COMPLIANCE / ENGINEERING / REMEDIATION

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October 27, 2006

Mr. James Clark
Elm Ridge Resources, Inc.
12225 Greenville Avenue, Suite 950
Dallas, Texas 75243

Mr. Mike Clark
Petrox Resources, Inc.
39868 Highway 13
Meeker, CO 81641

RE: 2006 Fruitland Outcrop Monitoring Report, Archuleta County, Colorado

Dear Gentlemen:

LT Environmental, Inc. (LTE) is please to provide this report containing the results of the 2006 Fruitland Formation outcrop monitoring program in Archuleta County.

LTE appreciates the opportunity to provide our services to Elm Ridge Resources, Inc. and Petrox Resources, Inc. If you have any questions, please do not hesitate to contact me at (303) 962-5507.

Sincerely,

LT ENVIRONMENTAL, INC.

John D. Peterson, P.G.
Project Manager

cc: Debbie Baldwin, Colorado Oil and Gas Conservation Commission, Denver, CO
Walt Brown, United States Forest Service, Durango, CO
Annette Candelaria, Archuleta County, CO

FRUITLAND OUTCROP MONITORING REPORT

ARCHULETA COUNTY, COLORADO

OCTOBER 2006

Prepared for:

ELM RIDGE RESOURCES, INC.
Dallas, Texas

And

PETROX RESOURCES, INC.
Meeker, Colorado

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LT ENVIRONMENTAL, INC.
4600 West 60th Avenue
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EXECUTIVE SUMMARY

In June 2004, the United States Forest Service (USFS) and the Bureau of Land Management (BLM) issued a Draft Environmental Impact Statement (DEIS) pertaining to the oil and gas industry's request to conduct coal bed methane (CBM) production on Federal lands within the northern rim of the San Juan Basin (SJB). One of the potential impacts identified in the DEIS is methane seepage at the outcrop of the Fruitland Formation (Kf), a phenomenon already observed in many areas of the western half (La Plata County) of the northern rim of the SJB.

The work is being conducted by LTE at the request of Elm Ridge Resources, Inc. (Elm Ridge) and Petrox Resources, Inc. (Petrox). Elm Ridge and Petrox are the majority lease holders in the eastern half of the northern rim of the SJB in Archuleta County, Colorado. This outcrop monitoring program has been conducted to meet the Conditions of Approval for the Pargin Mountain 10U #3 production well permit.

The project area includes approximately 18 miles of Kf outcrop starting from the La Plata County – Archuleta County boundary and extending southeast along the outcrop to the Southern Ute Indian Tribe (SUIT) Reservation Boundary near the confluence of the Piedra River and Stollsteimer Creek.

The purpose of the program is to identify methane seepage along the Kf outcrop and to monitor changes in seepage conditions over time and space. A similar program has been underway along the Kf outcrop in La Plata County since 1997. The overriding goal of the monitoring program is to ensure the safety of the public.

Results

The results of the monitoring effort indicate that methane seeps were not observed along the majority of the Kf outcrop. Methane was not detected in any of the permanent gas monitoring probes, nor was it detected in the shallow subsurface soil in the vicinity of the Candelaria Ranch and the Big Horn Schomburg #1 abandoned well site. Methane was detected in the shallow subsurface soil at a relatively low concentration (20 parts per million [ppm]) near a permanent gas monitoring probe line in Pole Gulch. Methane was also detected at a concentration of 2,500 ppm (5% of the lower explosive limit [LEL]) in an inactive water well adjacent to the Susie Candelaria residence. Methane gas was previously detected within the well casing of this water well during the 2005 field work at a concentration of 5,000 ppm (10% LEL).

A total of 25 natural springs in the project area have been identified by LTE or the BLM. Dissolved methane was detected in 10 of the 17 water samples collected from the field-verified springs in Archuleta County during the 2006 field activities. Of the 10 water samples reporting detectable concentrations of methane, seven of the water samples were collected from natural springs located on the Kf outcrop. The remaining three springs were not located on the Kf outcrop. The highest concentration of dissolved methane was reported in the water sample collected from Spring 3424 (0.023 milligrams per liter [mg/L]). This spring is used as a water supply for both residences on the Candelaria Ranch. Water samples collected from all natural springs indicated dissolved methane concentrations below the recommended Colorado Oil and Gas Conservation Commission (COGCC) threshold limit of 2 mg/L.

In general, the flow rates of natural springs observed in 2006 appear to be consistent with flow rates observed in 2005. However, it is difficult to compare flow rates between 2005 and 2006 because the 2005 field activities were conducted in late summer/fall while the 2006 field activities were conducted in spring/early summer.

With the exception of Squaw Creek, methane was not detected in any of the seven streams inspected by LTE during the 2006 field activities. LTE observed a relatively slow seep in a section of Squaw Creek on both sides of a culvert running beneath the Vance property driveway. Methane was detected in this area at a concentration of 1,000 ppm (2% LEL). After probing the stream bed, methane was detected at concentrations ranging as high as 17,500 ppm (35% LEL). A sample of the gas was collected on September 7, 2006 and submitted to Isotech Laboratory, Inc. (Isotech) for gas composition and isotopic analyses. Analytical results indicate that the gas seeping in Squaw Creek is near-surface microbial gas (biogenic).

Recommendations

LTE recommends the scheduled continued outcrop monitoring using infrared (IR) imagery acquisition and field verification of suspect areas on a three year interval.

LTE recommends annual monitoring using a soil gas survey of the area in close proximity to the Candelaria residences. The monitoring program should include water quality analysis of all natural springs on the Candelaria property.

LTE recommends abandonment of the inactive water well behind the Susie Candelaria residence. The well is currently seeping methane gas at a concentration of 2,500 ppm (5% LEL). The close proximity of the well to the residential structures increases the risk for the accumulation of explosive vapors in confined spaces.

LTE recommends annual monitoring of the Big Horn Schomburg #1 well site to assess the potential for methane seeps over time. Annual monitoring of the well is required by the Conditions of Approval for the Pargin Mountain 10U #3 permit.

LTE recommends annual water quality surveying of the natural springs located on the Kf outcrop in Archuleta County. Annual surveying of the natural springs will help evaluate future changes, especially changes in flow and dissolved methane concentrations, to surface water conditions over time.

LTE recommends annual inspections of the seven surface water drainages where the drainages cross the Kf outcrop to assess the potential for methane seeps over time. Annual inspections of the surface water drainages is required by the Conditions of Approval for the Pargin Mountain 10U #3 permit.

LTE recommends annual evaluation of data collected by the BLM from the four permanent gas monitoring probe lines located in Archuleta County.

Quick-Reference Summary

LTE has prepared a quick-reference summary of this monitoring effort organized by geographic location. The quick-reference summary is provided in the table presented below:

QUICK-REFERENCE SUMMARY

Site Location	Summary Notes
Beaver Creek	No methane detected. No visible methane seeps noted in surface water. Four natural springs noted in the vicinity of Beaver Creek (see Ramona Leonard Spring, Ramona Spring, Corrigan Spring, and Wood Spring below).
Upland Area Between Beaver Creek and Yellowjacket Pass	Two natural springs noted, both with detectable methane concentrations. (see Watson Well Spring and Crain Spring below). No methane detected in the subsurface soil around residence on Watson property.
Yellowjacket Pass / Squaw Creek	Visible methane seeps observed in surface water within Squaw Creek (Vance Property). Relatively low methane concentrations reported above surface water in seep area. No methane detected in subsurface soil adjacent to surface water seep area. Sample of gas in surface water collected and laboratory analyses indicate the origin of the gas is biogenic (near-surface microbial swamp gas). One natural spring noted in Squaw Creek drainage, two natural springs noted north of Squaw Creek and Hwy 160 (see Thick Spring, Townsend Spring, and Walt Spring #1 below).
Little Squaw Creek	No methane detected. No visible methane seeps observed in surface water.
Pole Gulch	Methane detected at relatively low concentration (20 ppm) in subsurface soil near permanent gas monitoring probe line. No visible methane seeps observed in surface water. No methane detected in permanent gas monitoring probes. Two natural springs located in drainage, one with detectable dissolved methane. One natural spring noted SE of Pole Gulch with detectable methane (see Big Hole Spring, Willow Spring, and Section 14 Spring [Reich] below).
Peterson Gulch	No visible methane seeps observed in surface water. No methane detected in subsurface soil. No methane detected in the two permanent gas monitoring probe lines. Two natural springs located in meadow, both with detectable methane (see NW John Grub and SE John Grub below).

QUICK-REFERENCE SUMMARY (continued)

Candelaria Ranch	No methane detected in subsurface soil on property. Methane detected at concentration of 2,500 ppm in inactive water well behind residence. Well drilled by Candelaria, date unknown. No methane detected in crawlspace of residences. Seven natural springs noted on Candelaria property, two are dry, four with detectable methane (see NW John Grub Spring, SE John Grub Spring, Section 10U Spring, Candelaria A Spring, Candelaria B Spring, Spring 3424 and Spring 1212 below).
Piedra River	No visible methane seeps observed in surface water.
Stollsteimer Creek	No visible methane seeps observed in surface water. One natural spring noted with detectable methane concentration (see Vaughn Spring below).
Cabezon Canyon	No methane detected in subsurface soil. One natural spring noted, appears to be water supply for residence. Unable to collect sample (see Miser Spring and Pipeline below).
Big Horn Schomburg #1	Abandoned well drilled and plugged in 1961. No methane detected in subsurface soil near abandoned well. Permanent monitoring probe installed in 2005, no methane detected in 2005 and 2006 monitoring events.

NATURAL SPRINGS QUICK-REFERENCE SUMMARY

Spring ID	Location	Summary Notes
Ramona Leonard Spring (Mona)	NESW, Sec 13, T35N, R6W	No methane detected.
Ramona Spring	NESW, Sec 13, T35N, R6W	Unable to locate / possibly dry.
Wood Spring	SWSE, Sec 13, T35N, R6W	Unable to locate / possibly dry.
Corrigan Spring	SWSE, Sec 13, T35N, R6W	No methane detected.
Watson Well Spring	SENW, Sec 19, T35N, R5W	Methane detected at concentration of 0.016 mg/L, below COGCC threshold of 2.0 mg/L. Spring is “hand-dug” well.

NATURAL SPRINGS QUICK-REFERENCE SUMMARY (continued)

Spring ID	Location	Summary Notes
Crain Spring	SWSW, Sec 20, T35N, R5W	Methane detected at concentration of 0.0067 mg/L, below COGCC threshold of 2.0 mg/L. Spring is tributary spring to Beaver Creek.
Seep Spring	NESW, Sec 04, T34N, R5W	Unable to locate / possibly dry.
Walt Spring #1	SESW, Sec 04, T34N, R5W	No methane detected.
Townsend Spring	SESW, Sec 04, T34N, R5W	Not sampled, spring was dry.
Thick Spring	SESE, Sec 05, T34N, R5W	No methane detected.
Vance Spring #1	NESW, Sec 08, T34N, R5W	Methane detected at concentration of 0.022 mg/L, below COGCC threshold of 2.0 mg/L. Spring is not located on Fruitland outcrop.
Vance Meadow Spring	SWNE, Sec 08, T34N, R5W	Methane detected at concentration of 0.011 mg/L, below COGCC threshold of 2.0 mg/L. Spring is not located on Fruitland outcrop.
Big Hole Spring	NWNW, Sec 14, T34N, R5W	Methane detected at concentration of 0.001 mg/L, below COGCC threshold of 2.0 mg/L. Spring is located in Pole Gulch.
Willow Spring	NWNW, Sec 14, T34N, R5W	No methane detected.
Section 14 Spring (Reich)	SWNE, Sec 14, T34N, R5W	No methane detected during 2006 natural spring sampling. Methane detected in 2005 at concentration of 0.0006 mg/L, below COGCC threshold of 2.0 mg/L.
Waypoint 0003	NWSE, Sec 13, T34N, R5W	Unable to locate / possibly dry.
NW John Grub Spring	NWNE, Sec 11U, T34N, R5W	Methane detected at concentration of 0.0016 mg/L, below COGCC threshold of 2.0 mg/L. Spring is located in Peterson Gulch.

NATURAL SPRINGS QUICK-REFERENCE SUMMARY (continued)

Spring ID	Location	Summary Notes
SE John Grub Spring	SENE, Sec 11U, T34N, R5W	Methane detected at concentration of 0.0025 mg/L, below COGCC threshold of 2.0 mg/L. Spring is located in Peterson Gulch.
Section 10U Spring	SWSE, Sec 10U, T34N, R5W	Methane detected at concentration of 0.0062 mg/L, below COGCC threshold of 2.0 mg/L. Methane not detected during 2005 natural spring sampling. Spring is not located on Fruitland outcrop.
Spring 1212	SWSW, Sec 14U, T34N, R5W	No methane detected during 2006 natural spring sampling. Methane detected during 2005 at concentration of 0.0005 mg/L. Spring is water supply to Candelaria homestead property, not currently in use.
Spring 3424	SESE, Sec 13U, T34N, R5W	Methane detected at concentration of 0.023 mg/L, below COGCC threshold of 2.0 mg/L. Methane concentration increased from 0.0017 mg/L in 2005. Spring is water supply to Candelaria residences.
Candelaria A Spring	NWNE, Sec 24U, T34N, R5W	Not sampled, spring was dry.
Candelaria B Spring	SWNE, Sec 24U, T34N, R5W	Not sampled, spring was dry.
Vaughn Spring	SESE, Sec 25, T34N, R5W	Methane detected at concentration of 0.0037 mg/L, below COGCC threshold of 2.0 mg/L. Spring is tributary to Stollsteimer Creek. Not sampled in 2005 because spring was submerged under creek.
Miser Spring and Pipeline	NESW, Sec 28, T34N, R4W	Unable to sample. Spring is located in Cabezon Canyon and is a “hand-dug” water supply well for residence. Well infrastructure prohibited sampling during field activities.

Other Quick-Reference Information

- Initial reconnaissance performed in September 2004, no methane detected.
- Infrared aerial imagery collected June 8, 2005.
- First field verification activities of infrared (IR) imagery performed September 14 through 22, 2005, no methane detected.
- Dissolved methane detected at relatively low concentrations in four natural springs in Archuleta County during 2005 field activities.
- Methane detected at relatively low concentration (20 ppm) in Pole Gulch during 2006 field activities.
- Inspection of Candelaria property and Schomburg #1 abandoned well site conducted in 2005 and 2006, no methane detected with exception of relatively low methane concentration in inactive water well behind Susie Candelaria Residence. Next inspection of Candelaria property and Schomburg #1 well scheduled for May 2007.
- Relatively low concentrations of methane observed in surface water within Squaw Creek during 2006 surface water inspections. Analytical results of gas sample collected from Squaw Creek indicate that the gas is near-surface microbial gas (biogenic). Next surface water inspection scheduled for May 2007.
- Methane detected in 10 of 17 water samples collected from natural springs in 2006. Concentrations detected were below COGCC threshold value of 2 mg/L. Next natural spring sampling event scheduled for May 2007.
- Infrared imagery capture and follow-up field verification scheduled for Fall 2008.

SECTION 1.0

INTRODUCTION

In June 2004, the United States Forest Service (USFS) and the Bureau of Land Management (BLM) issued a Draft Environmental Impact Statement (DEIS) pertaining to the oil and gas industry's request to conduct coal bed methane (CBM) production on Federal lands within the northern rim of the San Juan Basin (SJB). One of the potential impacts identified in the DEIS is methane seepage at the outcrop of the Fruitland Formation (Kf), a phenomenon already observed in the western half of the northern rim in La Plata County (*Fruitland Outcrop Monitoring Report, March 2006*). The DEIS recommends surveys of the Kf outcrop to monitor the potential for methane seepage and document changes over time and space.

This Fruitland Formation Outcrop Monitoring Report has been prepared at the request of Elm Ridge Resources, Inc. (Elm Ridge) and Petrox Resources, Inc. (Petrox). Elm Ridge and Petrox are the majority lease holders in the eastern half of the northern rim of the SJB in Archuleta County, Colorado.

1.1 PROJECT AREA DESCRIPTION

The project area includes approximately 18 miles of Kf outcrop starting on the west end at the La Plata County – Archuleta County boundary near Beaver Creek and extending southeast along the Kf outcrop to the Southern Ute Indian Tribe (SUIT) Reservation Boundary near the confluence of the Piedra River and Stollsteimer Creek. Figure 1A illustrates the project area. A detailed project area map is included as Figure 1B.

1.2 BACKGROUND INFORMATION

Since 1997, LT Environmental, Inc. (LTE) has conducted methane seep monitoring on the Kf outcrop in La Plata County, Colorado. The monitoring program in Archuleta County has been modeled after work already completed in the western half of the northern rim of the SJB.

As stated in the DEIS, methane seeps have been observed and reported in the SJB, particularly from the outcrop of the coal beds in the Fruitland Formation since the late 1800s. The report also states that existing data suggests that the intensity and areal extent of known seeps has increased during the last 20 years and that new seeps developed after CBM development began. Over the past nine years, drought conditions have prevailed in the SJB, which may affect methane seepage. While there is conflicting data regarding the changes in gas seepage over time and the cause of the seepage, seep activity can be monitored through detailed mapping, subsurface methane measurements, and reconnaissance across the outcrop looking for areas of stressed and dead vegetation.

In September 2004, LTE conducted an initial reconnaissance of the Kf in Archuleta County. The scope of the initial reconnaissance event included an aerial reconnaissance of the entire outcrop followed by field inspection of suspect areas. "Suspect areas" are areas of stressed and dead vegetation on the Kf outcrop and areas where surface water bodies, namely rivers, transect the Kf outcrop (i.e. the Piedra River south of US Highway 160). No methane seep activity was

noted during the initial reconnaissance. Areas of observed dead and stressed vegetation appeared to be the result of the drought conditions and/or pine beetle infestation.

In September 2005, LTE conducted a second reconnaissance of the Kf outcrop in Archuleta County. The scope of the second reconnaissance included aerial imagery acquisition using an infrared (IR) camera. LTE used the IR images to identify "suspect areas" on the Kf outcrop. LTE visited each identified suspect area and collected shallow subsurface gas concentration measurements and inspected the vegetation to identify potential causes of mortality. LTE also performed a survey of natural springs located on the outcrop in order to provide a baseline of surface water conditions on the outcrop. Results of the 2005 monitoring event indicated that no methane was detected in the shallow subsurface soil in Archuleta County. However, relatively low concentrations of dissolved methane were detected in several of the natural springs sampled in the project area during the 2005 monitoring event.

1.3 SCOPE OF WORK

The scope of work used in the monitoring program included the following: obtaining access to various private properties, conducting soil gas surveys on the Candelaria Ranch and the Big Horn Schomburg #1 abandoned well site, sampling natural springs identified by the BLM along with resampling natural springs identified by LTE during the 2005 survey, conducting surface water inspections of seven drainages along the Kf outcrop, and collecting subsurface gas measurements from four permanent gas monitoring probe lines transecting the Kf outcrop in Archuleta County.

The methodologies used in implementing the aforementioned scope of work are described in detail in Section 2.0.

1.4 PROPERTY ACCESS

Prior to the September 2005 field activities, LTE acquired land ownership information from the Archuleta County Assessor's Office. LTE used a Geographic Information System (GIS) to cross-reference the parcel data and the Kf outcrop to select those parcels located on the Kf outcrop. LTE attempted to contact the private landowners along the Kf outcrop in Archuleta County. Much of the land covering the Kf outcrop is public forest lands, therefore, it was not necessary to obtain permission to access those parcels. The parcels of land to which LTE was not granted access are presented in Table 1 and shown on Figure 2.

1.5 OBJECTIVES

The objective of this monitoring event was to establish baseline conditions with regard to methane seep activity and to document any observed changes in methane seep activity within the previously studied portions of the project area. The long term monitoring program will provide additional data to demonstrate the effects, if any, from methane seepage. The overriding goal of the monitoring program is to ensure the safety of the public.

The scope of work was developed to provide the most efficient means by which to characterize the general condition of seep activity, if any, along the entire project area and to inspect those

areas with the greatest potential for seep activity based on characteristics identified in methane seeps along the Kf outcrop in La Plata County.

The objective of the natural spring survey is to provide a baseline of surface water conditions on the Kf outcrop, particularly geographic location and elevation, discharge rates, and water quality. These data may prove useful in addressing potential future landowner issues regarding surface water quality and quantity. The data may also be useful in various aspects of the Kf reservoir engineering models.

The objective of the surface water inspections is also to provide a baseline of surface water conditions on the Kf outcrop, particularly geographic location of methane seeps in surface water bodies.

