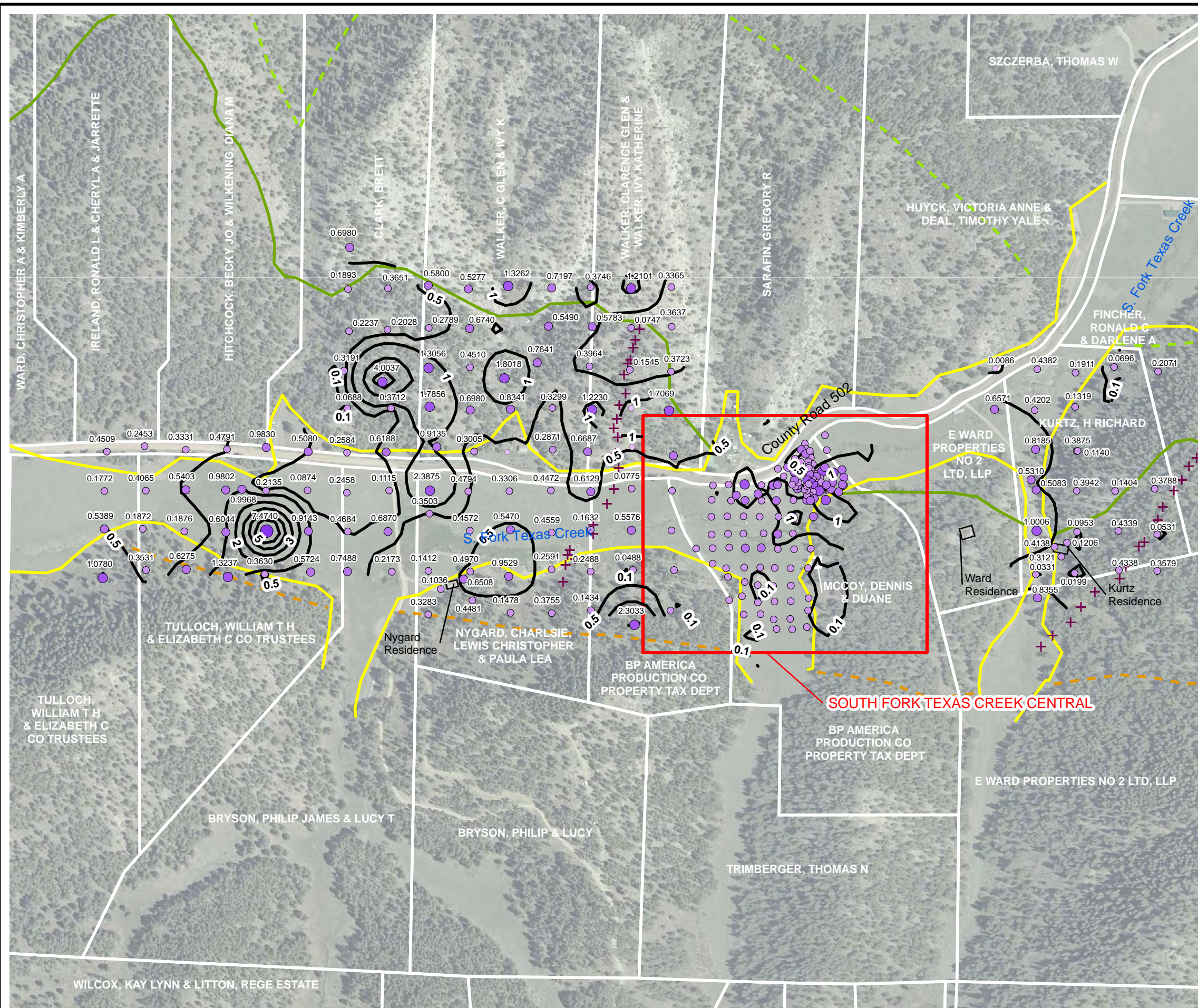
* Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

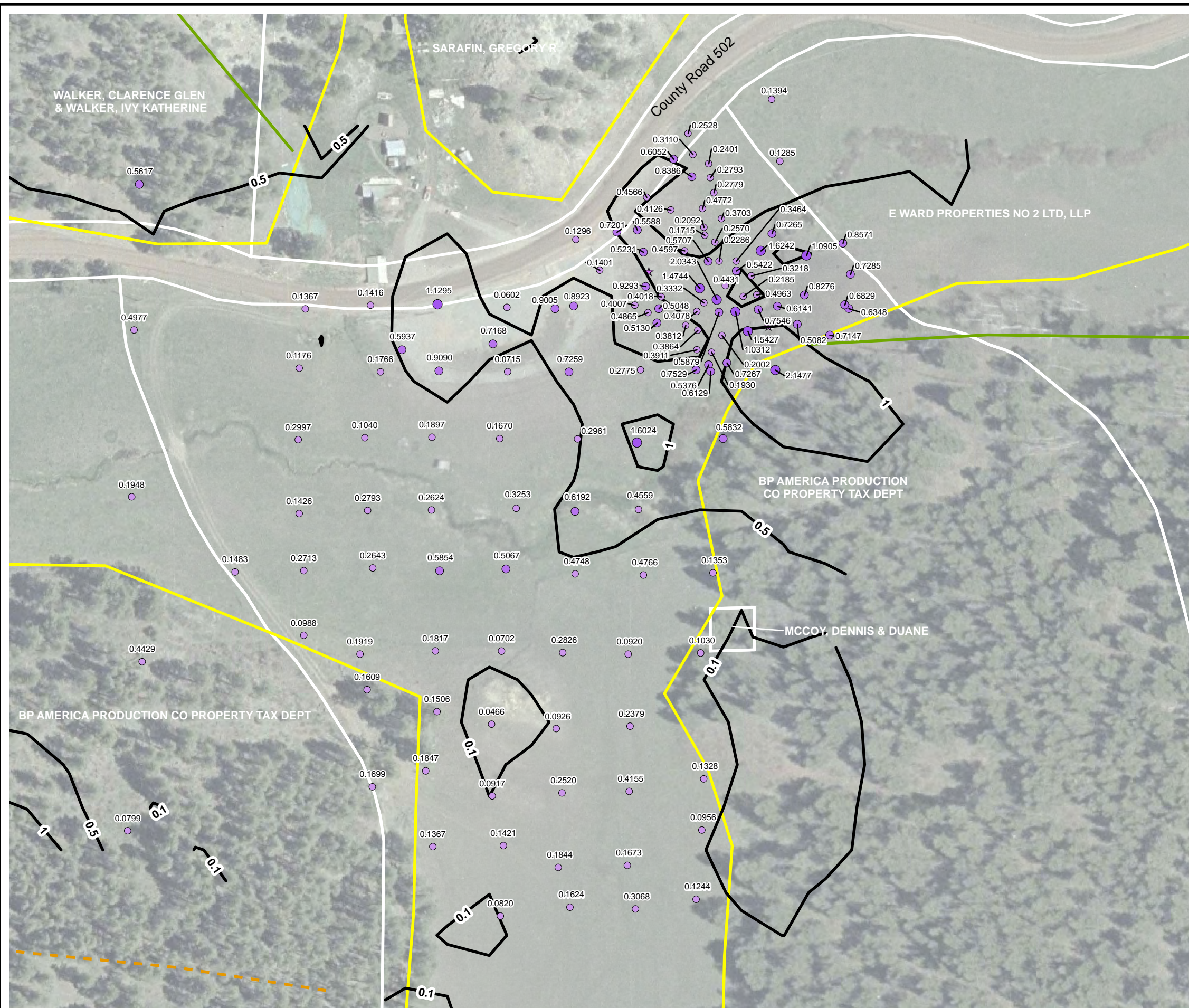


FIGURE 52
CARBON DIOXIDE FLUX CONTOURS
VOSBURG PIKE
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007





LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location ($\text{mol/m}^2 \cdot \text{day}$)
 - 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in $\text{mol/m}^2 \cdot \text{day}$ (Interval Varies)
- 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)
- $\text{mol/m}^2 \cdot \text{day}$ - moles per square meter per day
- ppm - parts per million
- Flux points not labeled are 0.0000 $\text{mol/m}^2 \cdot \text{day}$ Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