1.6 ORGANIZATION OF REPORT

This report is organized into five sections including this introduction, which presents the objective of the study and discusses background information related to the project. The field methods used to complete the scope of work are described in Section 2.0. Section 3.0 presents the results of the monitoring program. The conclusions and recommendations are summarized in Section 4.0. Figures, tables, and appendices follow the text in separate sections. Pertinent photographs have been included in the text.

SECTION 2.0

FIELD METHODS

This section describes the approach and procedures used to conduct the soil gas surveys, the natural spring survey, surface water drainage inspections, and gas measurement collection in permanent gas monitoring probes. Photographic documentation of the field activities is included throughout the report.

2.1 SOIL GAS SURVEYS

2.1.1 Candelaria Ranch Residences

LTE was tasked to conduct a soil gas survey around the two residential structures located on the Candelaria Ranch in Section 24 U, Township 35 North (T35N), Range 5 West (R5W). These structures are located on the Kf outcrop. A soil gas survey was previously conducted in this area during the September 2005 field activities. The most recent survey included the advancement of temporary soil gas probes on each side of the structure, and measurement of methane concentration in the crawlspace beneath the structures and in the former water well located behind the Susie Candelaria residence.

2.1.2 Big Horn Schomburg #1

LTE conducted a soil gas survey in the vicinity of the Schomburg #1 well. This well has been abandoned since 1961. LTE previously conducted a soil gas survey and installed a permanent gas monitoring probe in the vicinity of the abandoned well in September 2005. The most recent survey included the advancement of seven temporary soil gas probes and the collection of a subsurface gas measurement from the permanent gas monitoring probe. The concentration of methane, hydrogen sulfide (H_2S), carbon monoxide (CO), and oxygen (O_2) was measured in each probe hole and in the permanent gas monitoring probe. The location was mapped using the Global Positioning Position (GPS).

2.1.3 Features Observed

Features mapped during the 2006 soil gas surveys include subsurface methane measurements, an abandoned production well, an inactive water well, corners of structures, and a permanent gas monitoring probe. The mapping of stressed/dead vegetation areas was not included as part of the scope of work for this monitoring event. The mapping results are presented in figures, which are contained in a separate section following the text. The subsurface methane measurement location symbols are graduated based on concentration measured.

2.1.4 Use of GPS

LTE used a Trimble GeoXT® GPS with a real-time correction processor to map each feature. Specifications of the unit are included in Appendix A. The methane measurements and other relevant field notes were stored as attributes in the GPS unit with the associated GPS mapped

positions. The GPS data were later downloaded and grouped according to the type of feature, as points, lines, or polygons.

The data were collected with GPS in the World Geodetic System 1984 (WGS 84) and projected in Universal Transverse Mercator (UTM) Zone 13 North, North American Datum 1983 (NAD 83) for use in an ArcView® project file. On average, 25 GPS log points were collected for each point feature in order to obtain more accurate positioning.

2.1.5 Gas Measurement Collection

A slide hammer was used to advance a 3/8-inch diameter steel rod (probe) to a depth of approximately 36 inches during the field investigation. Some probe holes were shallower than 36 inches due to the density of the ground surface. One-quarter inch diameter polyethylene tubing perforated at the bottom six inches was inserted into each probe hole to collect subsurface gas measurements. The Mine Safety Appliances (MSA) GasPort® field meter was utilized to measure the concentration of methane, H_2S, CO, and O_2 in each probe hole.

The MSA GasPort® is capable of detecting methane in concentrations from zero parts per million (ppm) to 100 percent (%) methane. Specifications for the unit are included in Appendix A. The field meter was calibrated to methane, H_2S, and CO each morning and again at midday to ensure the equipment was working properly.

2.2 NATURAL SPRING SURVEY

Prior to LTE's initial natural spring survey in September 2005, LTE conducted a literature search to identify natural springs that had been previously mapped. LTE interviewed regulatory agencies including the BLM, USFS, Colorado Division of Wildlife (CDOW), and the Office of the State Engineer (SEO) to identify the locations of any known natural springs on the Kf outcrop.

LTE also prepared property boundary maps using aerial photography as a base map layer and the ownership parcel data from the Archuleta County Assessor's office. The maps were sent to all the landowners whose property intersects the Kf outcrop. A letter requesting information about natural springs on the property was included. Landowners were asked to draw in the location of natural springs on their property and return the maps to LTE. LTE compiled the data and digitized the locations into the GIS. As a result, 12 potential natural springs were identified on the Kf outcrop in Archuleta County prior to the 2005 field activities. LTE was able to field verify and collect water samples from seven of the 12 springs in September 2005.

As part of the DEIS, the BLM conducted further research of natural springs in Archuleta County in 2005 and 2006. The BLM identified a total of 18 natural springs on the Kf outcrop in Archuleta County that were not identified during LTE's initial natural spring survey in 2005. A total of 25 natural springs were identified by LTE or the BLM prior to the 2006 field activities. The locations of the natural springs identified by the BLM or LTE are shown on Figure 3 and in detailed on Figure 4.

During the 2006 field-verification activities, LTE inspected the natural springs, located the position and elevation with the GPS, and collected water quality measurements of pH, total

dissolved solids (TDS), conductivity, oxidation-reduction potential (ORP), and temperature. Water samples from each active spring identified were also collected and submitted to an analytical laboratory. The samples were delivered to Summit Scientific of Golden, Colorado for analysis of dissolved methane in water using method RSK-175.

Spring flow rate estimates were measured by capturing surface water into a graduated container. The time to fill the container was timed using a stop-watch. The flow rate was reported in gallons per minute and recorded in the GPS. A subsurface soil gas measurement was also collected in the vicinity of each natural spring encountered.

2.3 SURFACE WATER DRAINAGE INSPECTION

LTE visited the following areas where the surface drainage transects the Kf outcrop:

- Beaver Creek;
- Squaw Creek;
- Little Squaw Creek;
- Pole Gulch;
- Peterson Gulch;
- Piedra River; and
- Stollsteimer Creek.

LTE walked the drainages on foot and used the field methane meter with a funnel attached to tubing to detect the presence of methane directly above the surface water body per the requirements of the Conditions of Approval for the Pargin Mountain 10U #3 Application for Permit to Drill (APD). Each surface water methane concentration and measurement location was recorded using GPS. Where methane was detected directly above surface water, LTE advanced temporary soil probes on the adjacent stream banks to collect methane measurements from the shallow subsurface. LTE collected a gas sample from the seep in the surface water on September 7, 2006 and submitted the sample to Isotech Laboratories, Inc. (Isotech) of Champaign, Illinois for analyses of isotopes and gas composition.

2.4 BLM PERMANENT MONITORING PROBES

The BLM has been collecting subsurface gas measurements from four permanent monitoring probe transects running perpendicular to the Kf outcrop in Archuleta County. Two of the probe lines are located in Peterson Gulch, one probe line is located in Pole Gulch, and one probe line is located between Peterson Gulch and Pole Gulch. During a recent Gas and Oil Regulatory Team (GORT) meeting held in Durango, Colorado (CO), the BLM stated that relatively low concentrations of methane had been detected in the probes. LTE collected subsurface methane measurements from the four probe lines as part of the 2006 monitoring program in order to confirm or deny the presence of methane gas in the permanent gas monitoring probes.

2.5 LIMITATIONS

Generally, readings collected with the GPS unit can be located within one-meter radius of accuracy. But the type of terrain that exists along the Kf outcrop can present difficulties for both the GPS unit and collection of subsurface methane samples with the slide hammer. North-facing slopes and heavily wooded areas are difficult to obtain accurate positioning by the GPS, therefore the GPS accuracy decreases. Satellite signals are frequently bounced among the trees or lost completely. When satellite signals are limited, positioning accuracy decreases. In some cases, the GPS unit can not obtain a signal. In these situations, LTE field personnel took subsurface methane measurements and noted the results on the maps.

Soil probing in consolidated materials along the outcrop was limited. LTE used the slide hammer to probe to a maximum depth of 36 inches below ground surface (bgs). In some cases, probing depths of 18 inches bgs were laborious to achieve. If refusal occurred, measurements were taken at the depth bored. All probe holes were advanced to a depth ranging from 6 inches to 36 inches bgs depending on the type of surface cover present.

The sampling of natural springs in Archuleta County was limited due to regional drought conditions over the last nine years. When dry springs were encountered, LTE recorded the location of the spring and noted the absence of water.

Finally, LTE was restricted by property owners from accessing several areas within the project area. These parcels of land are presented in Table 1 and shown on Figure 2.

SECTION 3.0

MONITORING RESULTS

This section describes the results of the field activities conducted within the project area during the period from May 24, 2006 through June 10, 2006.

3.1 SOIL GAS SURVEYS

3.1.1 Candelaria Ranch Residences

Per the requirements of the Conditions of Approval for the APD, LTE conducted a soil gas survey in the vicinity of the Candelaria residences. An initial soil gas survey was conducted on the Candelaria Ranch property in September 2005. During the most recent survey, LTE collected soil gas measurements from the perimeter of the two residences and inspected the crawlspace/basement areas beneath the two residences. No methane was detected beneath either of the residences or in the shallow subsurface soil around the perimeter of the structures.

Susie Candelaria Residence.

LTE collected a subsurface methane measurement from the inactive water well location behind the Susie Candelaria residence. Construction information obtained from Gilbert Candelaria suggests that the well is most likely screened in the Kf. In September 2005, methane was detected in the well casing of this water well at a concentration of 5,000 ppm (10% LEL). During the most recent monitoring event, methane was detected in this water well at a concentration of 2,500 ppm (5% LEL). No methane was noted in the soil surrounding the well during either monitoring event. A detailed map of the soil gas survey performed at the Candelaria Ranch is presented as Figure 5.

3.1.2 Big Horn Schomburg #1

LTE conducted a soil gas survey at the Big Horn Schomburg #1 abandoned production well located in the southeast quarter, southeast quarter, Section 14U, T34N, R5W. The well was drilled and abandoned in 1961 and drilling information indicates that the Kf is close to or comes to the ground surface at this location. Geologic maps from the DEIS indicate that the well is located in the transition zone between the Kf and the Kirtland Formation (Kk). LTE conducted an initial soil gas survey and installed a permanent gas monitoring probe in the vicinity of the abandoned well in September 2005.

Schomburg #1 abandoned well marker and permanent gas monitoring probe.

LTE conducted the most recent survey on May 26, 2006. LTE advanced seven temporary soil probes in the area to determine the presence or absence of methane. No methane was detected at any of the sample locations. In addition, LTE collected a gas concentration measurement from the permanent gas monitoring probe adjacent to the abandoned well marker. No methane was detected in the probe. Figure 6 illustrates the area surveyed at the Schomburg #1 well site.

3.2 NATURAL SPRING SURVEY

During LTE's literature and interview research, a total of 25 potential natural springs were identified on the Kf outcrop in Archuleta County. All 25 natural springs identified through research were located in accessible areas. However, LTE was only able to field-verify 21 of the 25 natural springs. LTE was unable to locate the Wood Spring, Seep Spring, Waypoint 0003 Spring, and Ramona Spring. It is possible that these springs were dry as a result of drought conditions in the region. The Townsend Spring, the Candelaria A Spring, and the Candelaria B spring were field-verified by LTE, however, the springs were dry during the 2006 field activities. The Miser Spring and Pipeline was field-verified by LTE and appears to be a “hand-dug” well used as a water supply for the residence located nearby. The spring was inaccessible due to infrastructure around the spring. The locations of the natural springs are presented on Figure 3 and Figure 4.

Special attention was focused on Spring 3424. This spring is located north of the Candelaria residences. The spring begins to channelize approximately 900 feet north of the Susie Candelaria residence (northern residence). A cistern is located along the main channel and collects water from the spring. Water is then gravity fed to the well pump house approximately 20 feet north of the residence. The water enters a pressure tank system and water softener and is then piped into both of the Candelaria residences. By the time the water passes by the northern residence approximately 30 feet west of the building, flow in the channel is greater than 20 gallons per minute (gpm). Figure 5 contains a detailed view of the Candelaria Ranch area.

A total of 17 water samples from natural springs were collected by LTE. A total of 10 of the 17 water samples analyzed for dissolved methane concentration contained detectable concentrations of methane. Dissolved methane concentrations detected ranged from the detection limit of 0.001 milligrams per liter (mg/L), which was detected in Vance Meadow Spring (not located on the Kf outcrop) to 0.023 mg/L, which was detected in Spring 3424 (located on the Kf outcrop). Water samples from seven natural springs located on the Kf outcrop contained detectable concentrations of dissolved methane. These seven springs include Watson Well Spring, Crain Spring, Big Hole Spring, Vaughn Spring, Spring 3424, NW John Grub Spring, and SE John Grub Spring. The three springs located off the Kf outcrop, that reported dissolved methane, include Vance Spring #1, Vance Meadow Spring, and Section 10U Spring. The water sample collected from Vance Spring #1 reported a dissolved methane concentration of 0.022 mg/L.

The Colorado Oil and Gas Conservation Commission (COGCC) currently uses 2 mg/L as the threshold limit for methane in water systems. The COGCC recommends that water systems containing dissolved methane concentrations above 2 mg/L has an increased risk to desorb from the water and create potentially explosive conditions in confined spaces. Water samples collected from all natural springs indicated dissolved methane concentrations were below 2 mg/L.

Field measurements for temperature, pH, conductivity, ORP, TDS, and flow as well as the reported methane concentration from the springs identified on the Kf outcrop in Archuleta County are summarized in Table 2.

When comparing the dissolved methane concentrations in the seven natural springs sampled both in 2005 and 2006, data indicate that dissolved methane concentrations are higher in three of the water samples collected (Spring 3424, Section 10U Spring, and SE John Grub Spring) and lower in one of the water samples collected (NW John Grub Spring). The dissolved methane concentration in the water sample collected from Ramona Leonard Spring was below the laboratory detection limit during both monitoring events. It is not possible to make a comparison of the other two samples (Spring 1212 and Section 14 Spring) because the methane concentrations reported in 2005 are lower than the detection limit provided in 2006.

When comparing the flow rates of the seven natural springs that were sampled in 2005 and 2006, it appears that the majority of the natural springs indicated similar flows during the two years. However, LTE personnel noted that the soil in the vicinity of NW John Grub Spring and SE John Grub Spring appeared to be less saturated in 2006 than in 2005, though flow measurements were consistent. Additionally, the Vaughn Spring was not sampled during 2005 because it was beneath the surface water of Stollsteimer Creek. During the 2006 field activities, the Vaughn

Spring was observed in the embankment above Stollsteimer Creek. Due to the fluctuation in Stollsteimer Creek, it is not possible to make a comparison of the flow of the Vaughn Spring in 2005 and 2006. In general, it is difficult to compare flow rates of natural springs in 2005 and 2006 because the 2005 field activities were conducted in late summer/fall while the 2006 field activities were conducted in spring/early summer.

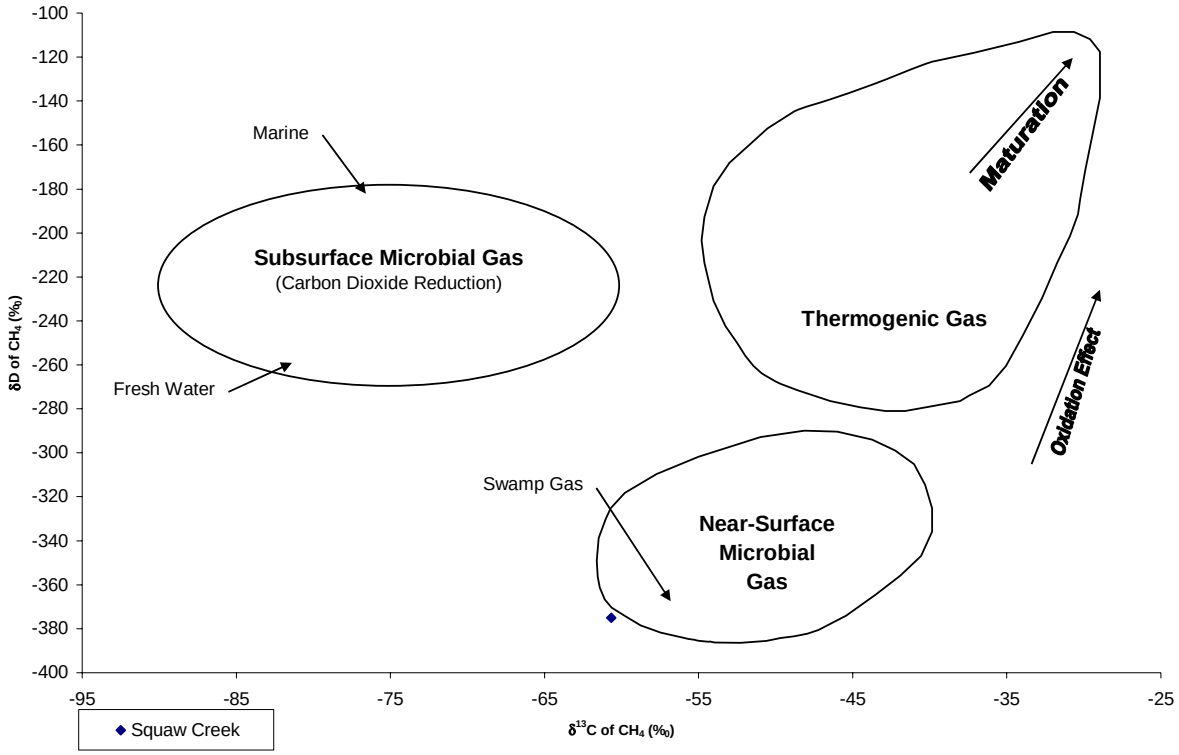
3.3 SURFACE WATER DRAINAGE INSPECTION

LTE conducted surface water drainage inspections on seven streams transecting the Kf outcrop in Archuleta County. Methane was detected above the surface water in one (Squaw Creek) of the seven streams inspected. LTE observed a relatively slow seep in a section of Squaw Creek on both sides of a culvert running beneath the Vance property driveway. In general, the stream in this area appeared to contain relatively stagnant water with a muddy, organic-rich stream bed. A funnel was placed over the seep area and a methane concentration of 1,000 ppm (2% LEL) was reported. A stick was used to probe the stream bed in this area and a funnel was place over the surface water to collect escaping gas from the disturbed portion of the stream bed. Methane was detected using this method at concentrations ranging from 3,500 ppm (7% LEL) to 17,500 ppm (35% LEL).

Area of methane seepage in Squaw Creek.

LTE advanced three temporary soil probes on the stream banks adjacent to the seep area to determine the presence or absence of methane gas in the shallow subsurface soil. No methane was detected in this area.

Analytical results of the gas sample collected from Squaw Creek indicate that the gas is near-surface microbial gas (swamp gas) of biogenic origin. Table 3 presents the results of the gas composition and isotopic analyses. The laboratory analytical data is included in Appendix B. The following figure was used to determine the origin of the gas.



3.4 BLM PERMANENT MONITORING PROBES

LTE collected subsurface gas measurements from four permanent gas monitoring probe lines transecting the Kf outcrop in Archuleta County. Methane was not detected in any of the permanent monitoring probes investigated by LTE during the 2006 field activities. LTE advanced two temporary soil probes to collect subsurface methane measurements in the vicinity of the Pole Gulch probe line. Methane was detected in one of the temporary soil probes at a relatively low concentration (20 ppm) near a coal seam.

BLM permanent monitoring probe.

SECTION 4.0

CONCLUSIONS AND RECOMMENDATIONS

4.1 SOIL GAS SURVEYS

4.1.1 Candelaria Ranch Residences

Methane was not detected in the shallow subsurface soil in the vicinity of the Candelaria Ranch residences during the 2005 and 2006 field activities. However, methane was detected in the former water well behind the Susie Candelaria residence during both the 2005 and 2006 field activities. LTE will continue the monitoring of the Candelaria Ranch as required by the Conditions of Approval for the Pargin Mountain 10U #3 APD.

As stated in the January 2006 monitoring report, the presence of an inactive water well with seeping methane gas in close proximity to the Candelaria residence poses a potential threat to the residents. The water well is likely screened in the Kf and is acting as a conduit for free gas in the formation. The close proximity of this well to the structure increases the potential for seeping gas to threaten the structure. LTE recommends the abandonment of this well in order to eliminate the potential for the well to act as a conduit for methane seepage.

4.1.2 Big Horn Schomburg #1

Methane has not been detected in the shallow subsurface soil in the vicinity of the Schomburg #1 well site during the 2005 and 2006 field activities. It does not appear that the abandoned well is acting as a conduit for the seepage of methane gas at this time. LTE recommends the continued annual monitoring of the abandoned well site per the requirement of the Conditions of Approval for the Pargin Mountain 10U #3 APD.

4.2 NATURAL SPRING SURVEY

Data collected during the natural spring survey indicate the presence of dissolved methane in 10 of the 17 natural springs sampled. A total of seven of the 10 natural springs containing detectable concentrations of dissolved methane are located on the Kf outcrop and three of the 10 springs are located off the Kf outcrop. The greatest concentration of methane occurred in the water sample collected from Spring 3424 (0.023 mg/L). This spring is located on the Kf outcrop and is used as a water supply for both residences on the Candelaria Ranch. Dissolved methane was detected at a similar concentration (0.022 mg/L) in the water sample collected from Vance Spring #1. This spring is not located on the Kf outcrop.

The methane concentrations detected in the springs are very low. In fact, there is insufficient gas in the water to conduct isotopic analyses to determine if the gas is biogenic or thermogenic. The COGCC has established a methane concentration of 2.0 mg/L as the threshold limit for which there is an increased risk of creating a hazardous atmosphere in a water well or residential water piping system. The methane concentrations currently detected in the natural springs sampled are below the 2.0 mg/L threshold limit.

LTE recommends continued monitoring of the springs on an annual basis. The Conditions of Approval for the Pargin Mountain 10U #3 APD also request annual monitoring of the natural springs.

4.3 SURFACE WATER DRAINAGE INSPECTIONS

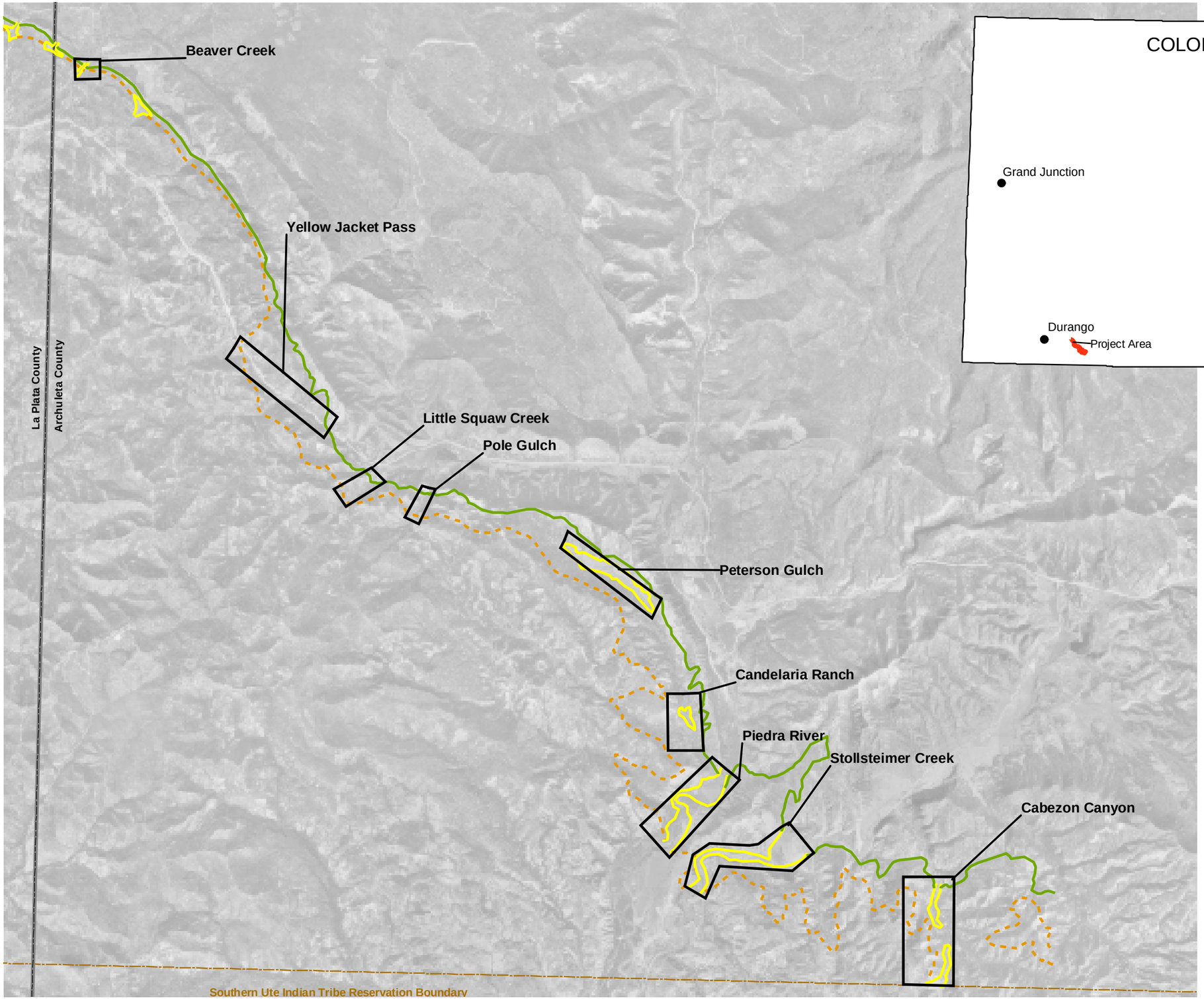
With the exception of Squaw Creek, methane was not detected along any of the seven streams inspected by LTE during the 2006 field activities. LTE observed a relatively slow seep in a section of Squaw Creek on both sides of a culvert running beneath the Vance property driveway. Methane gas was detected directly above the water in this area at a concentration of 1,000 ppm (2% LEL). After disturbing the stream bed, methane was detected at concentrations ranging as high as 17,500 ppm (35% LEL). LTE advance three temporary soil probes on the stream banks adjacent to the seep area to determine the presence or absence of methane gas in the shallow subsurface. No methane was detected in this area. Results of a gas sample collected from Squaw Creek indicate that the gas is near-surface microbial gas (swamp gas) of biogenic origin.

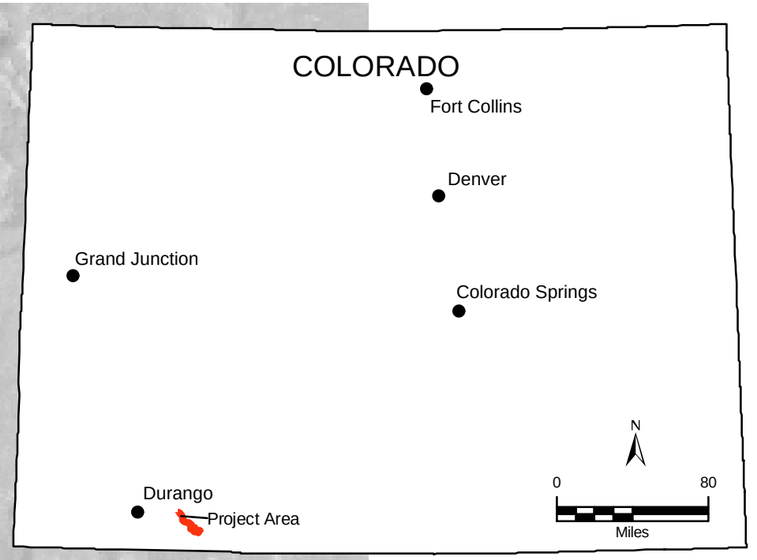
LTE recommends the annual monitoring of the seven surface water bodies transecting the Kf in Archuleta County per the requirement of the Conditions of Approval for the Pargin Mountain 10U #3.

4.4 PERMANENT GAS MONITORING PROBES

Methane was not detected in any of the permanent gas monitoring probes inspected during the 2006 field activities. Methane was detected at a relatively low concentration (20 ppm) in a temporary soil probe advanced next to the Pole Gulch permanent monitoring probe line. LTE recommends the collection of future and historic permanent monitoring probe data gathered by the BLM in order to evaluate potential methane seepage along the Kf outcrop in Archuleta County.

FIGURES





Legend

Geology

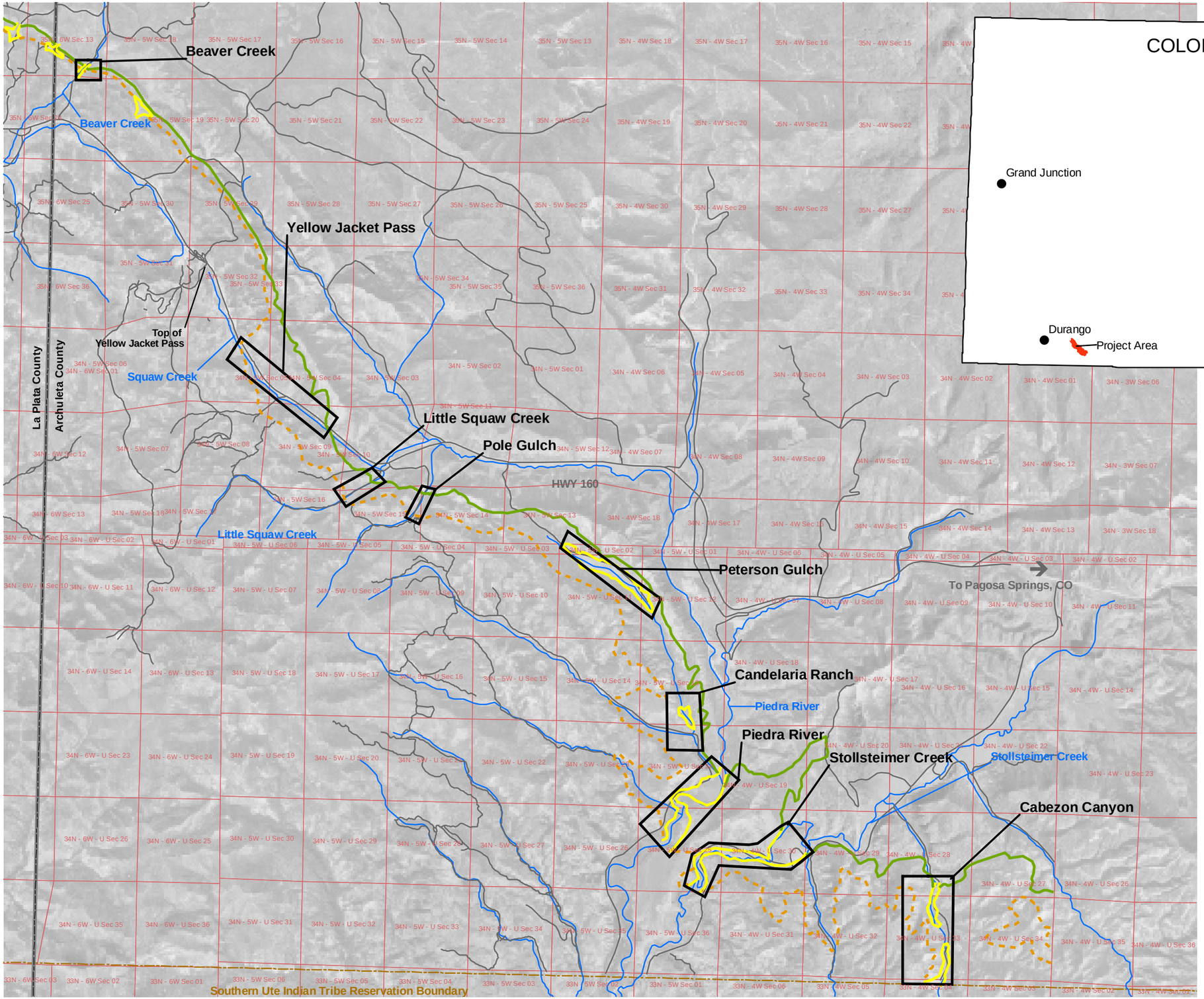
- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Area of Interest
- Southern Ute Indian Tribe Reservation Boundary
- County Boundary

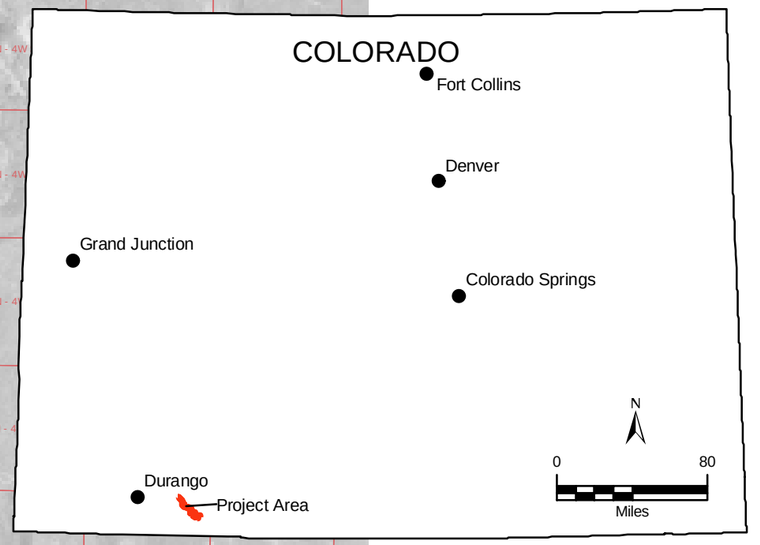
0 — 12,400 Feet

N

FIGURE 1A
PROJECT AREA MAP - DETAIL
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

0 — 12,400 Feet

N

FIGURE 1B
PROJECT AREA MAP - DETAIL
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

Beaver Creek

Squaw Creek

Little
Squaw Creek

HWY 160

To Pagosa Springs, CO

Piedra River

Stollsteimer
Creek

La Plata County

Archuleta County

3
5
6
28
29
42
34
30
19
20
15
18
14
21
25
24
23
26
27

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.

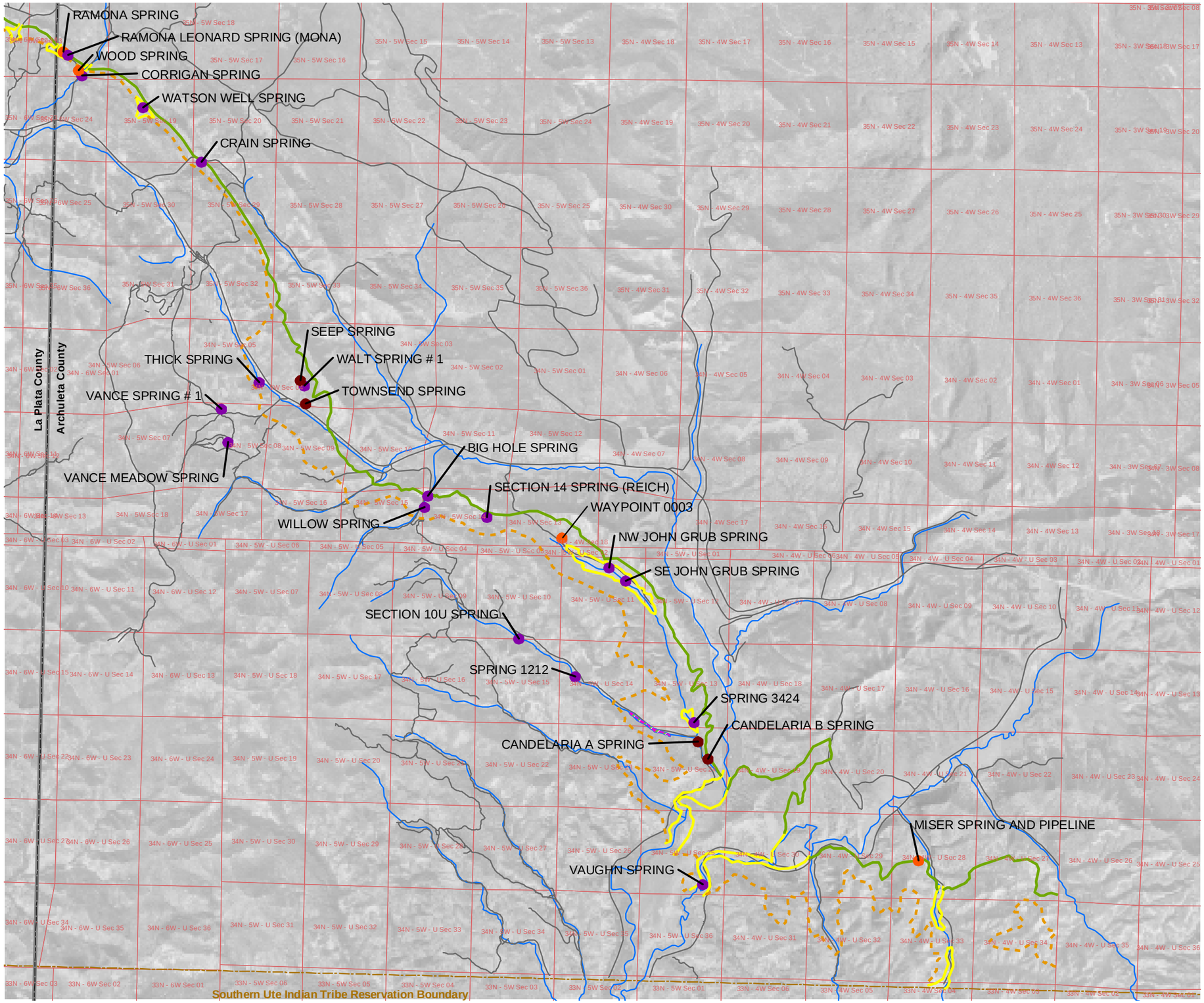
Number listed on parcel refers to ownership listing in Table 1.

0 12,400
Feet

N

FIGURE 2
PROPERTY ACCESS MAP
2006 OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

NATURAL SPRING LOCATION

- SAMPLED
- NOT SAMPLED
- DRY
- 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)
- Wetland Area, No Channel Flow
- Township Range Section
- Southern Ute Indian Tribe Reservation Boundary
- County Boundary

0 12,400
Feet

N

FIGURE 3
NATURAL SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

35N - 6W Sec 14

35N - 6W Sec 13

RAMONA SPRING

RAMONA LEONARD SPRING (MONA)

35N - 5W Sec 18

WOOD SPRING

CORRIGAN SPRING

35N - 6W Sec 23

La Plata County

Archuleta County

35N - 6W Sec 24

35N - 5W Sec 19

Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- 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)
- Township Range Section
- County Boundary

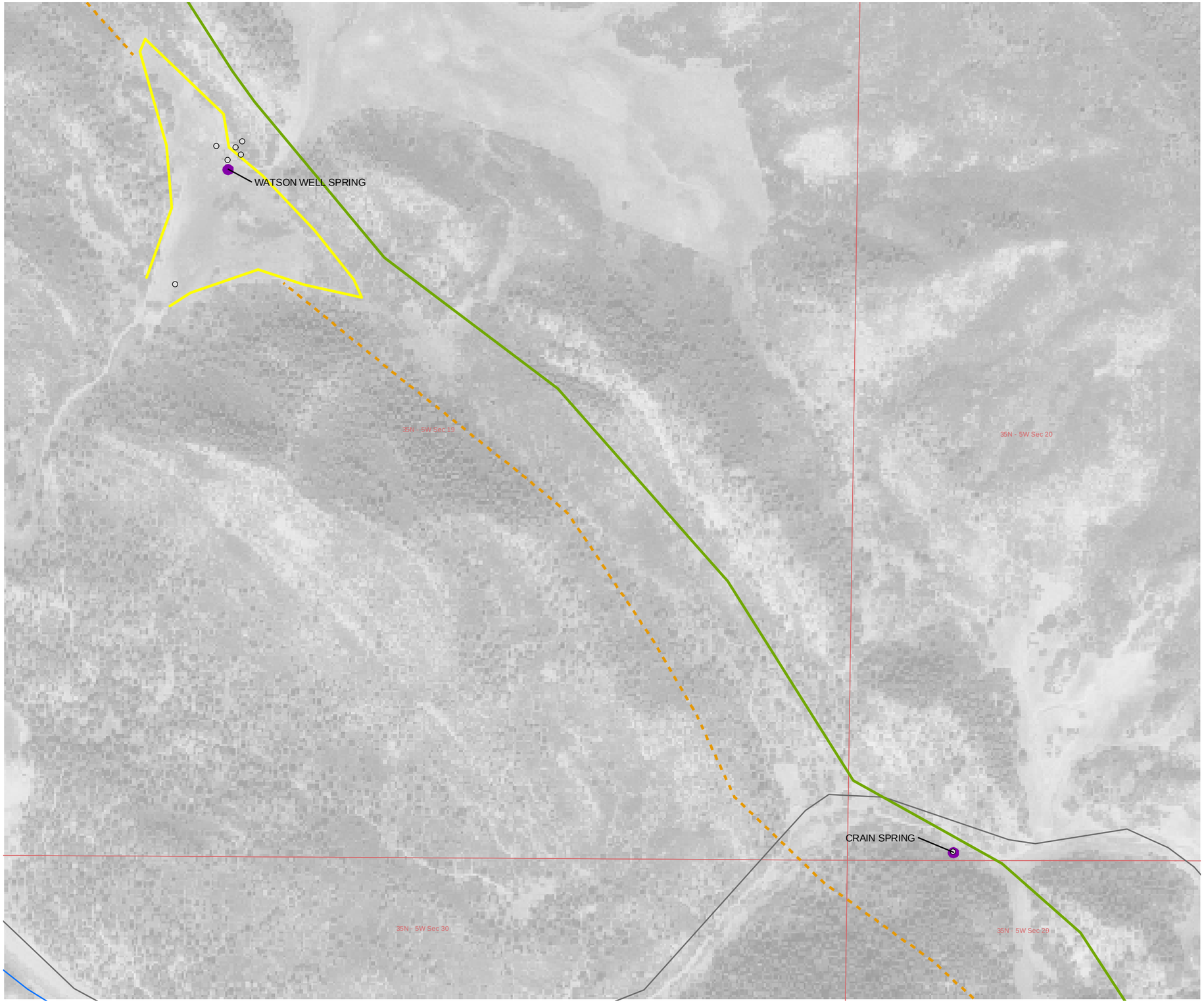
0 1,000

Feet

N

FIGURE 4A
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- 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)
- Township Range Section