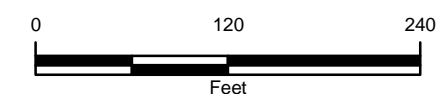
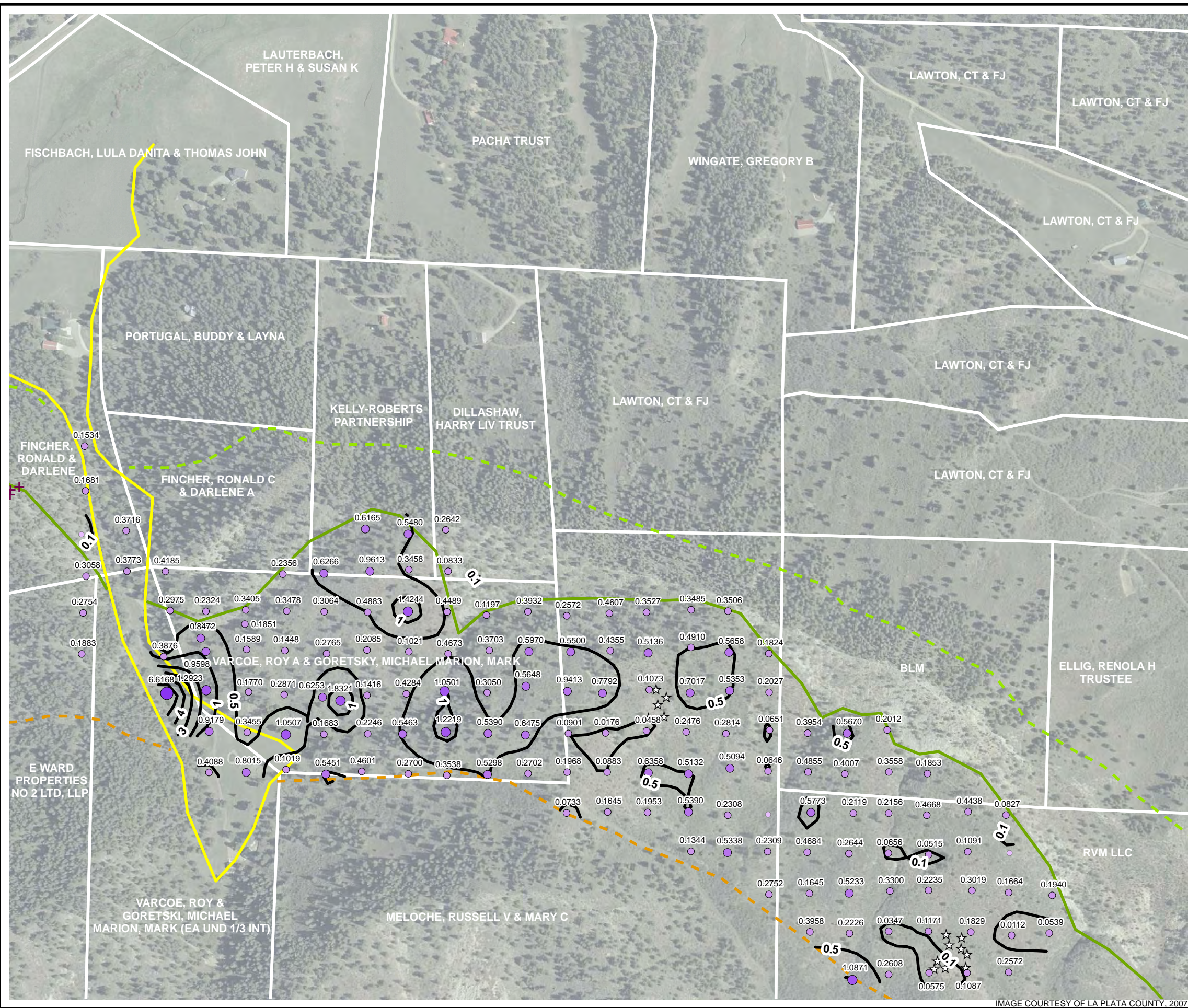


FIGURE 54
CARBON DIOXIDE FLUX CONTOURS
SOUTH FORK TEXAS CREEK CENTRAL
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007

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LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ★ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location ($\text{mol/m}^2 \cdot \text{day}$)
 - 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in $\text{mol/m}^2 \cdot \text{day}$ (Interval Varies)
- 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)
- $\text{mol/m}^2 \cdot \text{day}$ - moles per square meter per day
- ppm - parts per million
- Flux points not labeled are 0.0000 $\text{mol/m}^2 \cdot \text{day}$ Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

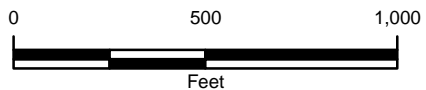
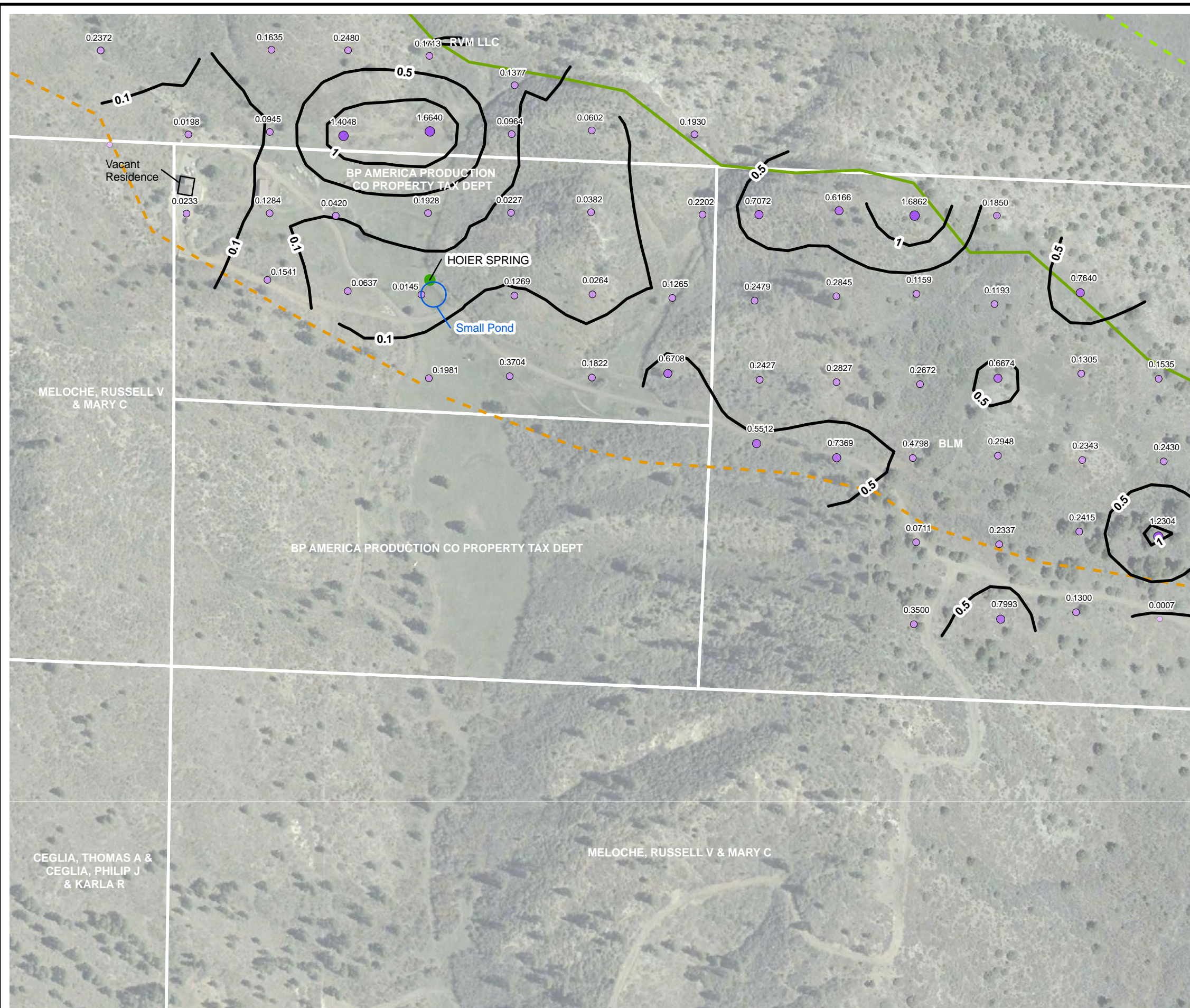


FIGURE 55
CARBON DIOXIDE FLUX CONTOURS
SOUTH FORK TEXAS CREEK EAST
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP





LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- Parcel Boundary & Owner (white)

Natural Spring Location

- Sampled
- Field Parameters Only
- Dry
- Not Located
- No Access

Carbon Dioxide Flux Location (mol/m² • day)

- 0.0000 - 0.0100
- 0.0101 - 0.5000
- 0.5001 - 1.0000
- 1.0001 - 5.0000
- 5.0001 - 10.0000
- 10.0001 - 25.0000

— Carbon Dioxide Flux Contour in mol/m² • day (Interval Varies)

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

Flux points not labeled are 0.0000 mol/m² • day Methane

All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.

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

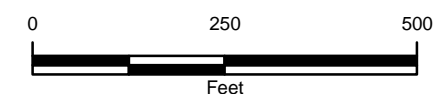


FIGURE 56
CARBON DIOXIDE FLUX CONTOURS
BP HIGHLANDS
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007

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LEGEND

- ☆ Subsurface Methane Measurement
- + Gas Monitoring Probes
- ★ Gas Flux Chambers
- Parcel Boundary & Owner (white)
- Carbon Dioxide Flux Location ($\text{mol/m}^2 \cdot \text{day}$)
 - 0.0000 - 0.0100
 - 0.0101 - 0.5000
 - 0.5001 - 1.0000
 - 1.0001 - 5.0000
 - 5.0001 - 10.0000
 - 10.0001 - 25.0000
- Carbon Dioxide Flux Contour in $\text{mol/m}^2 \cdot \text{day}$ (Interval Varies)
- 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)
- $\text{mol/m}^2 \cdot \text{day}$ - moles per square meter per day
- ppm - parts per million
- Flux points not labeled are 0.0000 $\text{mol/m}^2 \cdot \text{day}$ Methane
- All subsurface methane measurements shown had concentrations of 0 ppm unless otherwise noted.
- * Subsurface methane measurements collected from temporary soil probes advanced with slide hammer.