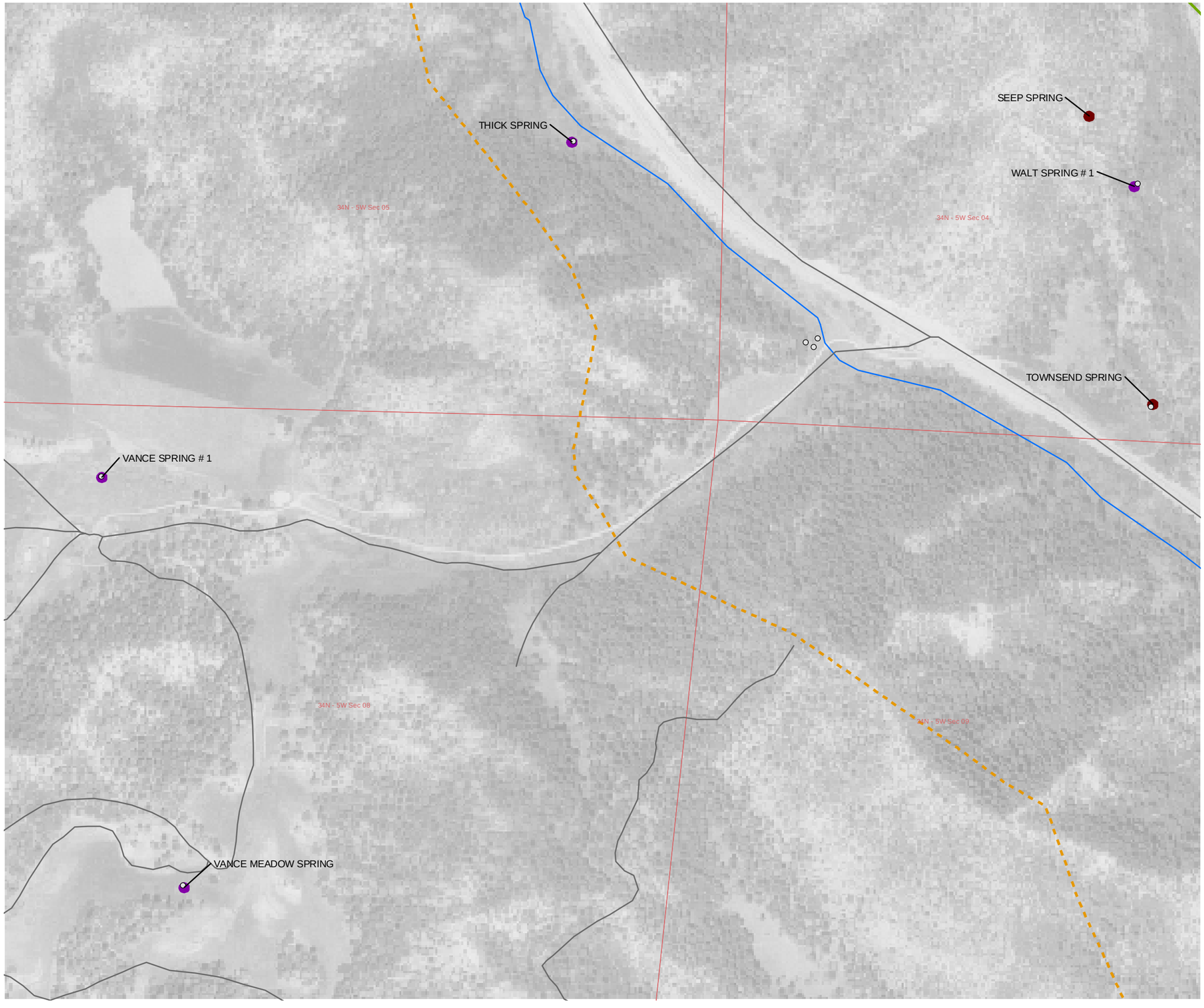
0 1,000

Feet

N

FIGURE 4B
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- Rivers
- Roads

Geology

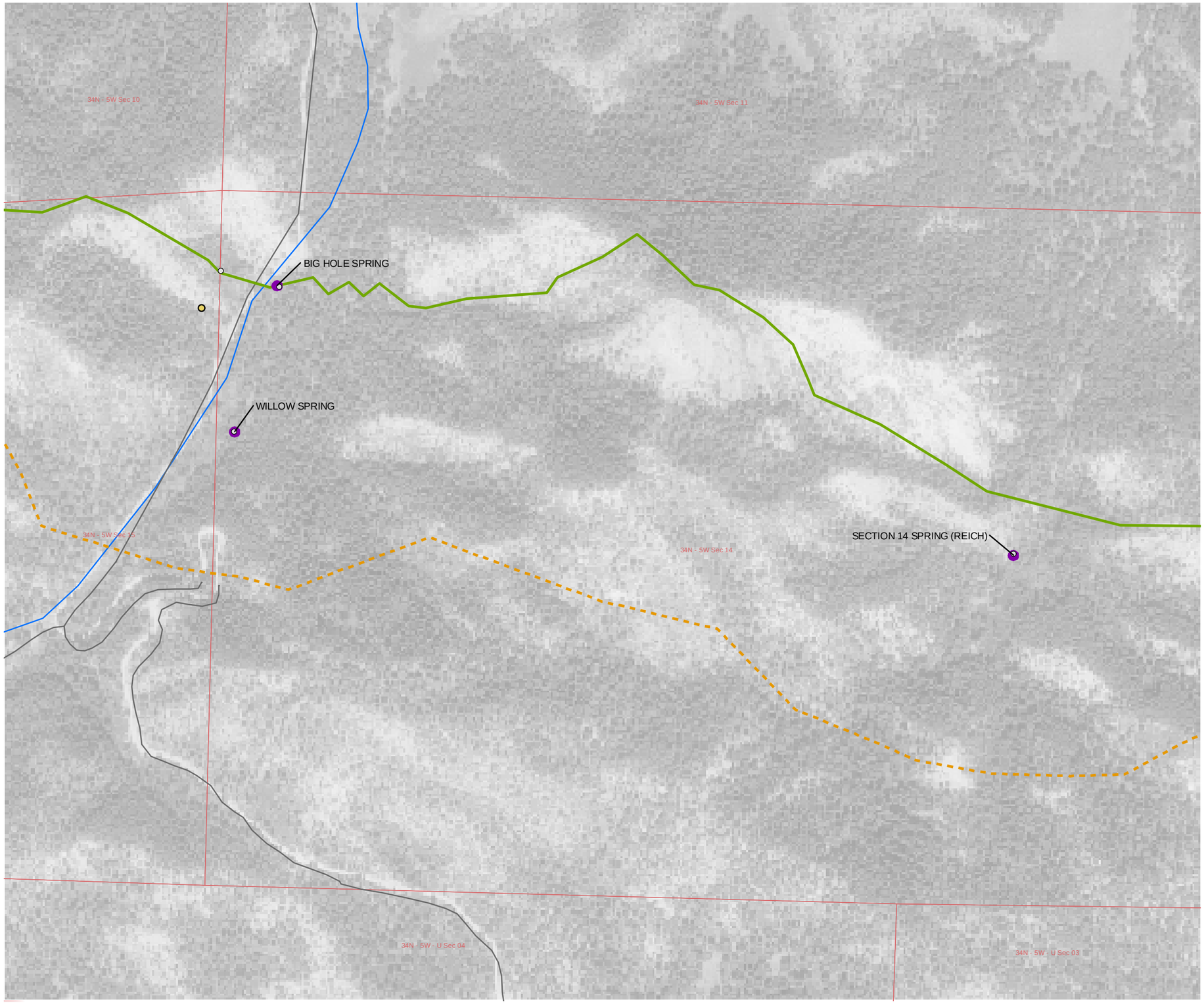
- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

0 1,000
Feet

N

FIGURE 4C
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- Rivers
- Roads

Geology

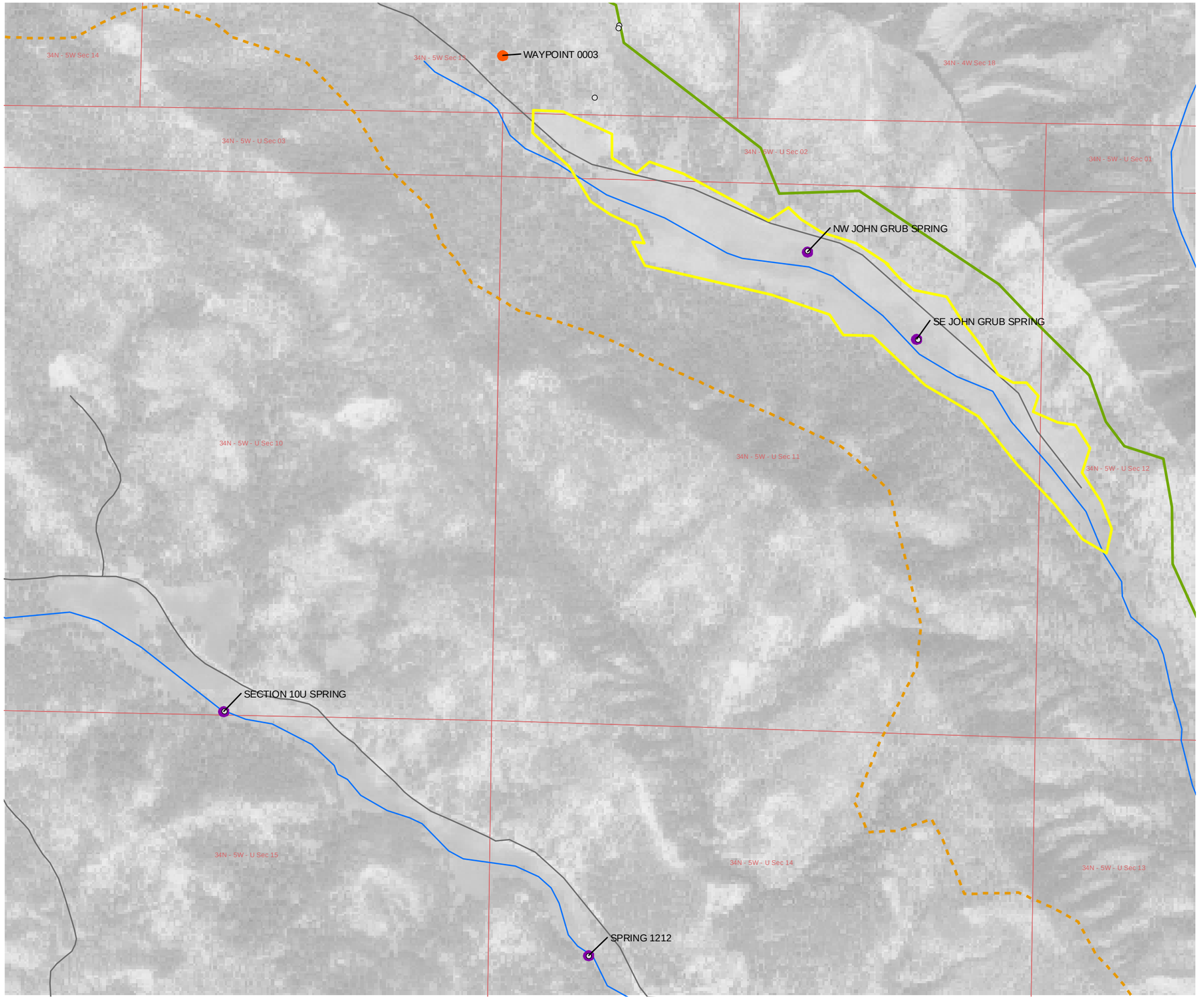
- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

0 1,000
Feet

N

FIGURE 4D
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- Rivers
- Roads

Geology

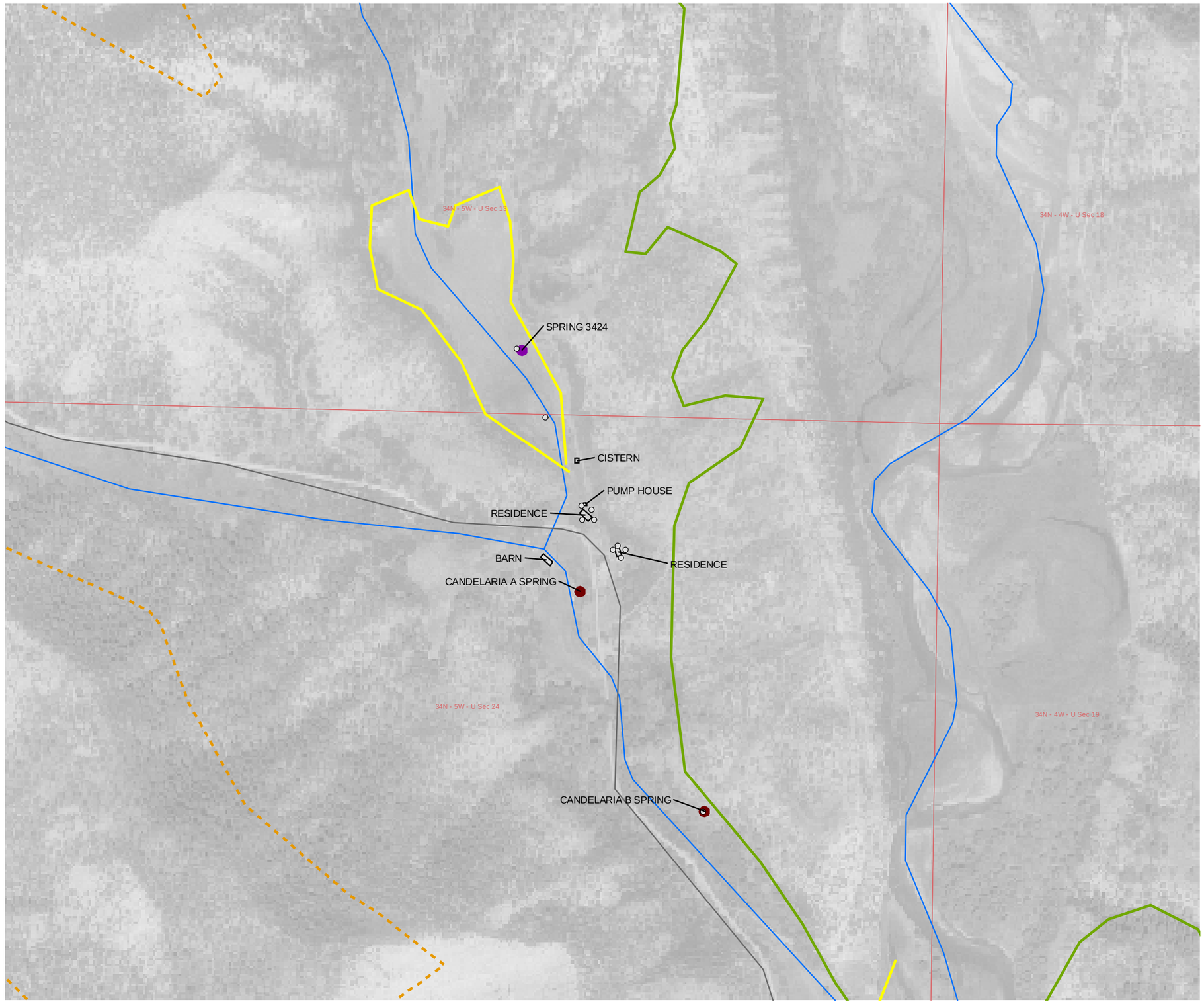
- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

0 1,920
Feet

N

FIGURE 4E
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- 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)
- Structures
- Township Range Section

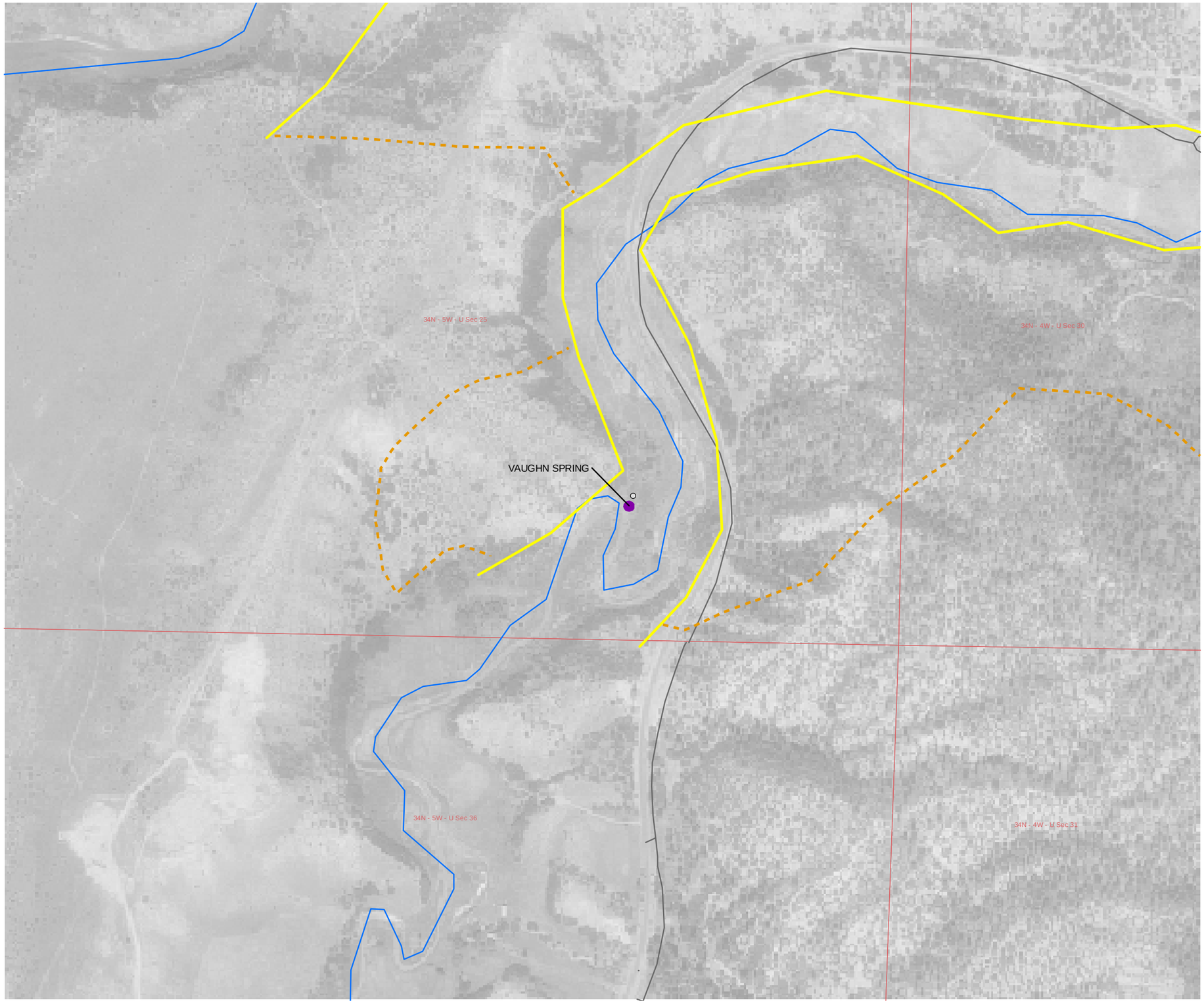
0 1,000

Feet

N

FIGURE 4F
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- 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)
- Township Range Section

0 1,000

Feet

N

FIGURE 4G
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

MISER SPRING AND PIPELINE

34N - 4W - U Sec 29

34N - 4W - U Sec 28

34N - 4W - U Sec 32

34N - 4W - U Sec 33

Legend

Natural Spring Location

- Sampled
- Not Sampled
- Dry

Subsurface Methane Measurements

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

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

- 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)
- Township Range Section

0 1,000

Feet

N

FIGURE 4H
DETAILED SPRING LOCATION MAP
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

Legend

Comment

Candelaria Well (Inactive)

Subsurface Methane Measurements

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

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

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)
- Structures

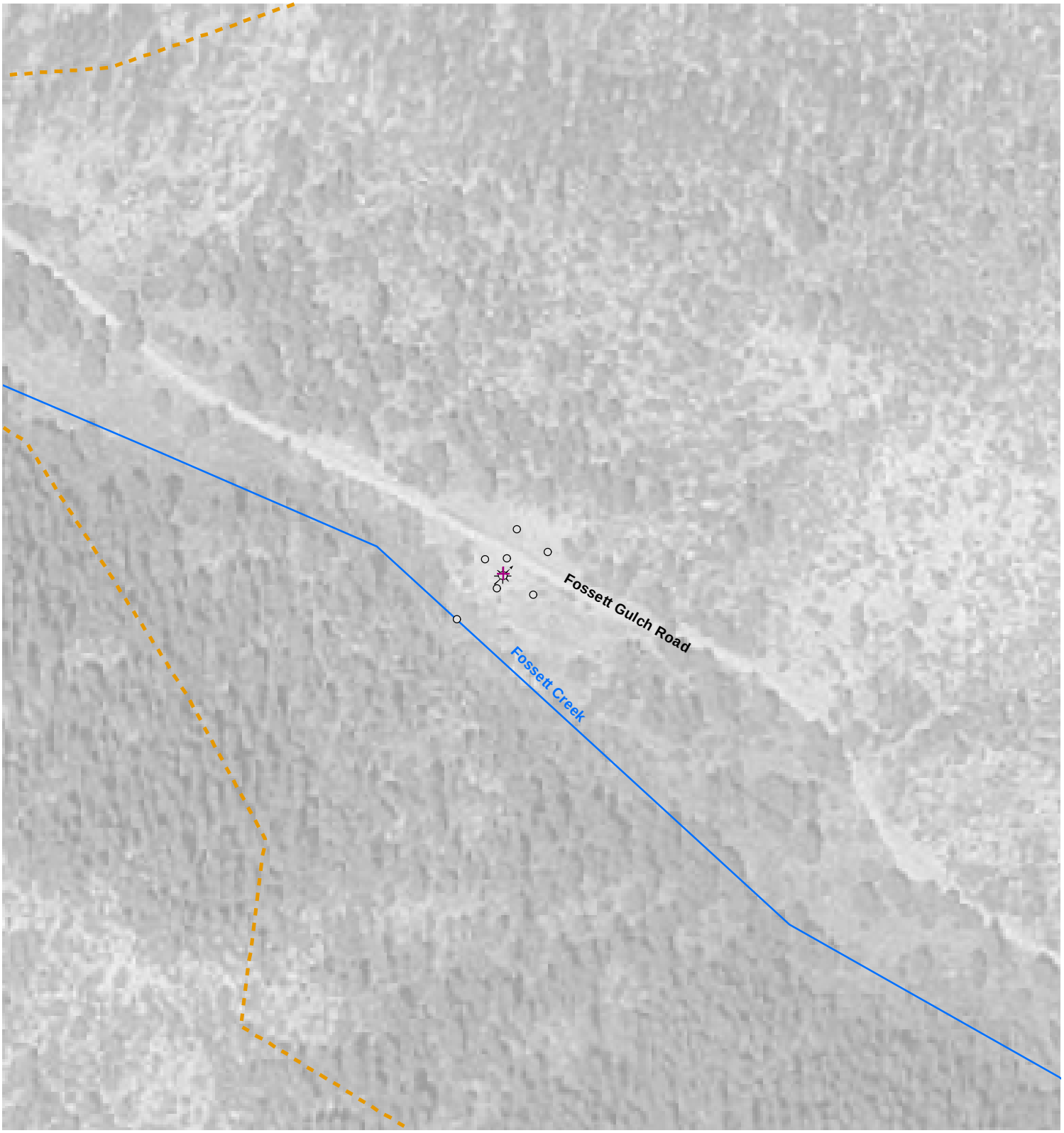
0 240

Feet

N

FIGURE 5
CANDELARIA RANCH DETAILED MAPPING
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

- Permanent Monitoring Probe
- Abandoned Oil and Gas Well

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)

Subsurface Methane Measurements

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

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

0 400
Feet

N

FIGURE 6
SCHOMBURG #1 ABANDONED OIL AND GAS WELL
2006 FRUITLAND OUTCROP MONITORING
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

35N - 6W Sec 13

35N - 5W Sec 18

35N - 6W Sec 24

35N - 5W Sec 19

Legend

Surface Water Methane Measurements

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

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

Subsurface Methane Measurements

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

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

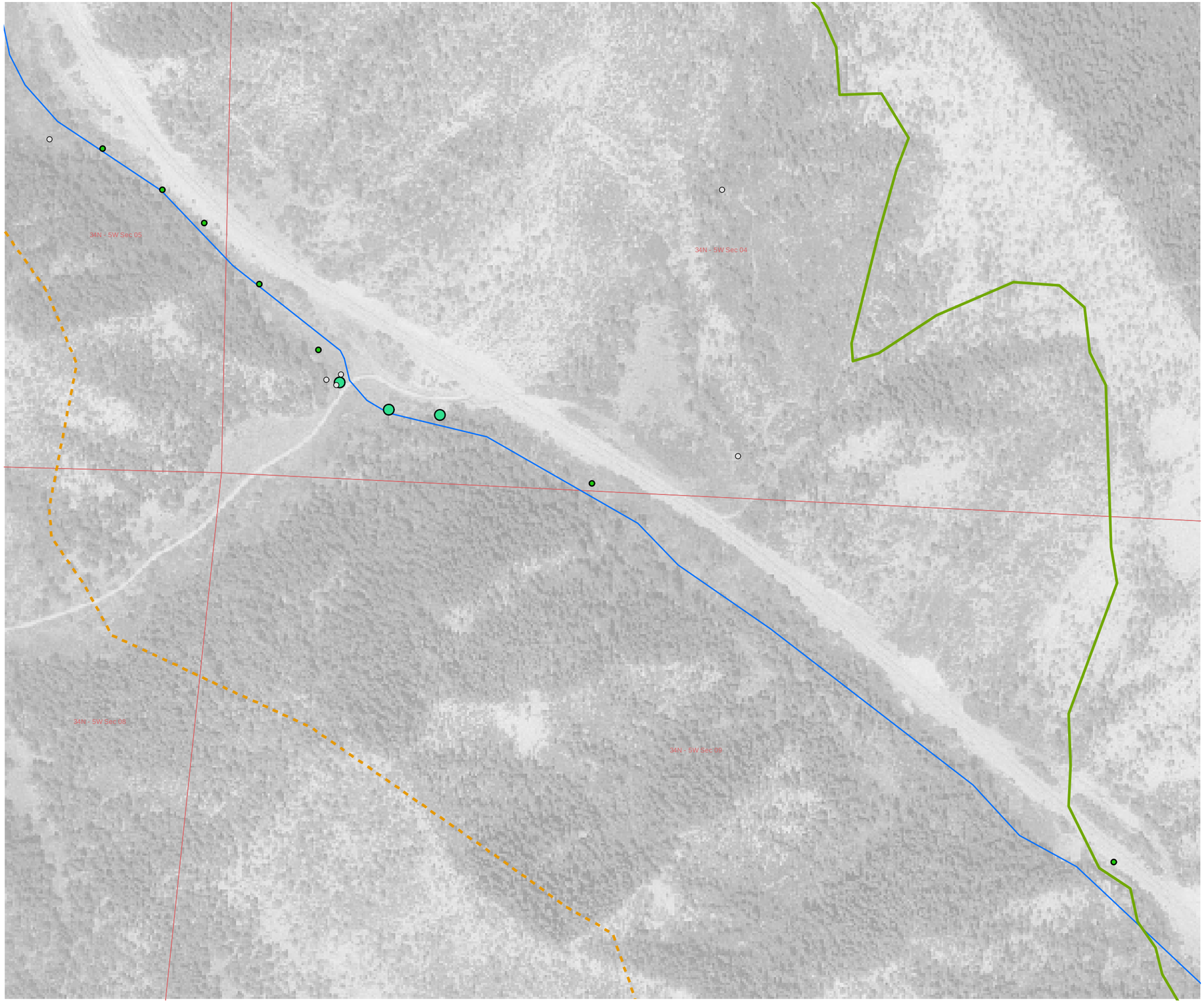
0 500

Feet

N

FIGURE 7
BEAVER CREEK
SURFACE WATER INSPECTION
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Surface Water Methane Measurements

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

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

Subsurface Methane Measurements

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

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

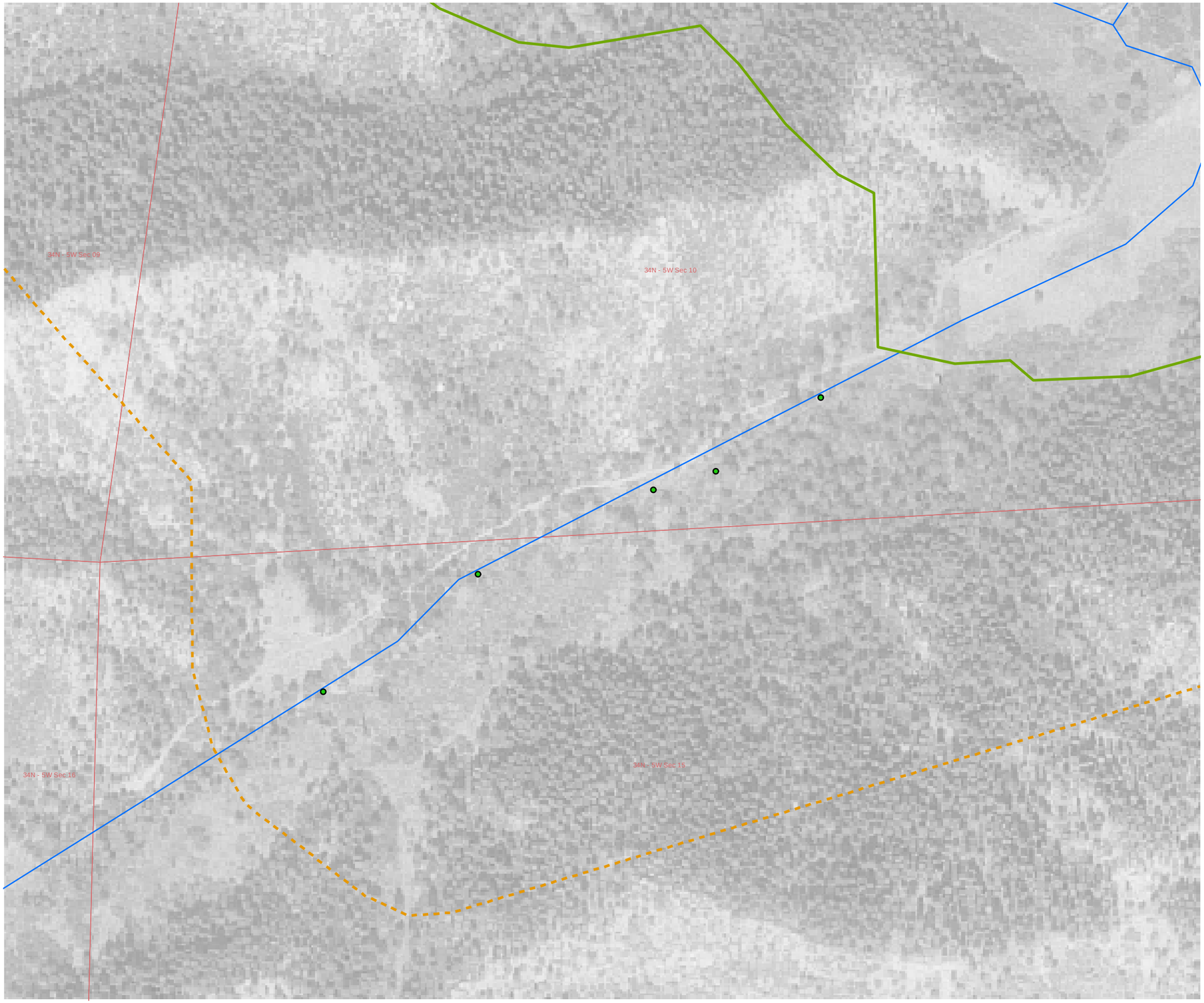
0 840

Feet

N

FIGURE 8
SQUAW CREEK
SURFACE WATER INSPECTION
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Surface Water Methane Measurements

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

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

- 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

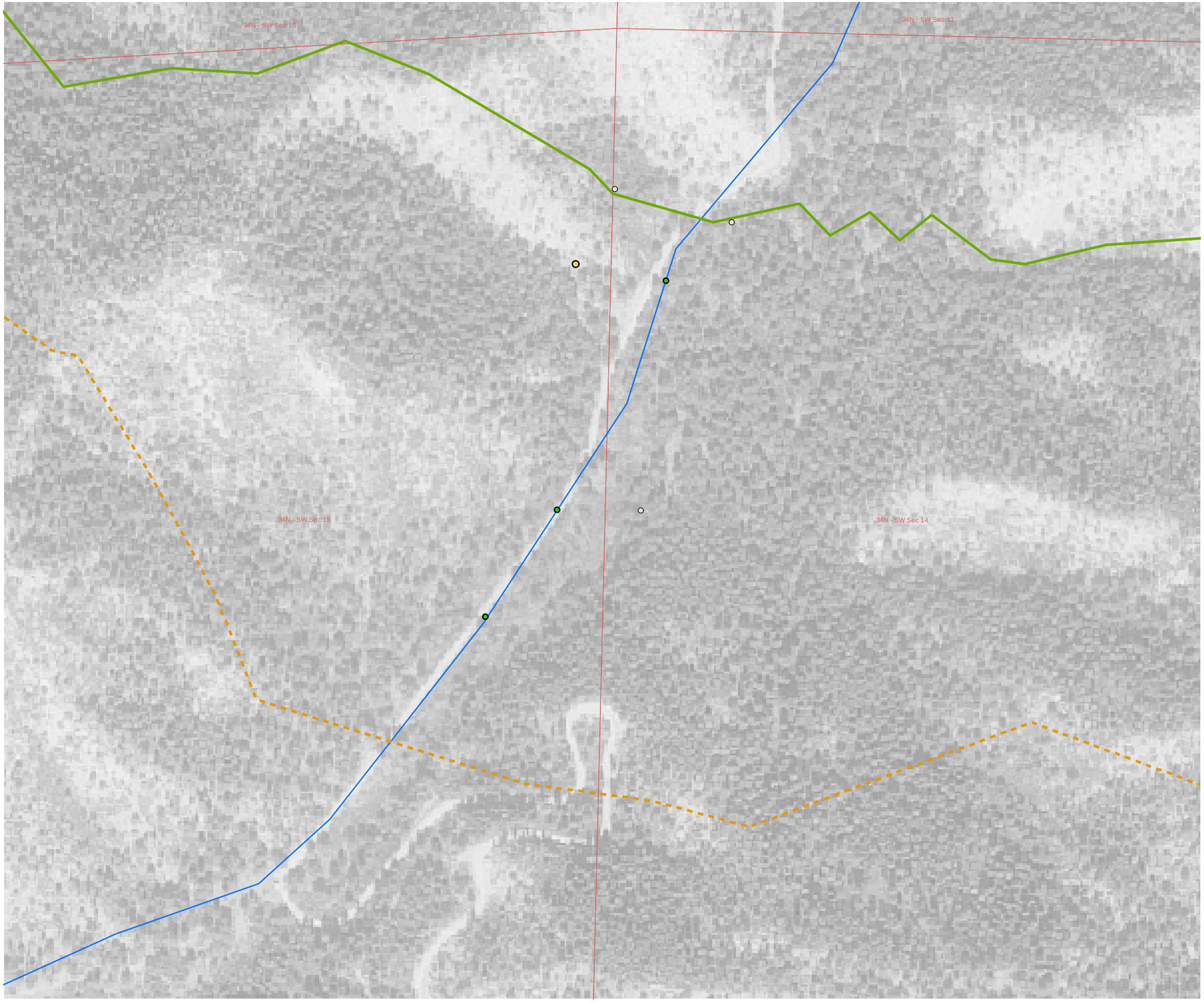
0 500

Feet

N

FIGURE 9
LITTLE SQUAW CREEK
SURFACE WATER INSPECTION
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Surface Water Methane Measurements

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

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

Subsurface Methane Measurements

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

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

- Rivers

Geology

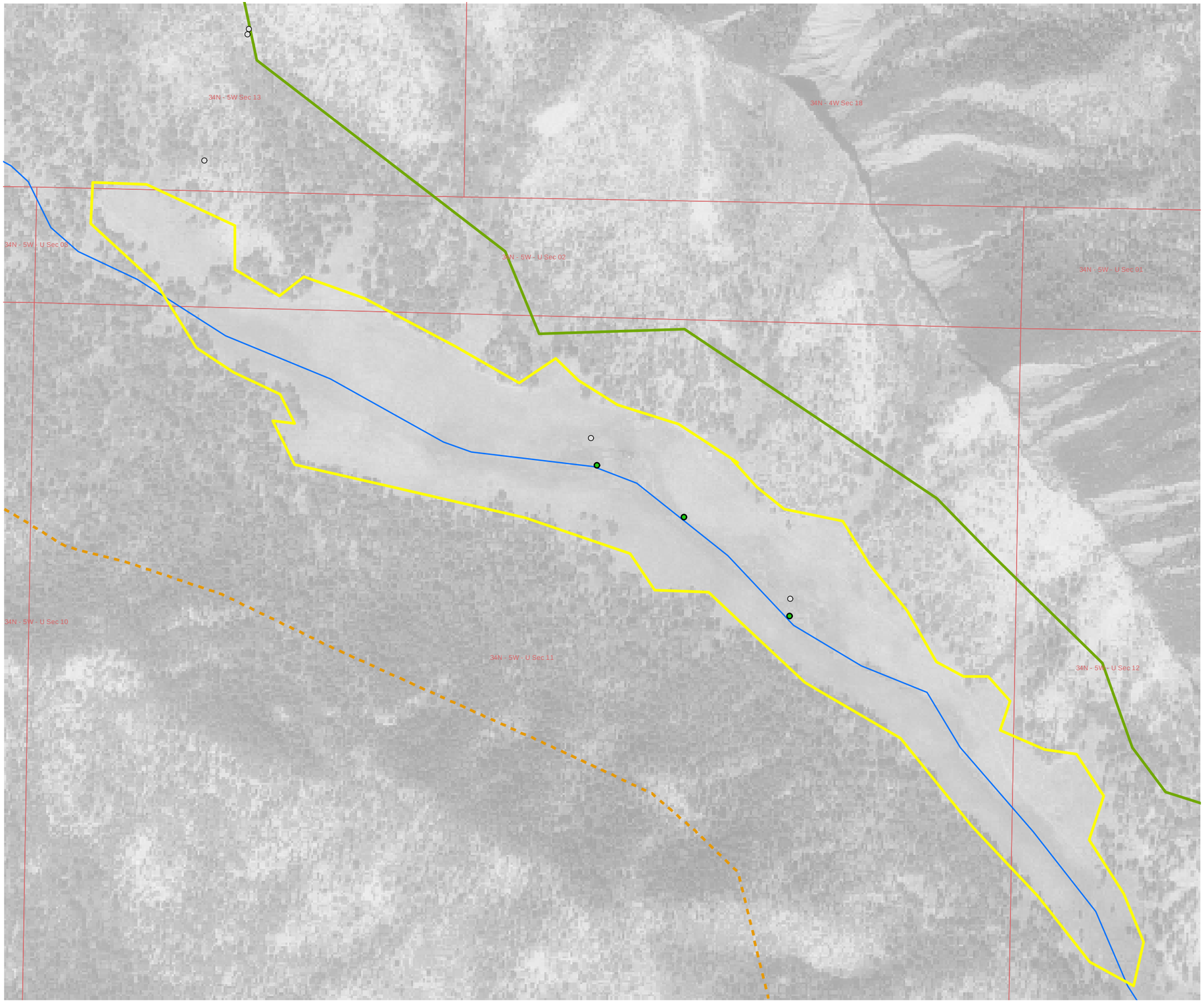
- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