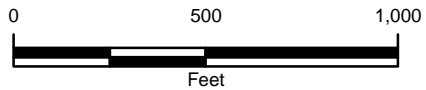
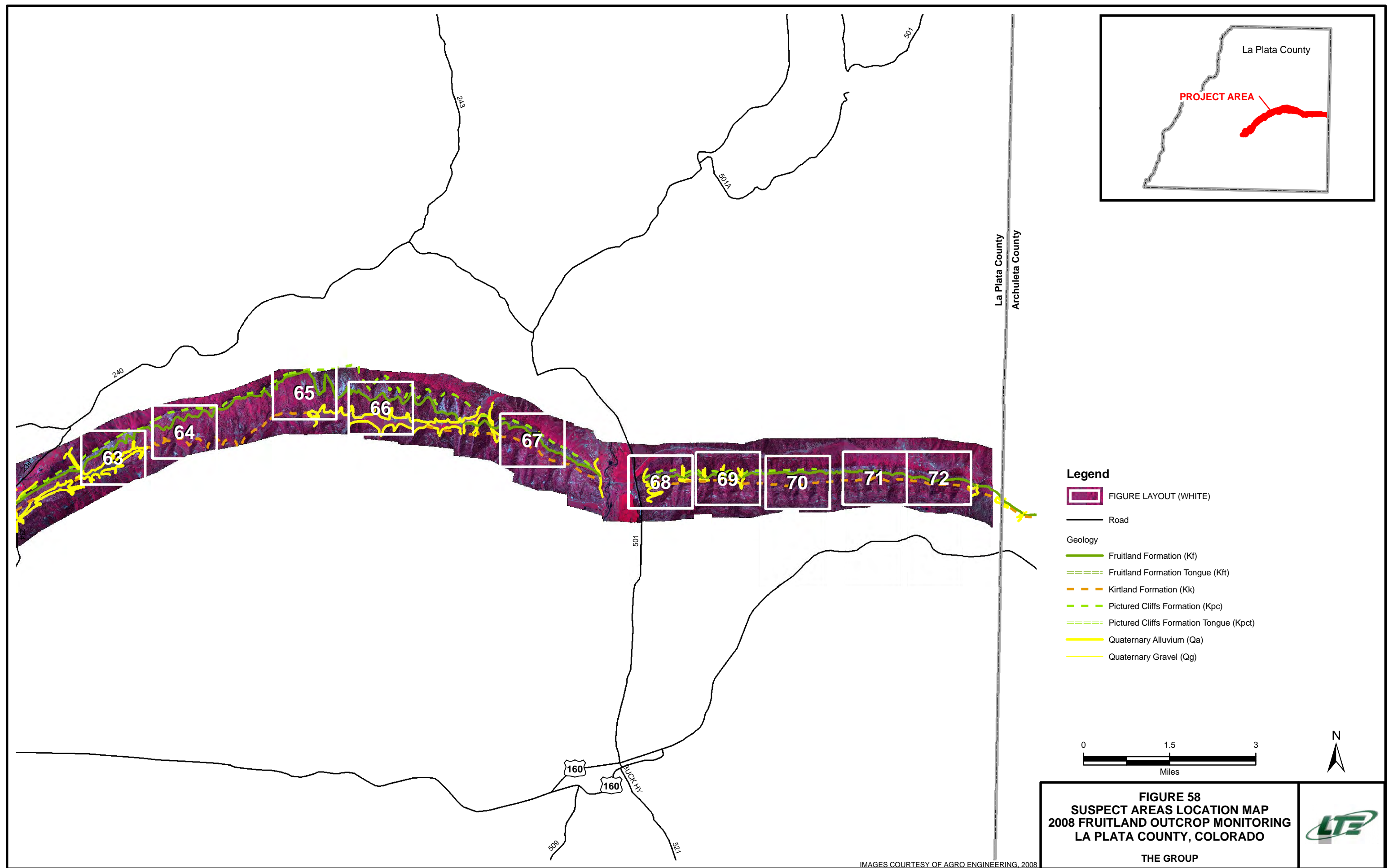
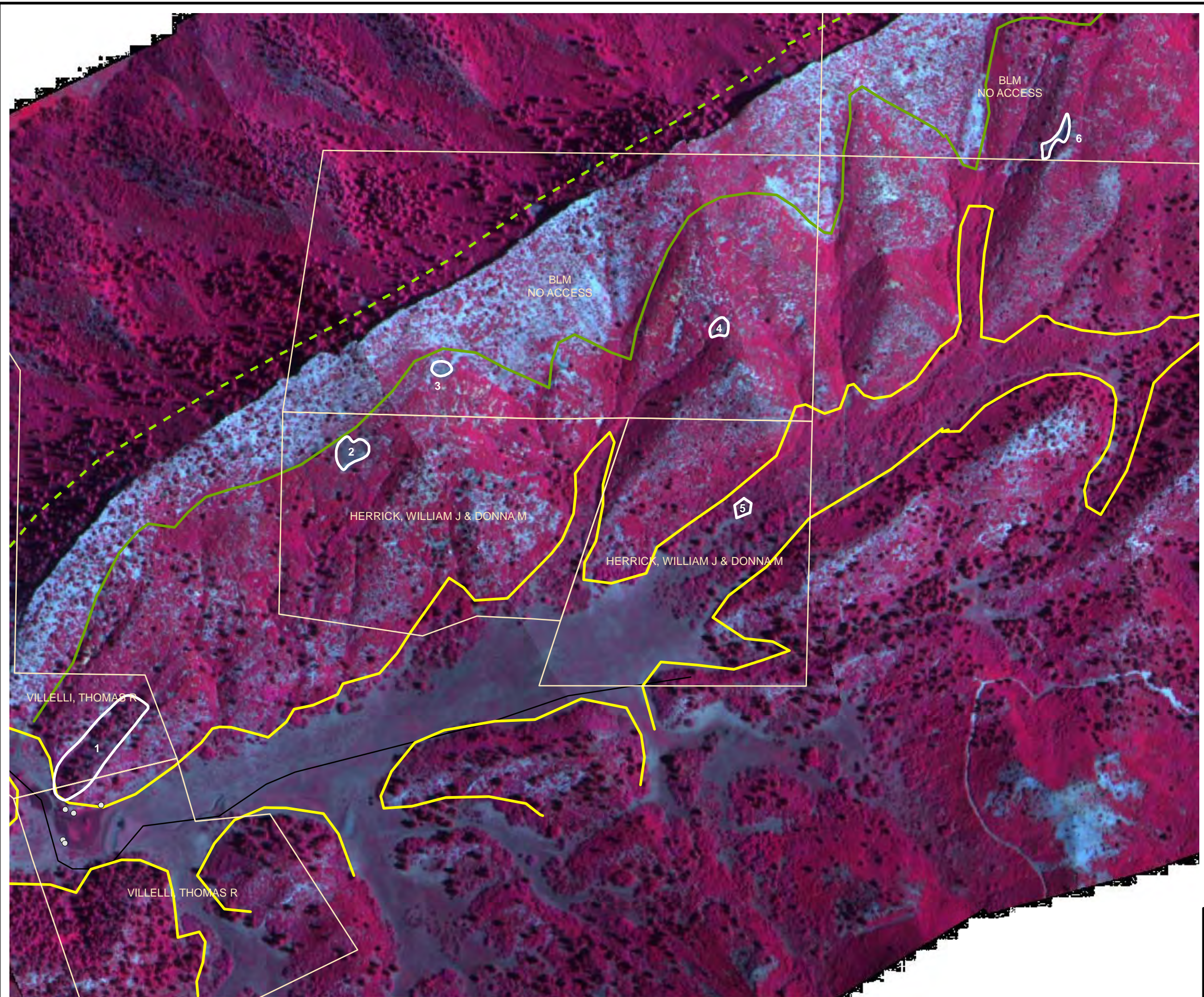


FIGURE 57
CARBON DIOXIDE FLUX CONTOURS
PINE RIVER
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007





Legend

Subsurface Methane Measurements

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

Parcel Boundary

Suspect Area (white)

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)