0 500
Feet

N

FIGURE 10
POLE GULCH
SURFACE WATER INSPECTION
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Surface Water Methane Measurements

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

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

Subsurface Methane Measurements

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

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

- Rivers

Geology

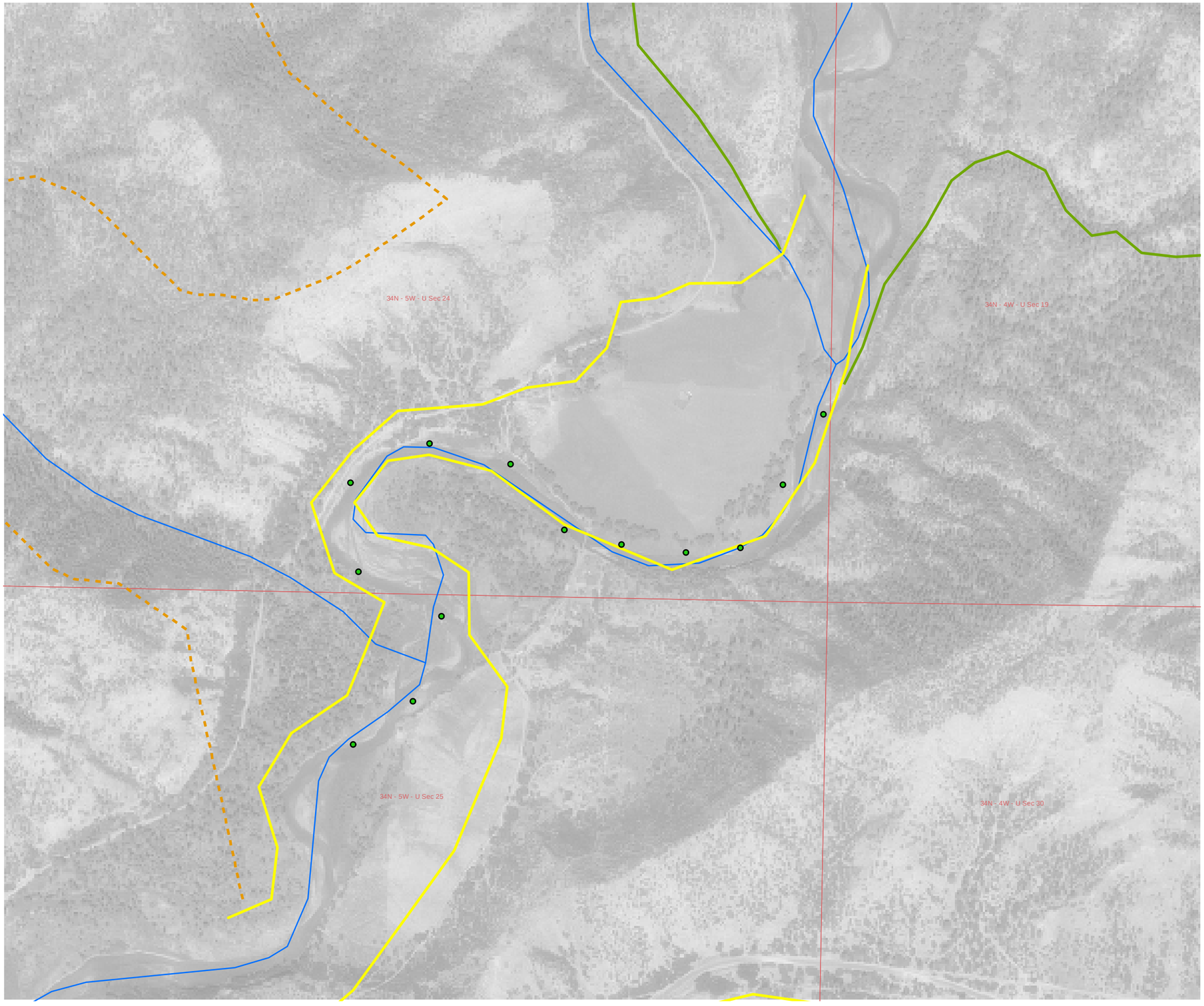
- Fruitland Formation (Kf)
- Fruitland Formation Tongue (Kft)
- Kirtland Formation (Kk)
- Pictured Cliffs Formation (Kpc)
- Pictured Cliffs Formation Tongue (Kpct)
- Quaternary Alluvium (Qa)
- Quaternary Gravel (Qg)
- Township Range Section

0 1,040
Feet

N

FIGURE 11
PETERSON GULCH
SURFACE WATER INSPECTION
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Surface Water Methane Measurements

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

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

- 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 1,240

Feet

N

FIGURE 12
PIEDRA RIVER
SURFACE WATER INSPECTION
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

34N - 5W - U Sec 25

34N - 4W - U Sec 30

34N - 5W - U Sec 36

34N - 4W - U Sec 31

Legend

Surface Water Methane Measurements

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

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

Subsurface Methane Measurements

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

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 1,080

Feet

N

FIGURE 13
STOLLSTEIMER CREEK
SURFACE WATER INSPECTION
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

34N - 5W Sec 10

34N - 5W Sec 11

34N - 5W Sec 15

34N - 5W Sec 14

Legend

Permanent Gas Monitoring Probe

Subsurface Methane Measurements

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

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

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

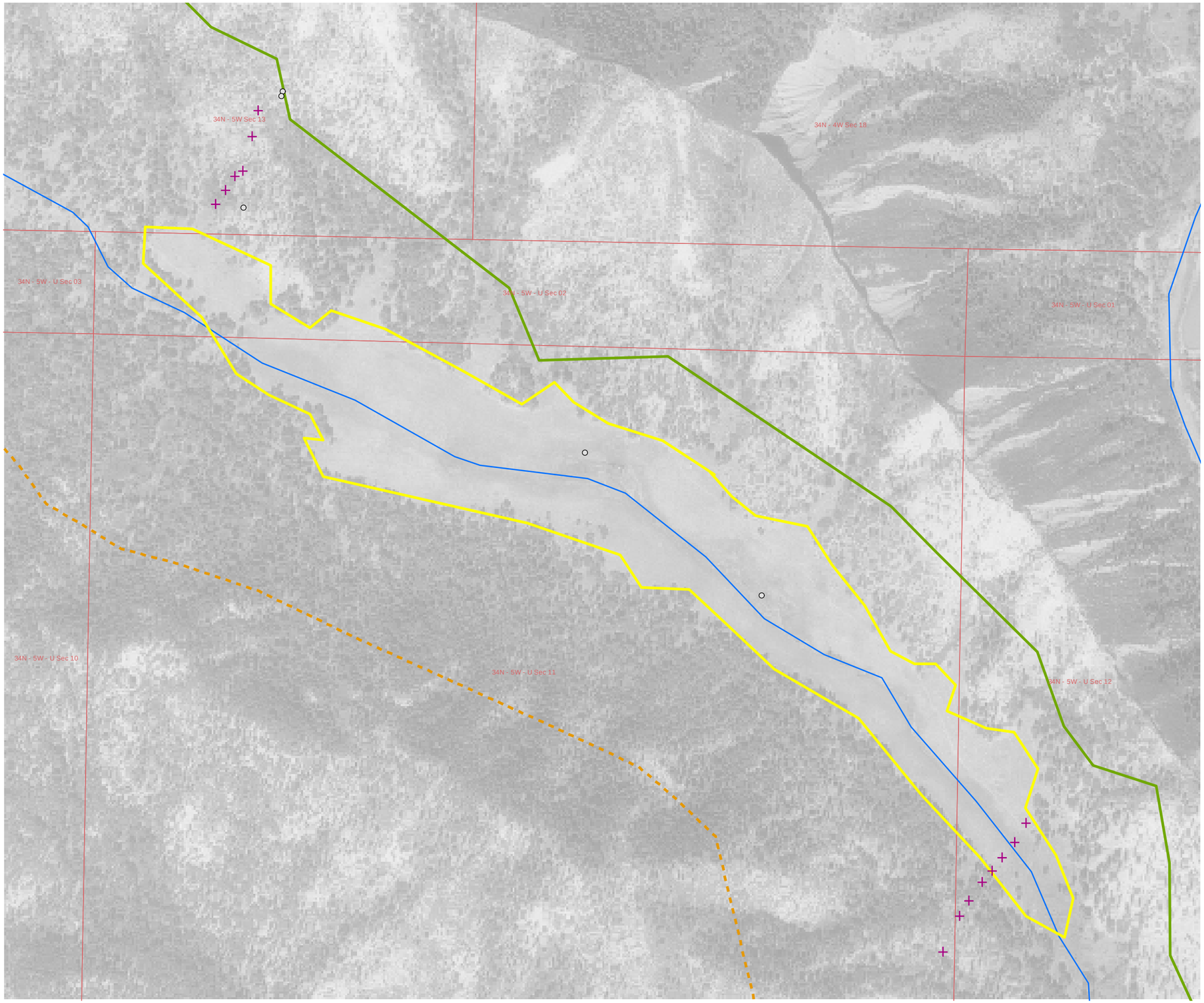
0 760

Feet

N

FIGURE 14
POLE GULCH
PERMANENT GAS MONITORING PROBE LINES
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES



Legend

Permanent Gas Monitoring Probe

Subsurface Methane Measurements

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

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

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

0 1,200

Feet

N

FIGURE 15
PETERSON GULCH
PERMANENT GAS MONITORING PROBE LINES
ARCHULETA COUNTY, COLORADO

ELM RIDGE RESOURCES AND PETROX RESOURCES

TABLES

TABLE 1

PROPERTY OWNER AND ACCESS INFORMATION
FRUITLAND FORMATION OUTCROP MONITORING 2005
ARCHULETA COUNTY, COLORADO

ID Number	Parcel Number	LTE Access	Physical Address	Owner Name	Mailing Address	Mailing City	Mailing State and Zip	Legal Description	Parcel Size (acres)	Geographic Position
1	568301100001	Access		Federal					0.000	
2	568501100001	Access		Federal					0.000	
3	568333200010	No	W HIGHWAY 160 X ESMT	HALVERSON HAROLD D ESTATE	23541 COUNTY RD S	DOLORES	CO 81323-0000	35-5W SEC 33	278.913	107.4276285W 37.2588724N
4	568510300009	Access	W HIGHWAY 160 26410	EDWARDS DURWOOD	710 E HOLLAND	ALPINE	TX 79830-0000	34-5W SEC 10	12.495	107.4170414W 37.2288842N
5	568505100016	No	W HIGHWAY 160 28061	KAHLER NOBLE GENE	PO BOX 405	BAYFIELD	CO 81122-0000	34-5W SEC 5	8.277	107.4397366W 37.2475521N
6	568505200020	No Response	W HIGHWAY 160 28444	INN ABOVE ONION CREEK INC	4444 HWY 150 WEST	KYLE	TX 78640-0000	34-5W SEC 5	245.669	107.4488552W 37.2467916N
7	568332300040	NA	W HIGHWAY 160 28644	COLORADO YELLOW JACKET LTD PTNSHP	PO BOX 774525	STEAMBOAT SPRINGS	CO 80477-0000	34-5W SEC 5	91.258	107.4471289W 37.2545177N
8	568332300009	NA	W HIGHWAY 160 28945	STRICKLAND SCOTT L & NIOBRA J	28945 E US HWY 160	BAYFIELD	CO 81122-0000	35-5W SEC 32	16.709	107.4437179W 37.2564906N
9	568319200034	Access	W HIGHWAY 160 30301A	WATSON DAVID LLOYD &	30301 US HWY 160	BAYFIELD	CO 81122-0000	35-5W SEC 19	1064.422	107.4633925W 37.2839436N
10	567913300015	Access	W HIGHWAY 160 31861M	LEONARD RAMONA	PO BOX 207	MAYER	AZ 86333-0000	35-6W SEC 13	26.772	107.4807203W 37.2986948N
11	567913400016	Access	W HIGHWAY 160 31861B	PEINADO EMILIO JR & KAREN R	PO BOX 706	BAYFIELD	CO 81122-0000	35-6W SEC 13	40.098	107.4751287W 37.2974749N
12	567913400017	Access	W HIGHWAY 160 31861L	WOOD LEE THOMAS & PEGGY DARLENE	31861 L W HWY 160	BAYFIELD	CO 81122-0000	35-6W SEC 13	37.432	107.4772925W 37.2954878N
13	589701400003 SJNF	Access		Federal					0.000	
14	589528400043	No	COUNTY RD 917 1023	EGAN JOHN T	1023 COUNTY ROAD 917	PAGOSA SPRINGS	CO 81147-0000	34U-4W SEC 28	35.213	107.2895008W 37.1560879N
15	589528400051	No	COUNTY RD 917 1000A	LEISER SANDRA J		MADISON	KS 66860-0000	34U-4W SEC 28	39.470	107.2827076W 37.1606722N
16	589511200003	Access	HIGHWAY 151 368	UNITED STATES OF AMERICA T/F	PO BOX 737	IGNACIO	CO 81137-0000	34U-4W	3505.197	107.2846571W 37.1913186N
17	589528400042	Access	COUNTY RD 917 1000	HALLOCK JAMES & NORA	1000 COUNTY RD 917	PAGOSA SPRINGS	CO 81147-0000	34U-4W SEC 28	35.086	107.2871869W 37.1588274N
18	589528400049	No	COUNTY RD 917 1019	MUHLIG BRITT & MAYUMI	1019 COUNTY RD 917	PAGOSA SPRINGS	CO 81147-0000	34U-4W SEC 28	34.963	107.2905460W 37.1573476N
19	589528300041	No	COUNTY RD 917 1001	CHENAULT ROBERT G	1001 COUNTY RD 917	PAGOSA SPRINGS	CO 81147-0000	34U-4W SEC 28	34.960	107.2917877W 37.1615535N
20	589528400050	No	COUNTY RD 917 1000	LEISER SANDRA J		MADISON	KS 66860-0000	34U-4W SEC 28	35.036	107.2886189W 37.1615376N
21	589528400053	No	COUNTY RD 917	WOZNY THEODORE G TRUST ACCOUNT	1601 COUNTY RD 917	PAGOSA SPRINGS	CO 81147-0000	34U-4W SEC 28	35.375	107.2872467W 37.1534398N
22	589533200046	Access	COUNTY RD 917 1601	LEON EUGENIA &	1601 A CR 917	PAGOSA SPRINGS	CO 81147-0000	34U-4W SEC 33	41.103	107.2902055W 37.1534003N
23	589533400048	No	COUNTY RD 917 1859	MODISETTE JERRY L & BEVERLY A	17110 CYPRESS ROSE HILL DR	CYPRESS	TX 77429-0000	34U-4W SEC 33	39.371	107.2873806W 37.1462336N
24	589533100045	No	COUNTY RD 917 1590	MISER PATRICIA	2341 JOY AVE	WHITE BEAR LAKE	MN 55110-0000	34U-4W SEC 33	42.697	107.2833805W 37.1498740N
25	589533100047	No	COUNTY RD 917 1589	SCHAEFER JAMES & NANCY	2754 S LAS PALMAS	MESA	AZ 85202-0000	34U-4W SEC 33	36.129	107.2874029W 37.1498359N
26	589533400033	No	COUNTY RD 917 1818	MODISETTE JERRY L & BEVERLY A	17110 CYPRESS ROSE HILL RD	CYPRESS	TX 77429-0000	34U-4W SEC 33	39.329	107.2828948W 37.1462775N
27	589533400034	No	COUNTY RD 917 2255	ADAM ROBERT J	12611 JONES RD STE #200	HOUSTON	TX 77070-0000	34U-4W SEC 33	39.331	107.2874383W 37.1426306N
28	568510300010	No Response	W HIGHWAY 160 26260	DREW DANNY S	PO BOX 13	CHIMNEY ROCK	CO 81127-0000	34-5W SEC 10	17.346	107.4141421W 37.2285446N
29	589712400002	No	COUNTY RD 175 2117 & 2119 & 2121	COONEY PROPERTIES 21 LLC	33 INVERNESS PL	DURANGO	CO 81301-0000	34U-5W SEC 12	792.487	107.3344796W 37.1930959N
30	589529300027	No	HIGHWAY 151 X	EF COAL RESOURCES LIMITED PRTN	PO BOX 773457	STEAMBOAT SPRINGS	CO 80477-0000	34U-4W SEC 29	157.152	107.3074462W 37.1570456N
31	589725400016	Access	HIGHWAY 151 6971	MARTINEZ AMOS MEL	2400 COUNTY RD 329	IGNACIO	CO 81137-0000	34U-5W SEC 25	19.762	107.3412769W 37.1560602N
32	589711200001	Access	W HIGHWAY 160 24160	GRUB JOHN	2841 WANDER CIR	SALT LAKE CITY	UT 84117-0000	34U-5W SEC 11	159.274	107.3596091W 37.2093422N
33	589725100011	Access	COUNTY RD 193 5801	CANDELARIA ROGER	9105 SIXTH ST	LANHAM	MD 20706-0000	34U-5W SEC 25	60.135	107.3412773W 37.1659743N
34	589725400015	No Response	HIGHWAY 151 6505A	VAUGHN LARRY C	6505A HWY 151	PAGOSA SPRINGS	CO 81147-0000	34U-5W SEC 25	19.762	107.3412769W 37.1578502N
35	589725400013	Access	HIGHWAY 151 X	MARTINEZ JOHN L &	5768 HANSEN CIR	MURRAY	UT 84107-0000	34U-5W SEC 25	39.523	107.3412770W 37.1605367N
36	589724400008	Access	COUNTY RD 193 X	CANDELARIA SY TRUSTEE & GILBERT	PO BOX 1771	ARBOLES	CO 81121-0000	34U-5W SEC 24	59.991	107.3390038W 37.1713890N
37	589713300006	Access	COUNTY RD 193 6551	CANDELARIA SUSIE	PO BOX 1764	ARBOLES	CO 81121-0000	34U-5W SEC 13	160.288	107.3436380W 37.1849042N
38	589724400010	Access	COUNTY RD 193 5801A	CANDELARIA ROGER	9105 SIXTH ST	LANHAM	MD 20706-0000	34U-5W SEC 24	19.859	107.3412824W 37.1704889N
39	589726400024	Access		Federal					0.000	
40	589725400014	Access	HIGHWAY 151 X	MARTINEZ MEL	5671 STATE HWY 151	PAGOSA SPRINGS	CO 81147-0000	34U-5W SEC 25	118.324	107.3322090W 37.1605486N
41	589724400007	Access	COUNTY RD 193 5879	CANDELARIA LUCY S &	PO BOX 1812	ARBOLES	CO 81121-0000	34U-5W SEC 24	39.283	107.3367759W 37.1750192N
42	589530100037	No Response	HIGHWAY 151 5461	CHIMNEY ROCK COAL CO C/O	3633 INLAND EMPIRE BLVD STE 480	ONTAIRO	CA 91764-0000	34U-4W SEC 30	79.285	107.3163700W 37.1642304N
43	589530100020	Access	HIGHWAY 151 5671	MARTINEZ MEL	5671 STATE HWY 151	PAGOSA SPRINGS	CO 81147-0000	34U-4W SEC 30	243.370	107.3175202W 37.1642058N
44	589529100026	Access	HIGHWAY 151 X	CAZEDESSUS CAMILE E JR	PO BOX 2340	PAGOSA SPRINGS	CO 81147-2340	34U-4W SEC 29	15.597	107.3094626W 37.1633518N
45	589725100012	Access		Federal					0.000	

Notes:

Indicates property access was denied

Indicates landowner did not respond to access request

TABLE 2

NATURAL SPRING WATER SAMPLE ANALYTICAL RESULTS
FRUITLAND FORMATION OUTCROP MONITORING 2006
ARCHULETA COUNTY, COLORADO

Spring ID	Description	Location	Inspection Date	Water Quality Field Measurements						Laboratory Result
				Conductivity (uS)	pH	ORP (mV)	Temperature (C)	TDS (ppm)	Estimated Flow (gal/min)	Methane (mg/L)
Ramona Leonard Spring (Mona)	Spring on Ramona Leonard property, on outcrop near county border	NESW, Sec 13, T35N, R6W	9/19/2005	NM	NM	NM	NM	NM	NM	<0.0005
			6/1/2006	768.4	6.35	107	13.5	522.4	0.6	<0.0010
Ramona Spring	Spring on Ramona Leonard property, unable to locate or dry	NESW, Sec 13, T35N, R6W	6/1/2006	NM	NM	NM	NM	NM	NM	NS
Wood Spring	Spring in Beaver Creek meadow, unable to locate or dry	SWSE, Sec 13, T35N, R6W	6/1/2006	NM	NM	NM	NM	NM	NM	NS
Corrigan Spring	Tributary spring seeping from hillside on southeast side of Beaver Creek, on outcrop	SWSE, Sec 13, T35N, R6W	6/1/2006	170.3	6.08	122	17.7	109.7	1	<0.0010
Watson Well Spring	Hand dug water well on Watson property, on outcrop	SENW, Sec 19, T35N, R5W	6/1/2006	745.5	7.29	34	13	507.7	NM	0.016
Crain Spring	Tributary spring seeping from embankment in drainage, east of Watson property, on outcrop	SWSW, Sec 20, T35N, R5W	6/1/2006	570.3	7.5	-115	29.1	375.3	NM	0.0067
Seep Spring	Spring located northwest of Walt Spring #1, on outcrop, unable to locate or dry	SESW, Sec 04, T34N, R5W	5/24/2006	NM	NM	NM	NM	NM	NM	NS
Walt Spring #1	Spring in drainage north of Yellow Jacket Pass, on outcrop	SESW, Sec 04, T34N, R5W	5/24/2006	524	7.9	86	12.1	345.4	<1	<0.0010
Townsend Spring	Spring located north of Hwy 160, east of Yellow Jacket Pass, on outcrop, spring is dry	SESW, Sec 04, T34N, R5W	5/24/2006	NM	NM	NM	NM	NM	NM	NS
Thick Spring	Spring on east side of Yellow Jacket Pass, becomes Squaw Creek, on outcrop	SESE, Sec 05, T34N, R5W	5/24/2006	325.6	7.80	120	11.7	214.6	2	<0.0010
Vance Spring #1	Spring in drainage on Vance Property south of Hwy 160, not located on outcrop	NENW, Sec 08, T34N, R5W	5/26/2006	404	7.75	-12	11.6	269.6	1	0.022
Vance Meadow Spring	Spring in meadow south of Vance residence, not located on outcrop	SWNE, Sec 08, T34N, R5W	6/6/2006	459.9	7.2	-60	16.5	310.9	<0.5	0.011
Big Hole Spring	Spring in Pole Gulch, near contact of Kpc-Kf, on outcrop	NWNW, Sec 14, T34N, R5W	5/24/2006	365.5	7.27	141	11.7	249.1	<1	0.001
Willow Spring	Spring in Pole Gulch, south of Big Hole Spring, on outcrop	NWNW, Sec 14, T34N, R5W	5/24/2006	252.9	7.39	122	14.0	178.7	1	<0.0010
Section 14 Spring (Reich)	Spring located between Pole Gulch and Peterson Gulch, on outcrop	SWNE, Sec 14, T34N, R5W	9/19/2005	412.2	7.93	NM	20.2	277.5	NM	0.0006
			5/24/2006	372.9	7.48	79	13.3	251.5	<1	<0.0010
Waypoint 0003 Spring	Unable to locate or dry	NWSE Sec 13, T34N, R5W	5/26/2006	NM	NM	NM	NM	NM	NM	NS
NW John Grub Spring	North spring in Peterson Gulch, on outcrop	NWNE, Sec 11U, T34N, R5W	9/19/2005	415.8	6.97	NM	15.8	282.3	0.1	0.015
			5/26/2006	421.7	7.83	108	27	275.9	<1	0.0016

TABLE 2 (continued)

NATURAL SPRING WATER SAMPLE ANALYTICAL RESULTS
FRUITLAND FORMATION OUTCROP MONITORING 2006
ARCHULETA COUNTY, COLORADO

Spring ID	Description	Location	Inspection Date	Water Quality Field Measurements						Laboratory Result
				Conductivity (uS)	pH	ORP (mV)	Temperature (C)	TDS (ppm)	Estimated Flow (gal/min)	Methane (mg/L)
SE John Grub Spring	South spring in Peterson Gulch, on outcrop	SENE, Sec 11U, T34N, R5W	9/19/2005	524.5	7.04	NM	15.6	358.5	0.25	<0.0005
			5/26/2006	509.5	7.86	-49	24.4	336.9	<1	0.0025
Section 10U Spring	Candelaria property spring, not located on outcrop	SWSE, Sec 10U, T34N, R5W	9/19/2005	458.1	7.27	131	10.9	314.7	0.9	<0.0005
			6/6/2006	489.9	7.18	521	20.0	328.2	1	0.0062
Spring 1212	Spring at homestead inside cistern, not located on outcrop	SWNW, Sec 14U, T34N, R5W	10/7/2005	420	6.59	NM	9.1	NM	NM	0.0005
			6/6/2006	356.6	7.29	75	15.3	243.9	5.28	<0.0010
Spring 3424	Spring adjacent to Susie Candelaria residence, used as water supply for both Susie and Gilbert Candelaria residences, on outcrop	SESE, Sec 13U, T34N, R5W	9/14/2005	725.2	6.86	71	16.5	504	1	0.0017
			5/26/2006	641.5	7.97	-98	17.3	436.7	1	0.023
Candelaria A Spring	Spring located on Candelaria property, spring is dry	NWNE, Sec 24U, T34N, R5W	5/26/2006	NM	NM	NM	NM	NM	NM	NS
Candelaria B Spring	Spring located on Candelaria property, spring is dry	SWNE, Sec 24U, T34N, R5W	5/26/2006	NM	NM	NM	NM	NM	NM	NS
Vaughn Spring	Tributary spring seeping out of embankment on north side of Stollsteimer Creek, on outctop	SESE, Sec 25, T34N, R5W	6/6/2006	730.7	7.55	521	20.1	509.5	<1	0.0037
Miser Spring and Pipeline	Unable to locate or possibly inaccessible due to well infrastructure	NESW, Sec 28, T34N, R4W	6/6/2006	NM	NM	NM	NM	NM	NM	NS

Notes:

uS = microSiemens
ORP = oxidation reduction potential
mV = millivolts
C = celsius
TDS = total dissolved solids
Flow measured using graduated container and stop-watch

ppm = parts per million
gal/min = gallons per minutes
NM = not measured
NS = not sampled
< = less than the stated laboratory method detection limit

TABLE 3

GAS SAMPLE ANALYTICAL RESULTS
ARCHULETA COUNTY, COLORADO

Isotech Lab No.	Sample Date	Sample Name	Ar %	O_2 %	CO_2 %	N_2 %	CO %	C_1 %	C_2 %	C_2H_4 %	C_3 %	iC_4 %	nC_4 %	iC_5 %	nC_5 %	C_6+ %	$d^{13}CO_2$ ‰	$d^{13}C_1$ ‰	dDC_1 ‰	H_2S %	Specific Gravity	BTU	Helium dilution factor *
103425	9/7/2006	Squaw Creek	0.207	0.0728	3.79	10.47	0	85.46	0	0	0	0	0	0	0	0	NM	-60.67	-375.1	NM	0.636	866	NA

Notes:

Chemical analysis based on standards accurate to within 2%

* Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace.

Ar = argon
O_2 = oxygen
CO_2 = carbon dioxide
N_2 = nitrogen
CO = carbon monoxide
C_1 = methane
C_2 = ethane
C_2H_4 = ethylene
C_3 = propane
iC_4 = i-butane
nC_4 = n-butane
iC_5 = i-pentane
nC_5 = n-pentane
C_6 = hexane
$d^{13}CO_2$ = isotopic carbon of carbon dioxide
$d^{13}C_1$ = isotopic carbon of methane
dDC_1 = isotopic hydrogen of methane
H_2S = hydrogen sulfide
BTU = british thermal units
NM = not measured

APPENDIX A

EQUIPMENT SPECIFICATIONS

Gasport® Gas Tester

MSA

The Gasport Gas Tester is designed for gas utility workers to detect methane and certain toxic gases. It is a reliable, simple, versatile tool to help your service technicians get the job done quickly! With multiple ranges and sensing capabilities built into one rugged housing, the Gasport Tester simplifies your work by reducing the number of meters you have to carry on the job.

Applications

The Gasport Tester's poison-tolerant methane sensor provides three measurement ranges for your daily service needs:

- Open air, safety sampling
- Small, in-home leak detection
- Street/outdoor service line leak detection

Features and Benefits

- **Proven in field use–rugged and reliable**
  Less costly to maintain, less time in repair
- **Multiple functions in one instrument**
  No need to buy, carry & maintain multiple instruments
- **New, poison-tolerant combustible gas sensor**
  Reduces meter ownership costs
- **User-selectable, "silent" operation mode**
  Reduces customer disturbances and worries
- **Fast warm up time**
  Fastest warm up time in industry saves time
- **Can monitor up to four gases at a time**
  Fewer instruments to carry
- **Show all gas concentrations simultaneously**
  Eliminates guesswork on what reading is displayed
- **Autoranging methane sensor**
  Automatically switches between 0-5% and 5-100% methane ranges
- **Gas readings recorded for later retrieval**
  Can double check readings after job is done
- **Simple manual or automated calibration options**
  Reduces training time and helps ensure accuracy
- **Intrinsically safe**
  Meets safety standards for work in hazardous areas
- **Lifetime warranty on case and electronics**
  Reduced maintenance and lifetime costs

Specifications

Gas	Range	Resolution
Methane	0–5000 ppm	50 ppm
Methane	0–100% LEL or 0–5% CH_4	1 % LEL or 0.1% CH_4
Methane	5–100% CH_4	1% CH_4
Oxygen	0–25%	0.1%
Carbon Monoxide	0–1000 ppm	1 ppm
Hydrogen Sulfide	0–100 ppm	1 ppm

Battery types: NiCd and Alkaline
Case material: Impact resistant, stainless-steel-fiber-filled polycarbonate
Operating temperature: normal -10 to 40°C; extended -20 to 50°C
Operating humidity: Continuous: 15-95% RH, non-condensing
Intermittent duty: 5-95% RH, non condensing
Warm up time: Less than 20 seconds to initial readings
Datalog capacity: 12 hours
Input: 3 clearly marked, metal domed keys
Warranty: Case and Electronics: Lifetime
Sensors and consumable parts: 1 year

The answer for gas utilities' gas detection needs

Gasport® Gas Tester

Ordering Information

Battery Chargers

Part No.	Description
494716	Omega 120 VAC 50/60Hz
495965	Omega 220 VAC 50/60Hz
801759	Omega 110/220 VAC, Five Unit, 50/60Hz
800525	Omega 8 - 24VDC for vehicle use

Battery Packs

Part No.	Description
496990	Standard NiCd Rechargeable
800526	Alkaline, Type C
711041	Alkaline, with Thumbscrews
800527	Heavy Duty NiCd Rechargeable

Sensors

Part No.	Description
813693	Combustible Gas
480566	O_2
812389	CO
812390	H_2S

Protective Boots

Part No.	Description
804955	Black, for NiCd Battery Packs
802806	Orange, for NiCd Battery Packs
806751	Black, for Alkaline Battery Packs
806750	Orange, for Alkaline Battery Packs
806749	Black, for HD NiCd Battery Packs
806748	Orange, for HD NiCd Battery Packs
812833	Yellow Soft Carrying Case with Harness
711022	Black padded Vinyl Carrying Case with Harness

Sampling Equipment

Part No.	Description
800332	Probe - 1 ft., plastic
800333	Probe - 3 ft., plastic
803561	Probe - 3 ft., plastic (holes 2" from end) (bar hole probe)
803962	Probe - 3 ft., plastic (holes 2" from handle) (solid probe)
803848	Probe - Hot Gas Sampler
710465	Sampling Line - 5 ft., coiled
497333	Sampling Line - 10 ft.
497334	Sampling Line - 15 ft.
497335	Sampling Line - 25 ft.

Sampling Accessories

Part No.	Description
801582	Replacement Filter, Probe, pkg. of 10
801291	External Filter Holder
014318	Charcoal Filter
711039	Line Scrubber Filter Holder
711059	Line Scrubber Replacement Cartridges, Box of 12
808935	Dust Filter, Pump Module
802897	Water Trap (Teflon) Filter, Pump Module

Calibration Check Equipment

Part No.	Description
477149	Calibration Kit Model RP with 0.25 lpm Regulator
491041	Calibration Gas - methane, 2.5%
473180	Calibration Gas - 300 ppm CO
813718	Calibration Gas - methane, 2.5% oxygen, 15%60 ppm CO
813720	Calibration Gas - methane, 2.5% oxygen, 15%300 ppm CO 10 ppm H_2S
710288	Gasmiser™ Demand Regulator 0 - 3.0 lpm

Accessories

Part No.	Description
804679	Data Docking Module Kit. Includes the Data Docking Module, MSA Link Software and Instruction Manual

Approvals

The Gasport Gas Tester has been designed to meet intrinsic safety testing requirements in certain hazardous atmospheres.

The Gasport Gas Tester is approved by MET (an OSHA Nationally Recognized Testing Laboratory [NRTL]) for use in Class I, Division I, Groups A, B, C, D; Class II, Division I, Groups E, F, G; and Class III Hazardous locations. Gaspor tGas Testers sold in Canada are approved by CSA for use in Class I, Division I, Groups A, B, C, and D locations.

Contact MSA at 1-800-MSA-2222 for more information or with questions regarding the status of approvals.

Gasport Gas Tester Kits

	LEL Display	O_2	CO	H_2S	Alarms Always	Alarms Optional	Leak Detect Page	Peak	Alkaline Battery	NiCd Battery	5ft Coiled Line	1ft Probe	Part No.
4-Gas, Selectable, NiCd	•	•	•	•		•	•	•		•	•	•	711489
4-Gas, Selectable, Alkaline	•	•	•	•		•	•	•	•		•	•	711490
3-Gas, Selectable, NiCd	•	•	•			•	•	•		•	•	•	711493
3-Gas, Selectable, Alkaline	•	•	•			•	•	•	•		•	•	711494
2-Gas, Selectable, NiCd	•		•			•	•	•		•	•	•	711495
2-Gas, Selectable, Alkaline	•		•			•	•	•	•		•	•	711496
4-Gas, Alarms On, NiCd	•	•	•	•	•		•	•		•	•	•	711491
4-Gas, Alarms On, Alkaline	•	•	•	•	•		•	•	•		•	•	711492

Assemble-to-Order (ATO) System: You Make the Choices

The ATO System makes it easy to "custom order" the Gasport Gas Tester, configured exactly the way you want it. You can choose from an extensive line of base instrument components and accessories. To obtain a copy of the "ATO System and Price Information for the Gasport Gas Tester," call toll-free 1-800-MSA-2222, and request Bulletin 0804-28. **To obtain a copy of the ATO via FAX, call MSA QuickLit Information Service at 1-800-672-9010. At the prompt, request QuickLit Document #2345 (ATO for Gasport Gas Tester).**

ID 08-04-27-MC / May 2000

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P.O. Box 426
Pittsburgh, PA 15230 USA
Phone (412) 967-3000
www.MSAnet.com

U.S. Customer Service Center
1-800-MSA-2222

MSA International
Phone (412) 967-3354
FAX (412) 967-3451

Offices and representatives worldwide
For further information:

GeoXT

The total GPS platform for all your GIS field requirements

The GeoXT™ handheld, from the GeoExplorer® series, is an essential tool for maintaining your GIS. It's all you need to collect location data, keep existing GIS information up to date, and even mobilize your GIS.

The unique GeoExplorer series combines a Trimble® GPS receiver with a rugged field-ready handheld computer running the Microsoft® Windows Mobile™ 2003 software for Pocket PCs. Plus there's an internal battery that easily lasts for a whole day of GPS operation. The result is tightly integrated, tough, and incredibly powerful.

High-accuracy integrated GPS

The GeoXT is optimized to provide the reliable, high-accuracy location data you need. Advanced features like EVEREST™ multipath rejection technology let you work under canopy, in urban canyons, or anywhere where accuracy is crucial.

Need submeter accuracy in real-time? Use corrections from a satellite-based augmentation system (SBAS) like WAAS[1] or EGNOS[2]. Want to get that extra edge in precision? Collect data with Trimble's TerraSync™ or GPScorrect™ software, and then postprocess back in the office.

Because the GPS receiver and antenna are built into the handheld computer, it's never been easier to use GPS in your application. The system is more than just cable-free: it's a totally integrated solution.

Optimized productivity

Take advantage of the power and flexibility of Windows Mobile software for Pocket PCs by choosing from the most comprehensive range of field software available—whether off-the-shelf or purpose-built. Whatever your needs, Windows Mobile lets you choose a software solution to match your workflow.

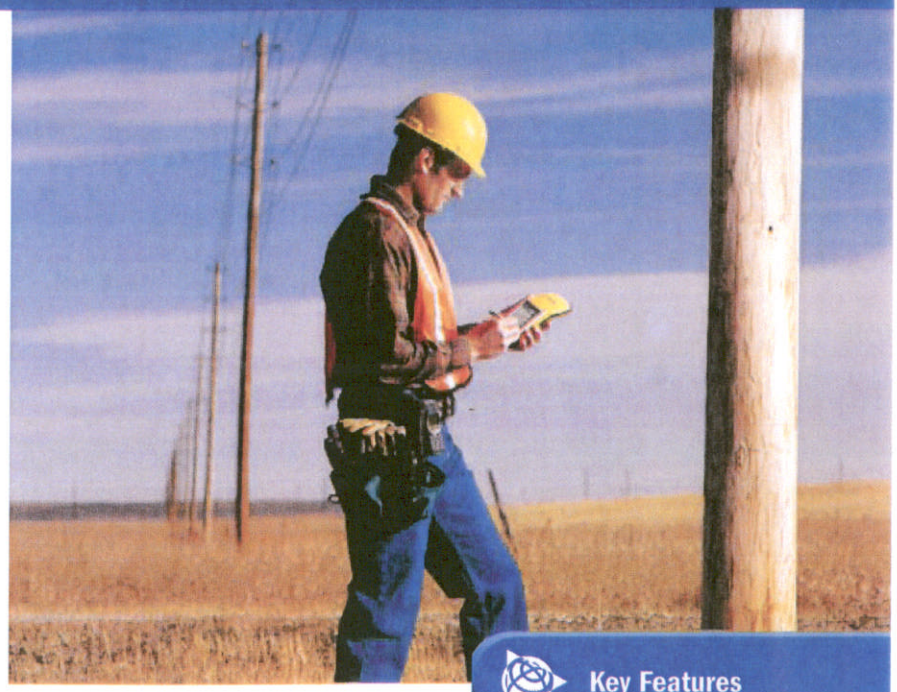
Windows Mobile includes familiar Microsoft productivity tools, including Pocket Word, Pocket Excel, and Pocket Outlook®. Pocket Outlook lets you synchronize e-mails, contacts, appointments, and data with your office computer, so whether you're in the office or in the field, you're always up to date.

Go wireless with integrated Bluetooth®* for connection to other Bluetooth-enabled devices, including cell phones and PCs. You also have the option to use the USB support module to connect to a desktop computer, or use the optional serial clip for cabled connections in the field.

Receive a free copy of Microsoft Streets & Trips** 2004 software with your GeoXT handheld, and take advantage of comprehensive map and travel information for easy navigation and route planning.

All the memory you need

There's plenty of storage space in the GeoXT for all your GIS data. The fast processor and large memory mean even big graphics files load quickly—and they're crisp and crystal-clear on the advanced TFT outdoor color screen.



Key Features

- High-performance submeter GPS with integrated WAAS/EGNOS
- Windows Mobile 2003 software for Pocket PCs, allowing maximum flexibility in software choice
- Rugged handheld with all-day battery
- Advanced color TFT display with backlight
- Integrated Bluetooth for wireless connectivity

From data collection to data maintenance, to mobile GIS and beyond ... the GeoXT is the handheld of choice.

* *Bluetooth type approvals are country spe[illegible]. GeoExplorer series handhelds are approv[illegible] for use with Bluetooth in the USA. For a comp[illegible] list of other countries with Bluetooth appr[illegible] please refer to: www.trimble.com/geo_bluetooth.html.*

** *Microsoft Streets & Trips 2004 software ava[illegible] in US/Canada; Microsoft AutoRoute® 2004 in Europe.*

Trimble.