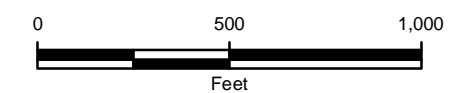


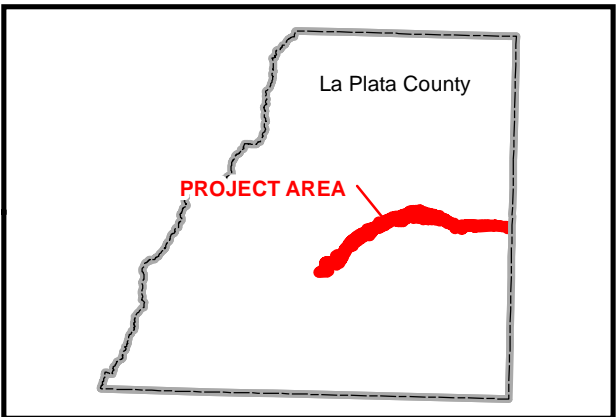
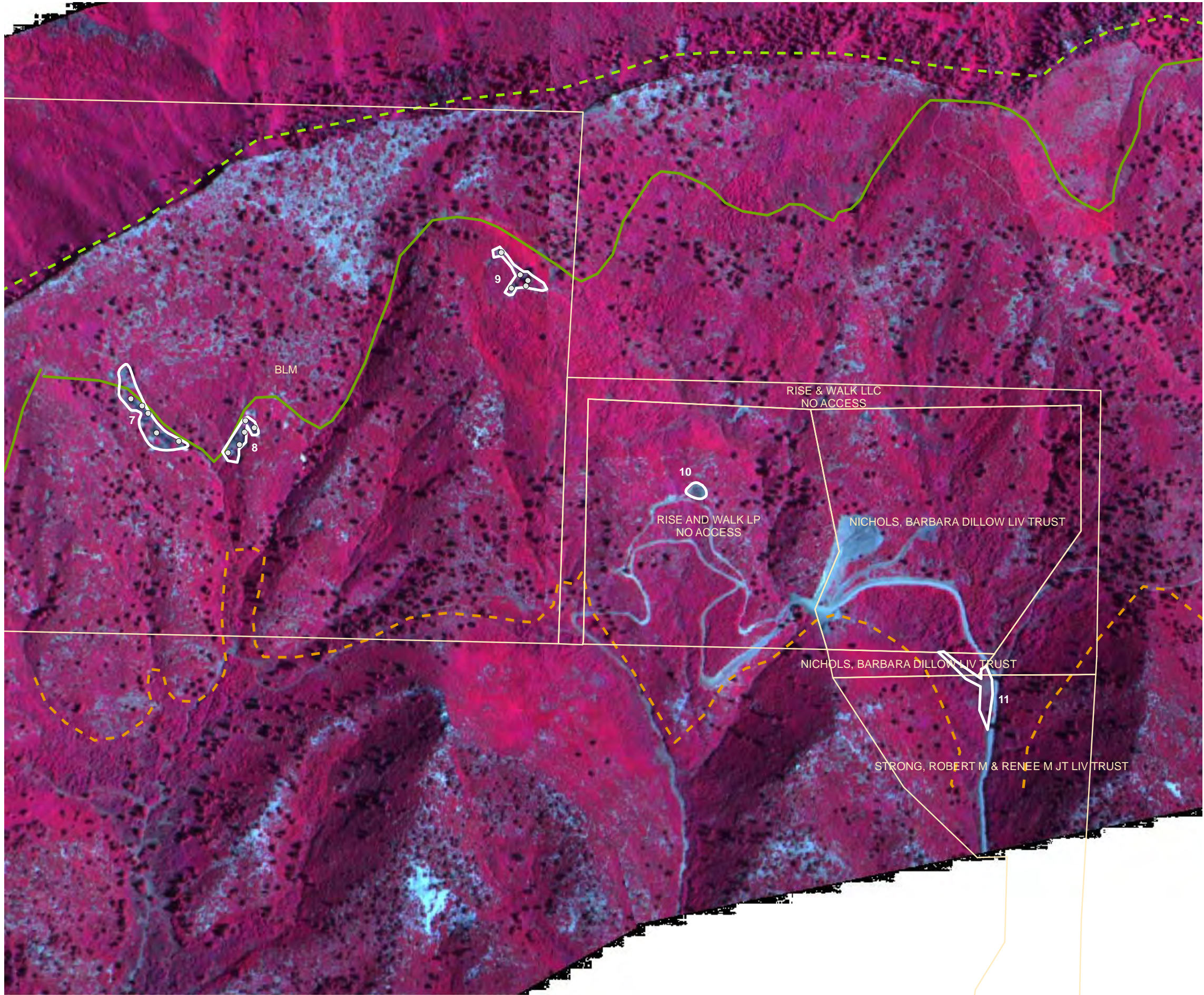
FIGURE 59
SUSPECT AREAS 1-6
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO

THE GROUP



IMAGES COURTESY OF AGRO ENGINEERING, 2008

P:\San Juan Basin GIS\LaPlata\Fruitland_OMR\MXDs\Vers_8.3\2008\CIR_FIELD_MAP.mxd



Legend

Subsurface Methane Measurement

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

- Parcel Boundary
- Suspect Area (white)
- Road

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)

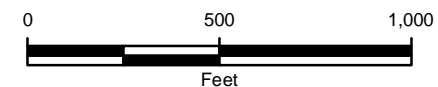
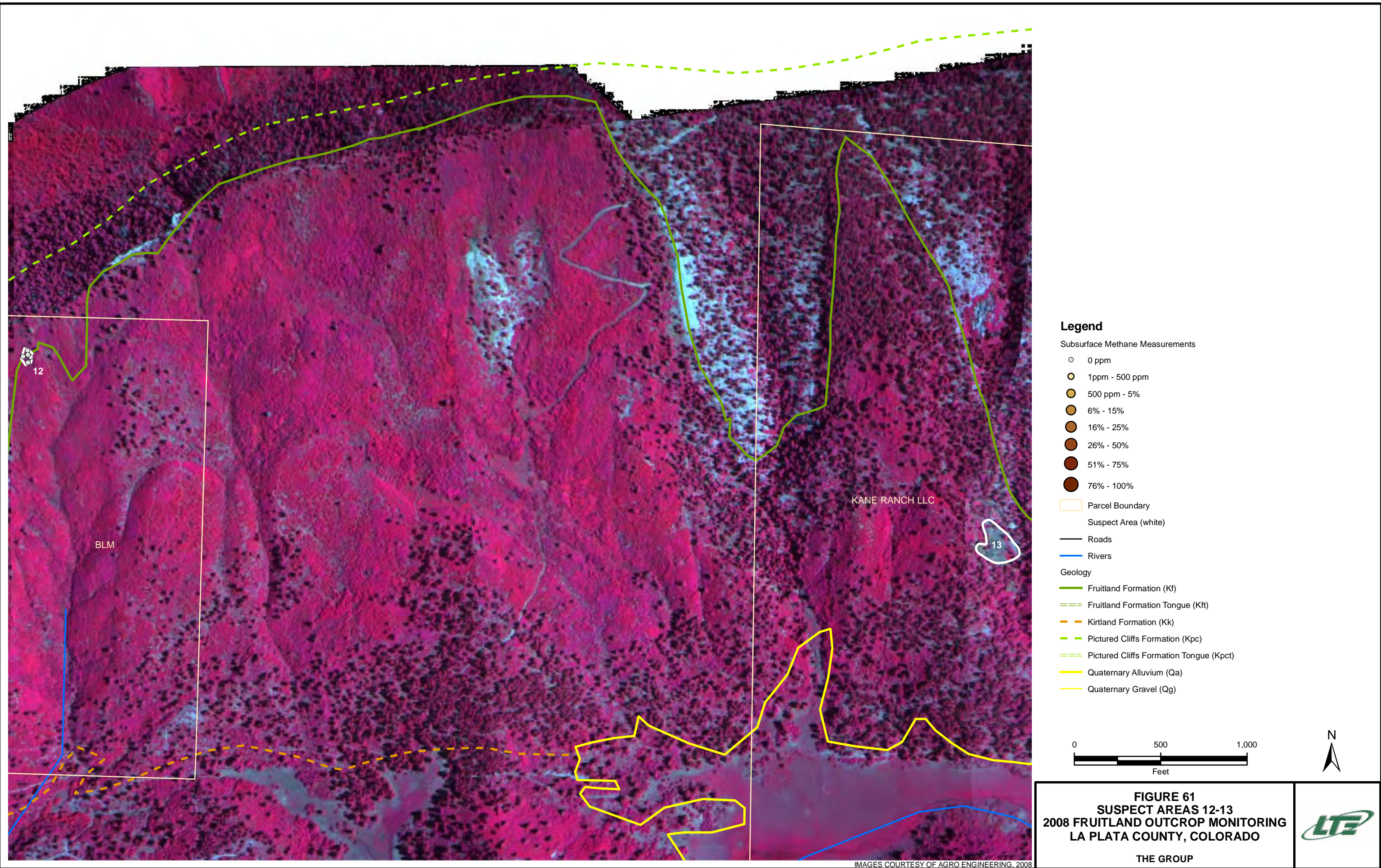


FIGURE 60
SUSPECT AREAS 7-11
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO

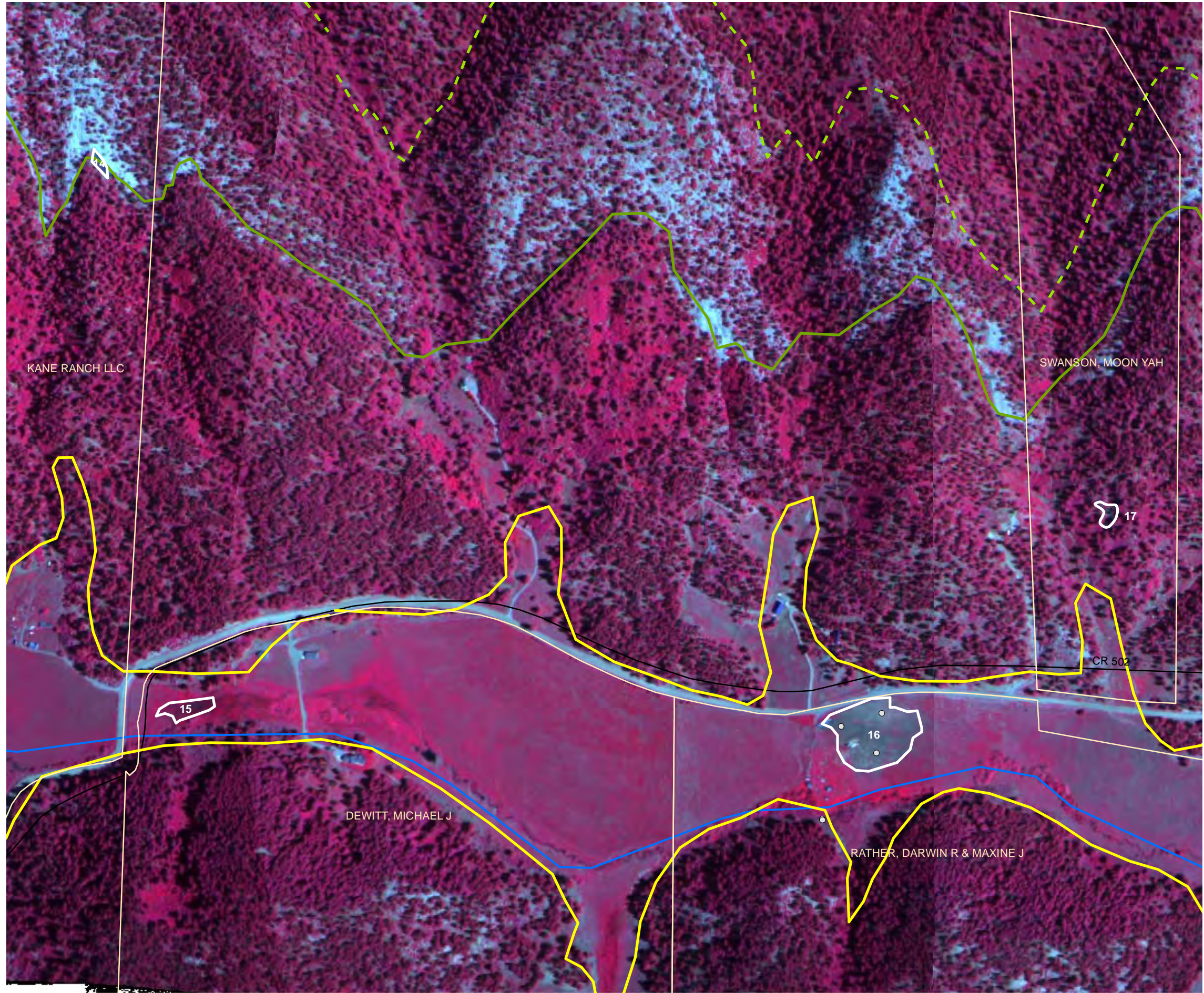
THE GROUP



IMAGES COURTESY OF AGRO ENGINEERING, 2008



IMAGES COURTESY OF AGRO ENGINEERING, 2008



Legend

Subsurface Methane Measurements

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

Parcel Boundary

Suspect Area (white)

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)

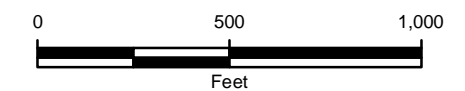
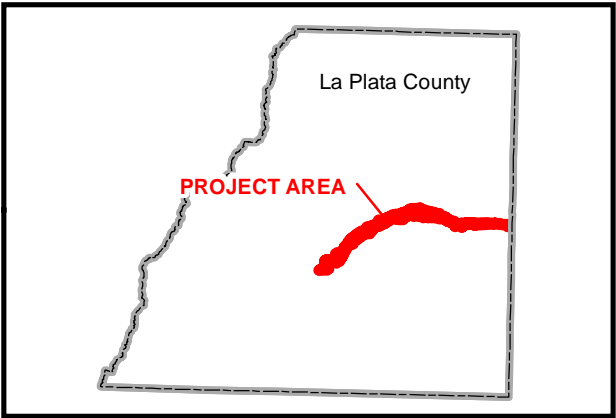
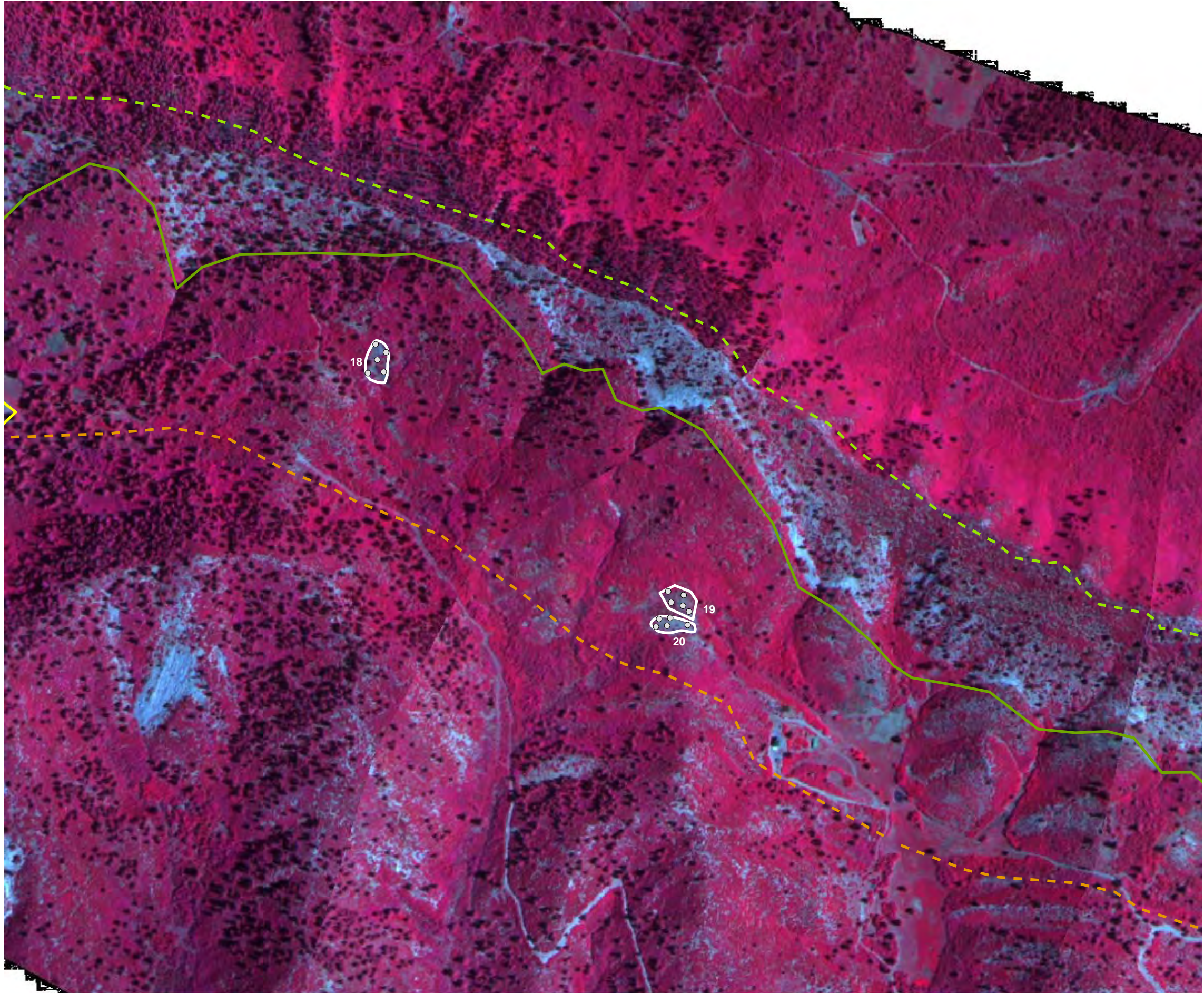


FIGURE 62
SUSPECT AREAS 14-17
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO

THE GROUP



IMAGES COURTESY OF AGRO ENGINEERING, 2008



Legend

Subsurface Methane Measurement

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

Suspect Area (white)

— Road

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)

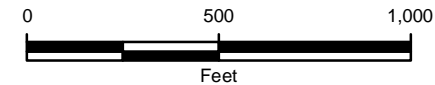
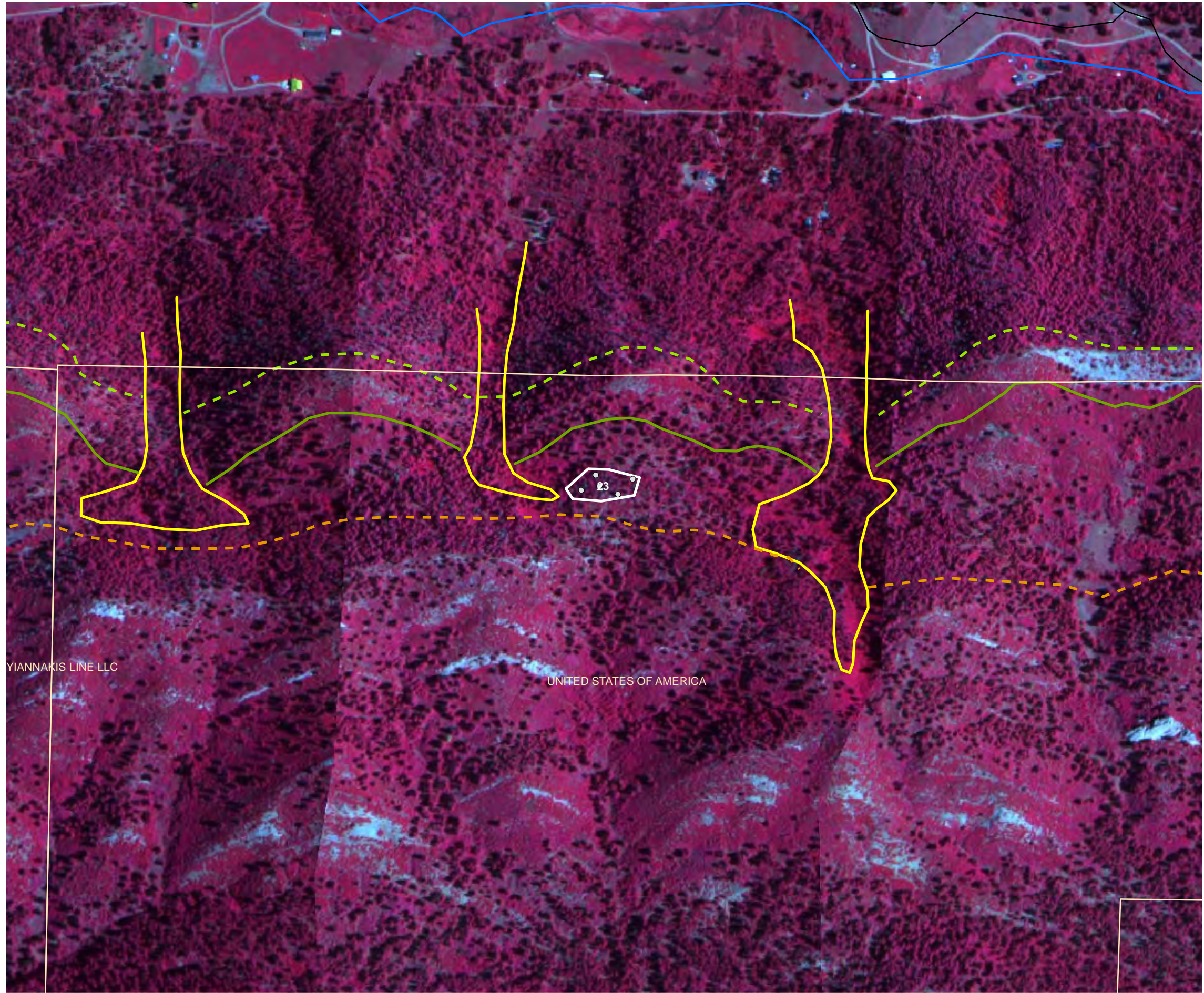


FIGURE 63
SUSPECT AREAS 18-20
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO

THE GROUP



IMAGES COURTESY OF AGRO ENGINEERING, 2008



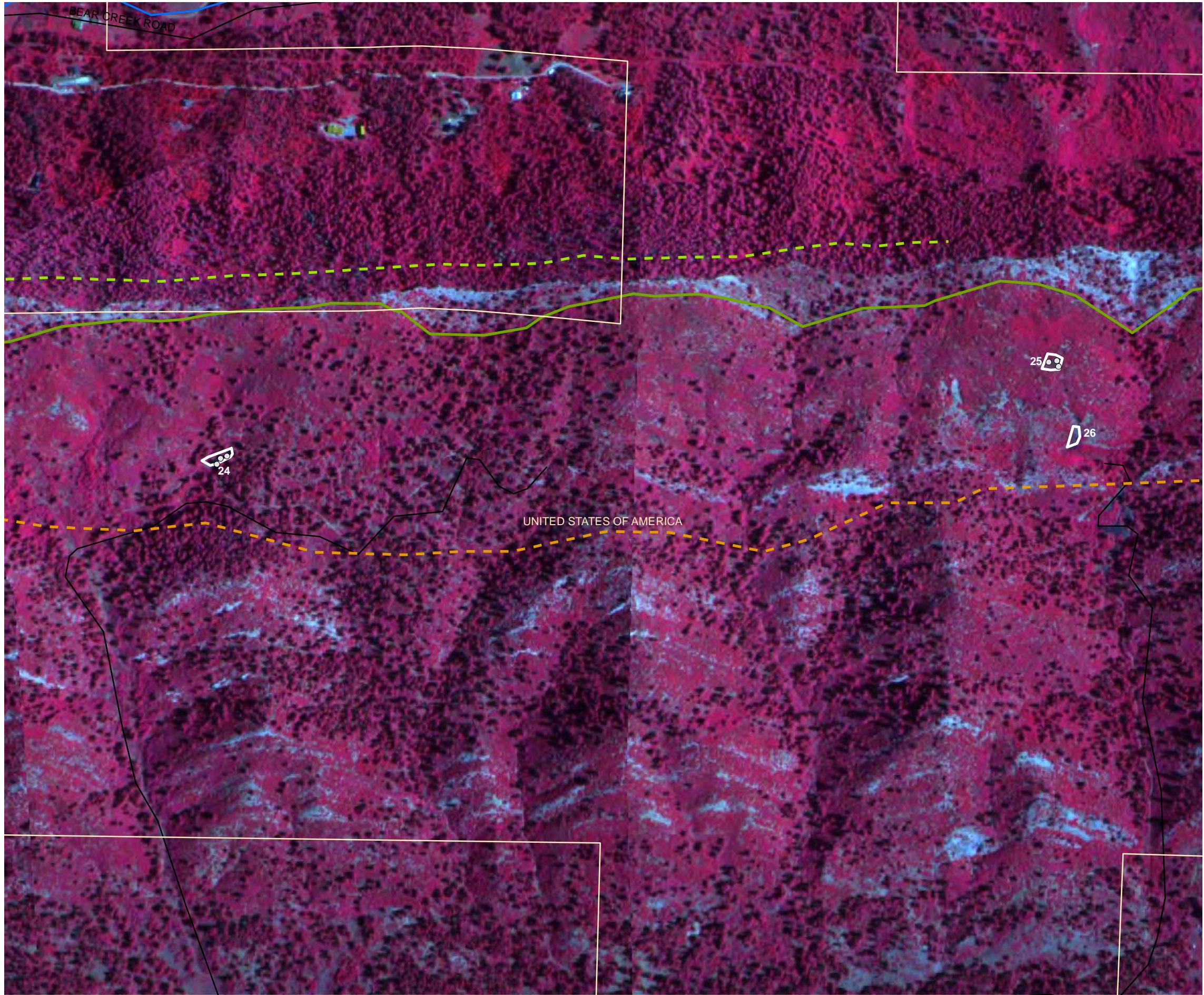
- Legend**
- Subsurface Methane Measurements
- 0 ppm
 - 1ppm - 500 ppm
 - 500 ppm - 5%
 - 6% - 15%
 - 16% - 25%
 - 26% - 50%
 - 51% - 75%
 - 76% - 100%
- Parcel Boundary
- Suspect Area (white)
- Roads
- Rivers
- Geology
- Fruitland Formation (Kf)
 - == Fruitland Formation Tongue (Kft)
 - - Kirtland Formation (Kk)
 - - Pictured Cliffs Formation (Kpc)
 - - Pictured Cliffs Formation Tongue (Kpct)
 - Quaternary Alluvium (Qa)
 - Quaternary Gravel (Qg)



FIGURE 65
SUSPECT AREA 23
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO

THE GROUP





Legend

Subsurface Methane Measurements

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

Parcel Boundary

Suspect Area (white)

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)

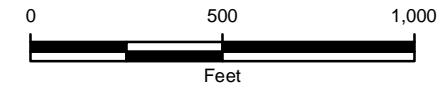
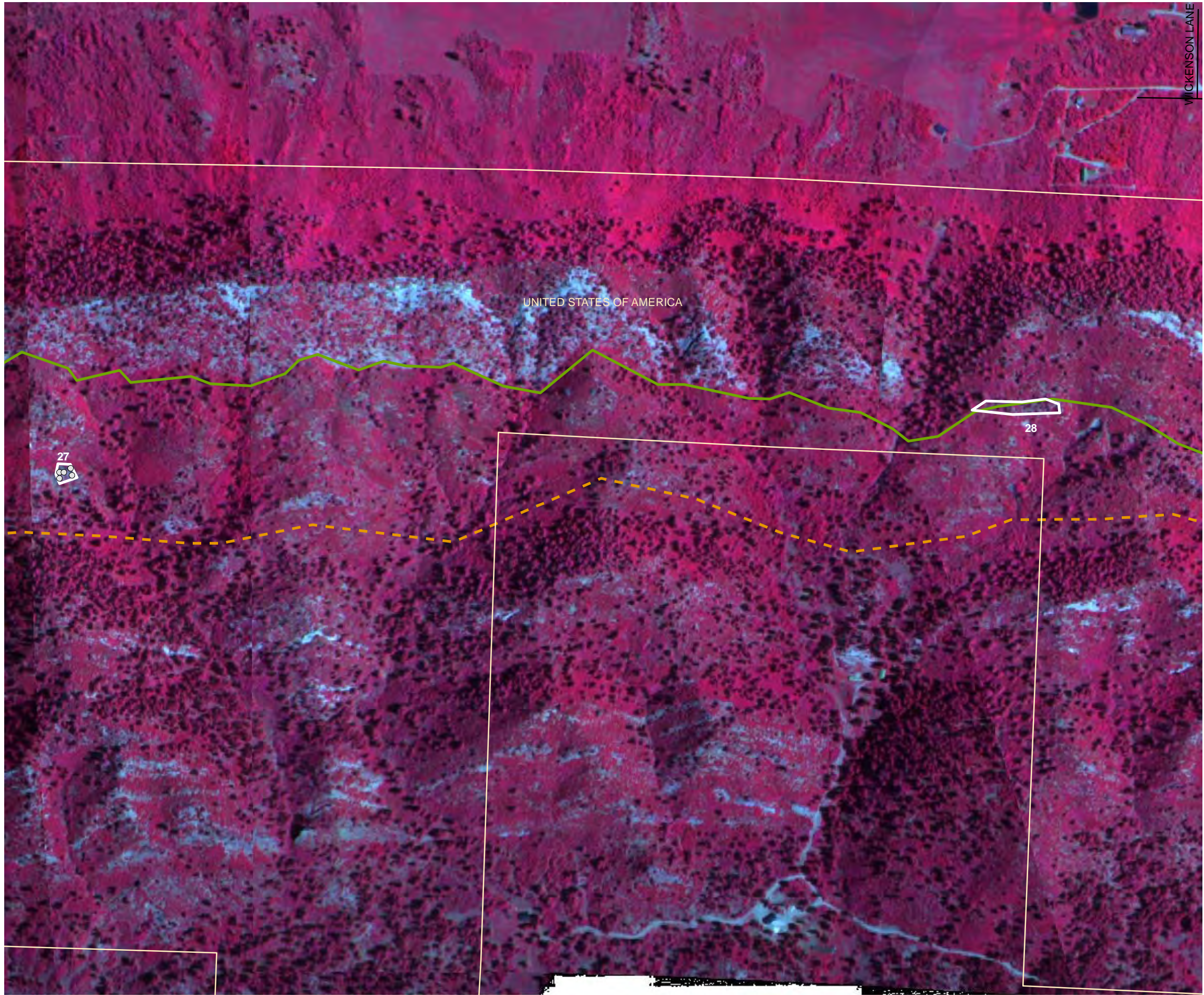


FIGURE 66
SUSPECT AREAS 24-26
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO



THE GROUP

IMAGES COURTESY OF AGRO ENGINEERING, 2008



Legend

Subsurface Methane Measurements

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

Parcel Boundary

Suspect Area (white)

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)

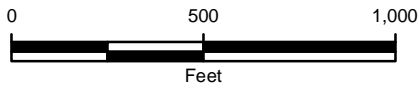
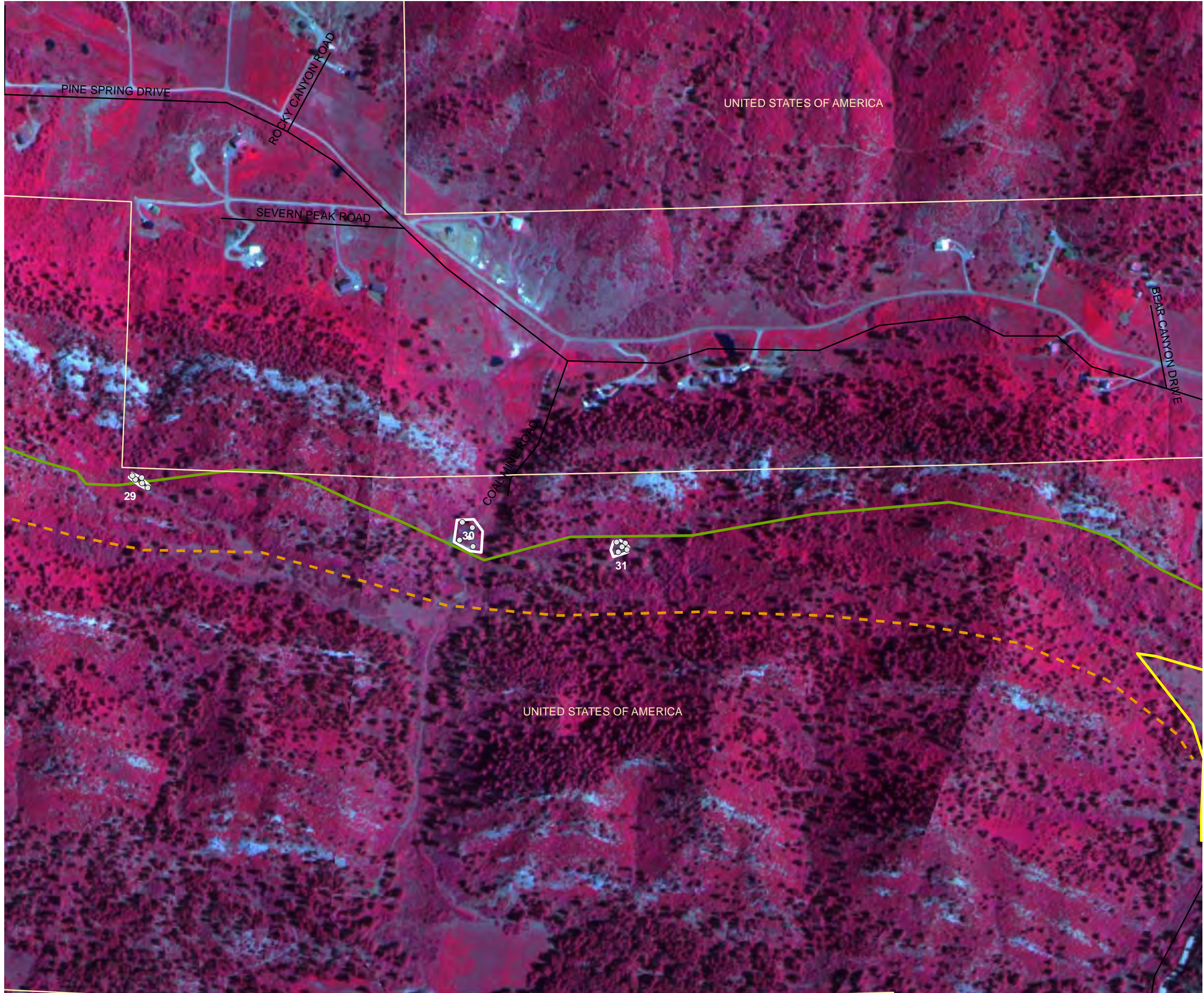


FIGURE 67
SUSPECT AREAS 27-28
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO

THE GROUP



IMAGES COURTESY OF AGRO ENGINEERING, 2008



Legend

Subsurface Methane Measurements

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

- Parcel Boundary
- Suspect Area (white)

- 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)

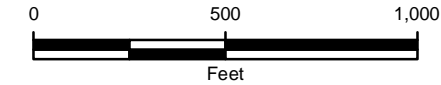


FIGURE 68
SUSPECT AREAS 29-31
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO



THE GROUP



LEGEND

- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- <all other values>

Natural Spring Location

- Sampled
- Field Parameters Only
- Dry
- Not Located
- No Access

Subsurface Methane Measurement

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

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)

ppm - parts per million
% - percent

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

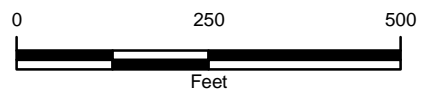


FIGURE 69
DETAILED SPRINGS LOCATION MAP
EDGEMONT RANCH
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007



LEGEND

- + Gas Monitoring Probes
- ☆ Gas Flux Chambers
- <all other values>

Natural Spring Location

- Sampled
- Field Parameters Only
- Dry
- Not Located
- No Access

Subsurface Methane Measurement

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

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)

ppm - parts per million
% - percent

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

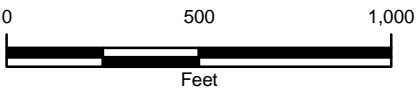
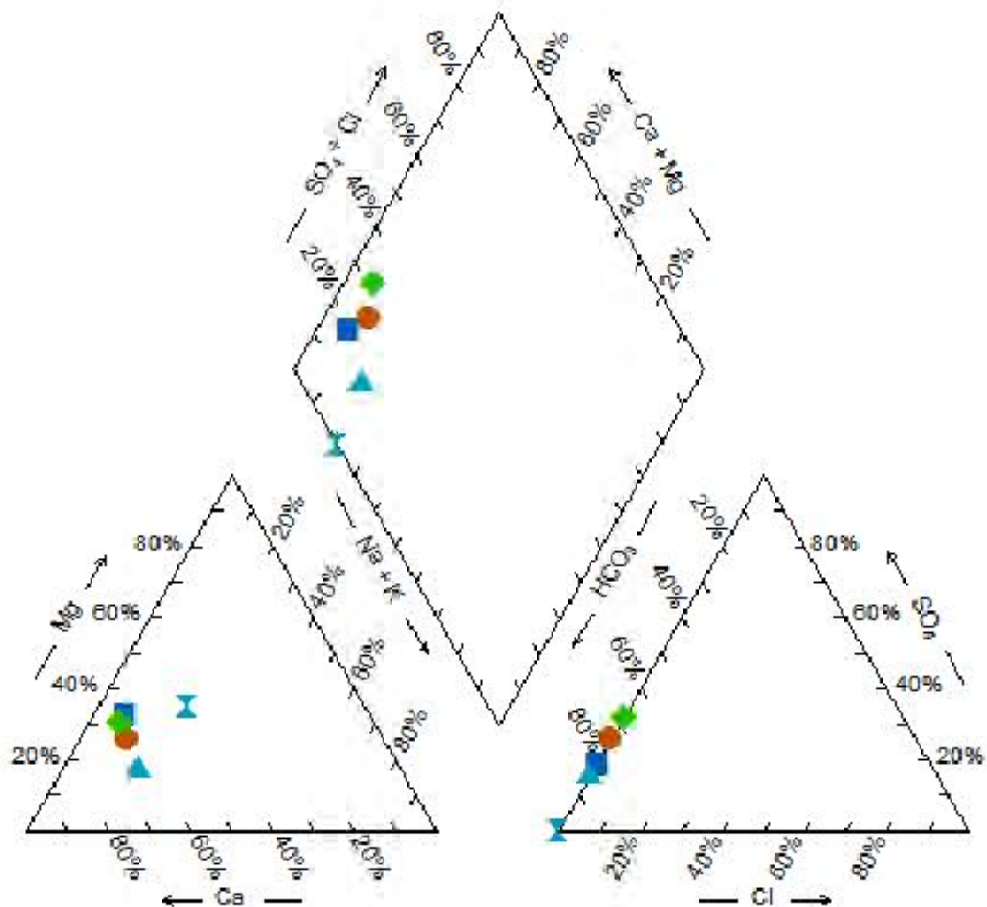


FIGURE 70
DETAILED SPRINGS LOCATION MAP
SOUTH FORK TEXAS CREEK
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



IMAGE COURTESY OF LA PLATA COUNTY, 2007

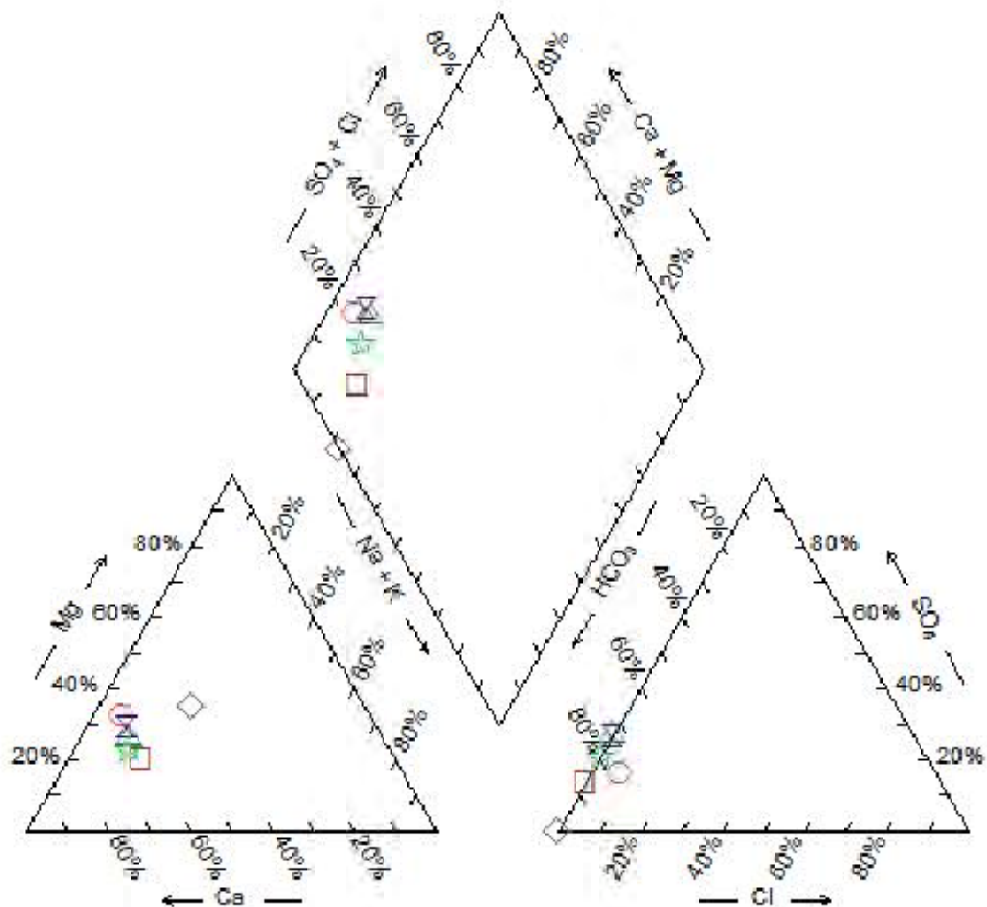


LEGEND

- DARWIN RATHER #1
- ▲ DARWIN RATHER #2
- RANCHO DURANGO LTD
- ◆ RANCHO DURANGO NORTH
- ✕ HOIER SPRING

FIGURE 71
TRI-LINEAR DIAGRAM OF NATURAL SPRINGS WATERS
JUNE 23, 2008
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
 THE GROUP





LEGEND

- DARWIN RATHER #1
- DARWIN RATHER #2
- △ RANCHO DURANGO LTD
- × RANCHO DURANGO NORTH
- ★ RANCHO DURANGO EAST
- ◇ HOIER SPRING

FIGURE 72
TRI-LINEAR DIAGRAM OF NATURAL SPRINGS WATERS
OCTOBER 15, 2008
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
 THE GROUP



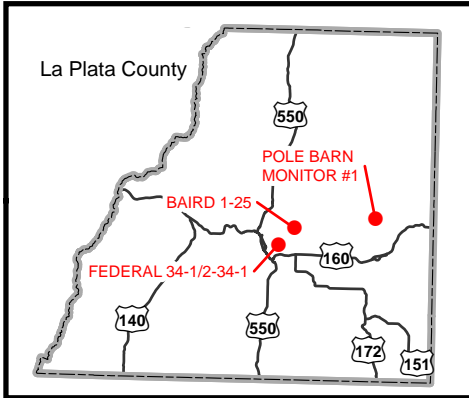


IMAGE COURTESY OF USDA/NRCS, 2008

LEGEND

Subsurface Methane Measurements

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

⊗ Abandoned Well Location

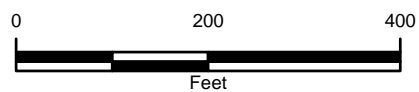


FIGURE 73
SUBSURFACE METHANE MEASUREMENTS
BAIRD 1-25
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



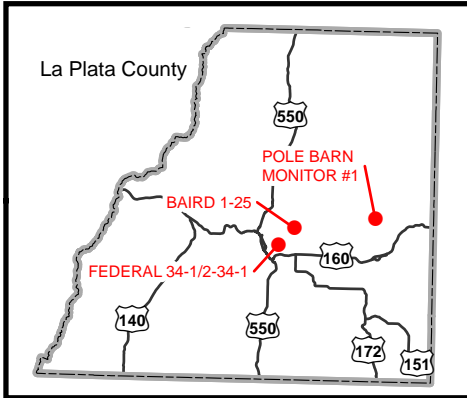


IMAGE COURTESY OF USDA/NRCS, 2008

LEGEND

Subsurface Methane Measurements

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

⊘ Abandoned Well Location

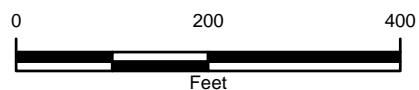


FIGURE 74
SUBSURFACE METHANE MEASUREMENTS
FEDERAL 34-1/2-34-1
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP



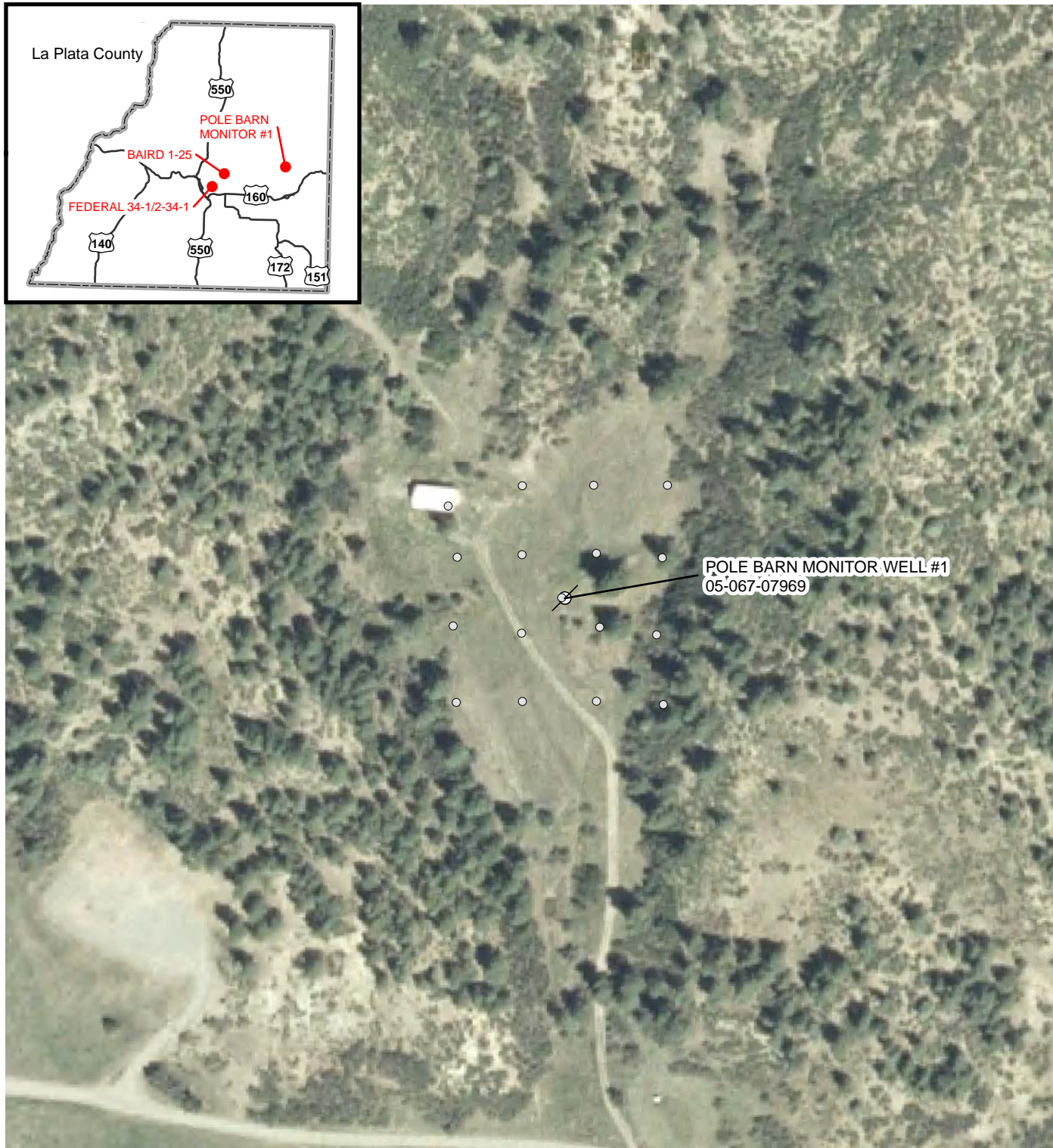
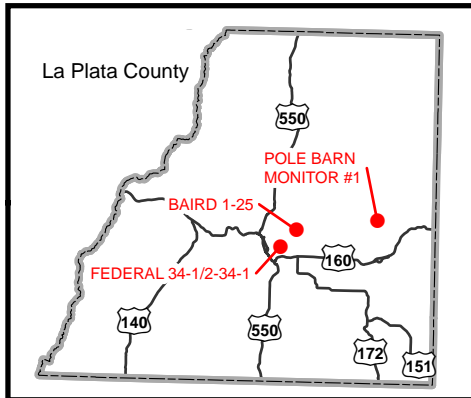


IMAGE COURTESY OF USDA/NRCS, 2008

LEGEND

Subsurface Methane Measurements

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

⊗ Abandoned Well Location

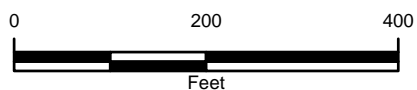


FIGURE 75
SUBSURFACE METHANE MEASUREMENTS
POLE BARN MONITOR WELL #1
2008 FRUITLAND OUTCROP MONITORING
LA PLATA COUNTY, COLORADO
THE GROUP