GeoXT

The total GPS platform for all your GIS field requirements

Standard features

System
- Microsoft Windows Mobile 2003 software for Pocket PCs
- 206 MHz Intel StrongARM processor
- 512 MB non-volatile Flash data storage
- Outdoor color display
- Ergonomic cable-free handheld
- Rugged and water-resistant design
- All-day internally rechargeable battery
- Bluetooth wireless

GPS
- Submeter accuracy
- Integrated WAAS[1]/EGNOS[2]
- RTCM real-time correction support
- NMEA and TSIP protocol support
- EVEREST multipath rejection technology

Software
- GPS Controller for control of integrated GPS and in-field mission planning
- GPS Connector for connecting integrated GPS to external ports
- File Explorer, Internet Explorer, Pocket Outlook (Inbox, Calendar, Contacts, Tasks, Notes), Sprite Pocket Backup, Transcriber, Pocket Word, Pocket Excel, Pictures, Windows® Media Player, Bluetooth File Transfer, Calculator, ActiveSync®
- Microsoft Streets & Trips/AutoRoute 2004 software

Accessories
- Support module with power supply and USB data cable
- Getting Started Guide
- Companion CD includes Outlook 2002 and ActiveSync 3.7.1
- Hand strap
- Pouch
- Stylus

Optional Features

Software
- TerraSync
- GPScorrect for ESRI® ArcPad®
- GPS Pathfinder® Tools Software Development Kit (SDK)
- GPS Pathfinder Office
- Trimble GPS Analyst extension for ArcGIS®

Accessories
- Serial clip for field data and power input
- Vehicle power adaptor[3]
- Portable power kit[3]
- Hurricane antenna
- External patch antenna
- Pole-mountable ground plane
- Baseball cap with antenna sleeve
- Beacon-on-a-Belt (BoB™) differential correction receiver[3]
- Hard carry case
- Null modem cable[3]
- Backpack kit

Specifications subject to change without notice.

Technical specifications

Physical

Size	21.5 cm × 9.9 cm × 7.7 cm (8.5 in × 3.9 in × 3.0 in)
Weight	0.72 kg (1.59 lb) with battery
Processor	206 MHz Intel StrongARM SA-1110
Memory	64 MB RAM and 512 MB internal Flash disk
Power	
Low (no GPS)	0.6 Watts
Normal (with GPS)	1.4 Watts
High (with GPS, backlight, and Bluetooth)	2.5 Watts
Battery	Internal lithium-ion, rapidly rechargeable in unit, 21 Watt-hours

Environmental

Temperature	
Operating	–10 °C to +50 °C (14 °F to 122 °F)
Storage	–20 °C to +70 °C (–4 °F to 158 °F)
Humidity	99% non-condensing
Casing	Wind-driven rain and dust-resistant per IP 54 standard Slip-resistant grip, shock- and vibration-resistant

Input/output

Communications	Bluetooth for wireless connectivity USB via support module, serial via optional DE9 serial clip adaptor
Bluetooth	
Certification	Bluetooth type approvals are country specific. GeoExplorer series handhelds are approved for use with Bluetooth in the USA. For a complete list of other countries with Bluetooth approval please refer to www.trimble.com/geoxt_ts.asp.
Profiles	
Both client and host support	Serial Port, File Transfer (using OBEX)
Client support only	Dial-Up Networking, Lan Access
Host support only	Basic Imaging, Object Push
Display	Advanced outdoor TFT, 240 × 320 pixel, 65,536 colors, with backlight
Audio	Microphone and half duplex speaker, record and playback utilities
Interface	Anti-glare coated touch screen, Soft Input Panel (SIP) virtual keyboard 2 hardware control keys plus 4 programmable permanent touch buttons Handwriting recognition software, Audio system events, warnings, and notifications

GPS

Channels	12
Integrated real-time	WAAS[1] or EGNOS[2]
Update rate	1 Hz
Time to first fix	30 sec (typical)
Protocols	NMEA (GGA, VTG, GLL, GSA, ZDA, GSV, RMC), TSIP (Trimble Standard Interface Protocol)

Accuracy (RMS)[4] after differential correction

Postprocessed[5]	Submeter
Carrier postprocessed[6]	
With 10 minutes tracking satellites	30 cm
Real-time	Submeter

1 *WAAS (Wide Area Augmentation System). Available in North America only. For more information, see http://gps.faa.gov/programs/index.htm.*
2 *EGNOS (European Geostationary Navigation Overlay System). Available in Europe only. For more information, see http://www.esa.int/export/esaSA/navigation.html.*
3 *Serial clip also required.*
4 *Horizontal accuracy. Requires data to be collected with minimum of 4 satellites, maximum PDOP of 6, minimum SNR of 4, minimum elevation of 15 degrees, and reasonable multipath conditions. Ionospheric conditions, multipath signals or obstruction of the sky by buildings or heavy tree canopy may degrade precision by interfering with signal reception. Accuracy varies with proximity to base station by +1 ppm for postprocessing and real-time, and by +5 ppm for carrier postprocessing.*
5 *Postprocessing with GPS Pathfinder Office software or GPS Analyst extension for ArcGIS.*
6 *Requires collection of carrier data. (Only available with the GPS Pathfinder Office software).*

YOUR LOCAL TRIMBLE OFFICE OR REPRESENTATIVE

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APPENDIX B

LABORATORY ANALYTICAL RESULTS

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

June 12, 2006

John Peterson
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003

RE: Archuleta Natural Spring Survey

Enclosed are the results of analyses for samples received by Summit Scientific on 06/07/06 11:29. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Noelle E Doyle
Laboratory Manager

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 15:22

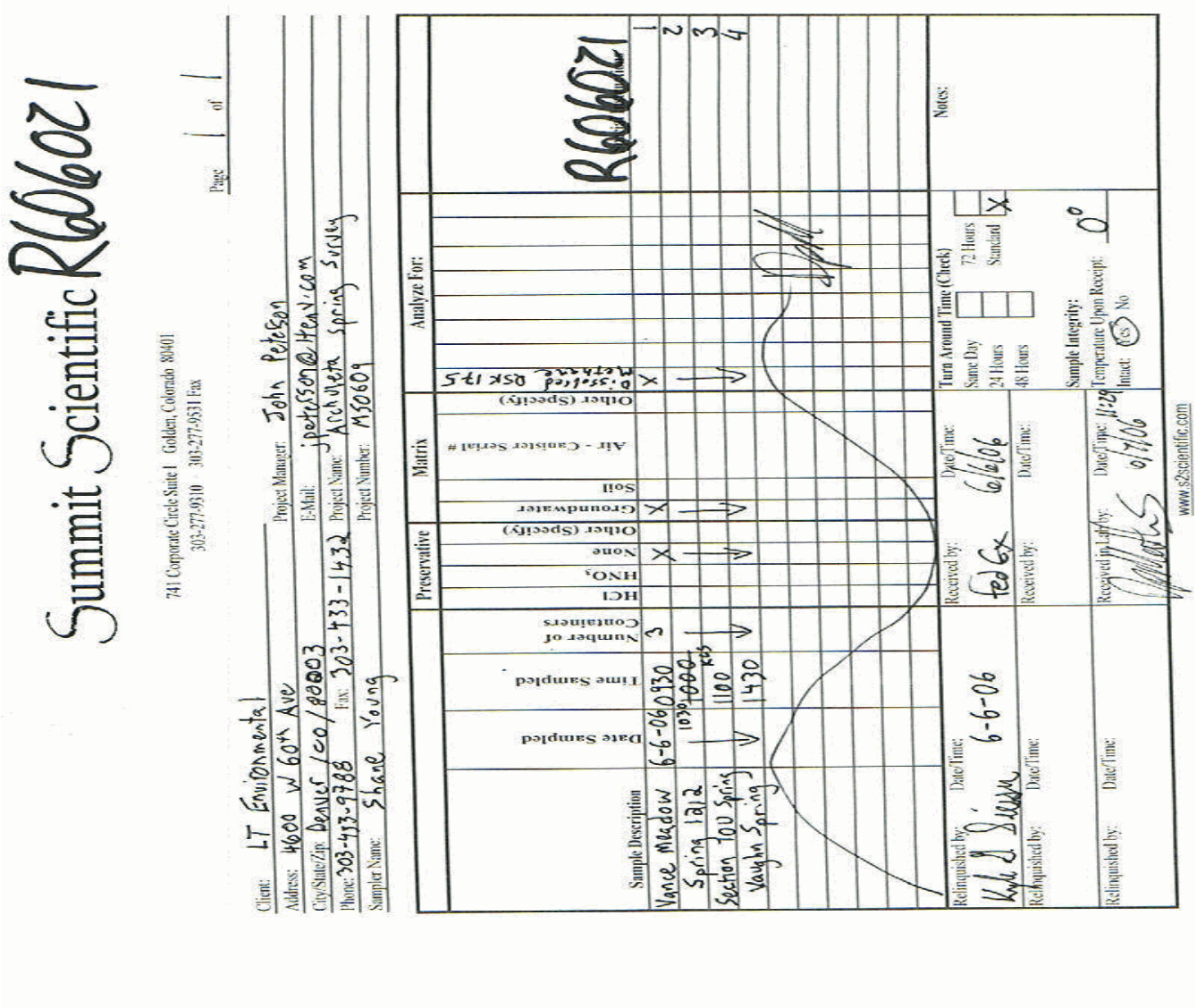
ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Vance Meadow	R606021-01	Water	06/06/06 09:30	06/07/06 11:29
Spring 1212	R606021-02	Water	06/06/06 10:30	06/07/06 11:29
Section IOU Spring	R606021-03	Water	06/06/06 11:00	06/07/06 11:29
Vaughn Spring	R606021-04	Water	06/06/06 14:30	06/07/06 11:29

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 15:22



LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 15:22

Vance Meadow

R606021-01 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/06/06 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**11**	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Project Number: Project Manager:	Archuleta Natural Spring Survey MS0609 John Peterson	**Reported:** 06/12/06 15:22

Spring 1212

R606021-02 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/06/06 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	ND	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 15:22

Section IOU Spring

R606021-03 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/06/06 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**6.2**	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 15:22

Vaughn Spring

R606021-04 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/06/06 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**3.7**	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 15:22

RSK-175 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6060801 - General Preparation										
Blank (6060801-BLK1)				Prepared: 06/08/06 Analyzed: 06/12/06						
Methane	ND	1.0	ug/l							

S2

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 15:22

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

June 12, 2006

John Peterson
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003

RE: Archuleta Natural Spring Survey

Enclosed are the results of analyses for samples received by Summit Scientific on 06/02/06 10:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Noelle E Doyle
Laboratory Manager

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39

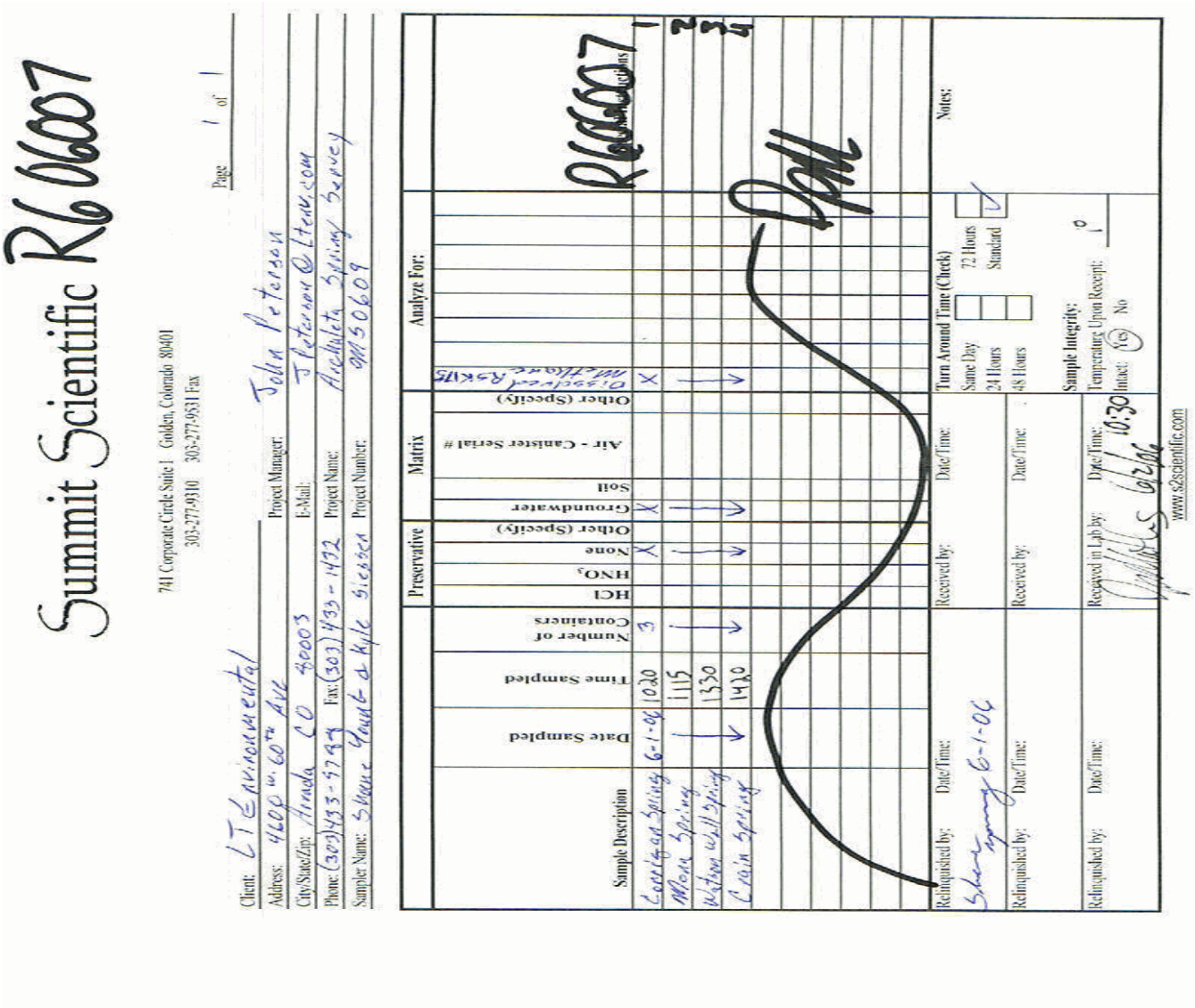
ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Corrigan Spring	R606007-01	Water	06/01/06 10:20	06/02/06 10:30
Mona Spring	R606007-02	Water	06/01/06 11:15	06/02/06 10:30
Watson Wall Spring	R606007-03	Water	06/01/06 13:30	06/02/06 10:30
Crain Spring	R606007-04	Water	06/01/06 14:20	06/02/06 10:30

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39



LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39

Corrigan Spring

R606007-01 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/01/06 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	ND	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

Summit Scientific

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LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39

Mona Spring

R606007-02 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/01/06 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	ND	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

S2

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39

Watson Wall Spring

R606007-03 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/01/06 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**16**	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

Summit Scientific

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LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39

Crain Spring

R606007-04 (Water)

Summit Scientific

RSK-175

Date Sampled: **06/01/06 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**6.7**	1.0	ug/l	1	6060801	06/08/06	06/12/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39

RSK-175 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6060801 - General Preparation										
Blank (6060801-BLK1)				Prepared: 06/08/06 Analyzed: 06/12/06						
Methane	ND	1.0	ug/l							

S2

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/12/06 14:39

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

June 01, 2006

John Peterson
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003

RE: Archuleta Natural Spring Survey

Enclosed are the results of analyses for samples received by Summit Scientific on 05/26/06 15:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Noelle E Doyle
Laboratory Manager

S2

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55

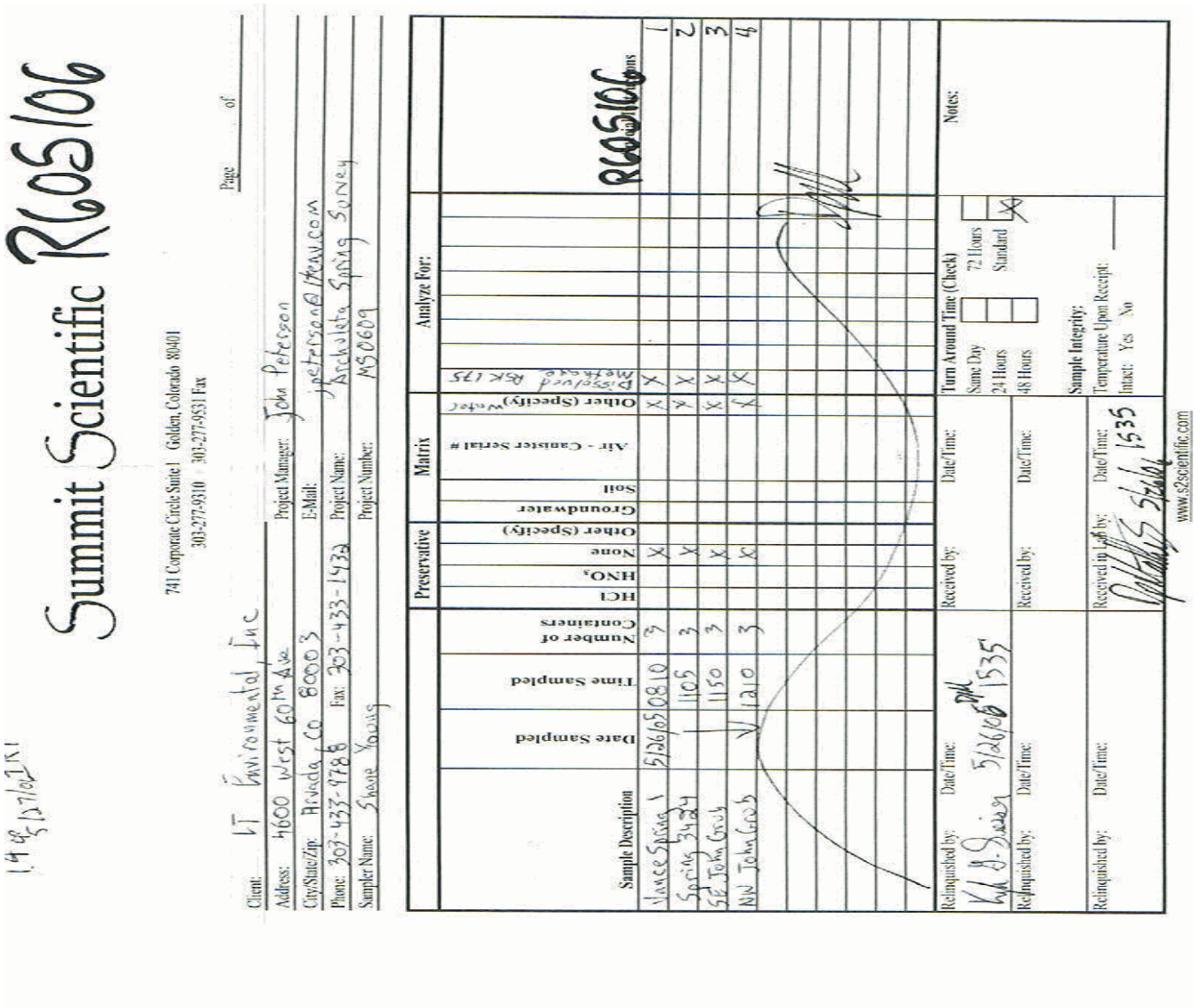
ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Vance Spring 1	R605106-01	Water	05/26/06 08:10	05/26/06 15:35
Spring 3424	R605106-02	Water	05/26/06 11:05	05/26/06 15:35
SE John Grub	R605106-03	Water	05/26/06 11:50	05/26/06 15:35
NW John Grub	R605106-04	Water	05/26/06 12:10	05/26/06 15:35

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55



Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55

Vance Spring 1

R605106-01 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/26/06 08:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**0.022**	0.0010	mg/L	1	6053003	05/30/06	06/01/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55

Spring 3424

R605106-02 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/26/06 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**0.023**	0.0010	mg/L	1	6053003	05/30/06	06/01/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55

SE John Grub

R605106-03 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/26/06 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**0.0025**	0.0010	mg/L	1	6053003	05/30/06	06/01/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55

NW John Grub

R605106-04 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/26/06 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**0.0016**	0.0010	mg/L	1	6053003	05/30/06	06/01/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55

RSK-175 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6053003 - General Preparation										
Blank (6053003-BLK1)				Prepared: 05/30/06 Analyzed: 06/01/06						
Methane	ND	0.0010	mg/L							

S2

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/01/06 12:55

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

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Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

June 13, 2006

John Peterson
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003

RE: Archuleta Natural Spring Survey

Enclosed are the results of analyses for samples received by Summit Scientific on 05/26/06 10:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Noelle E Doyle
Laboratory Manager

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Thick Spring	R605103-01	Water	05/25/06 09:30	05/26/06 10:30
Walt Spring 1	R605103-02	Water	05/25/06 10:15	05/26/06 10:30
Reich Spring	R605103-03	Water	05/25/06 12:35	05/26/06 10:30
Big Hole Spring	R605103-04	Water	05/25/06 13:30	05/26/06 10:30
Willow Spring	R605103-05	Water	05/25/06 14:10	05/26/06 10:30

Summit Scientific

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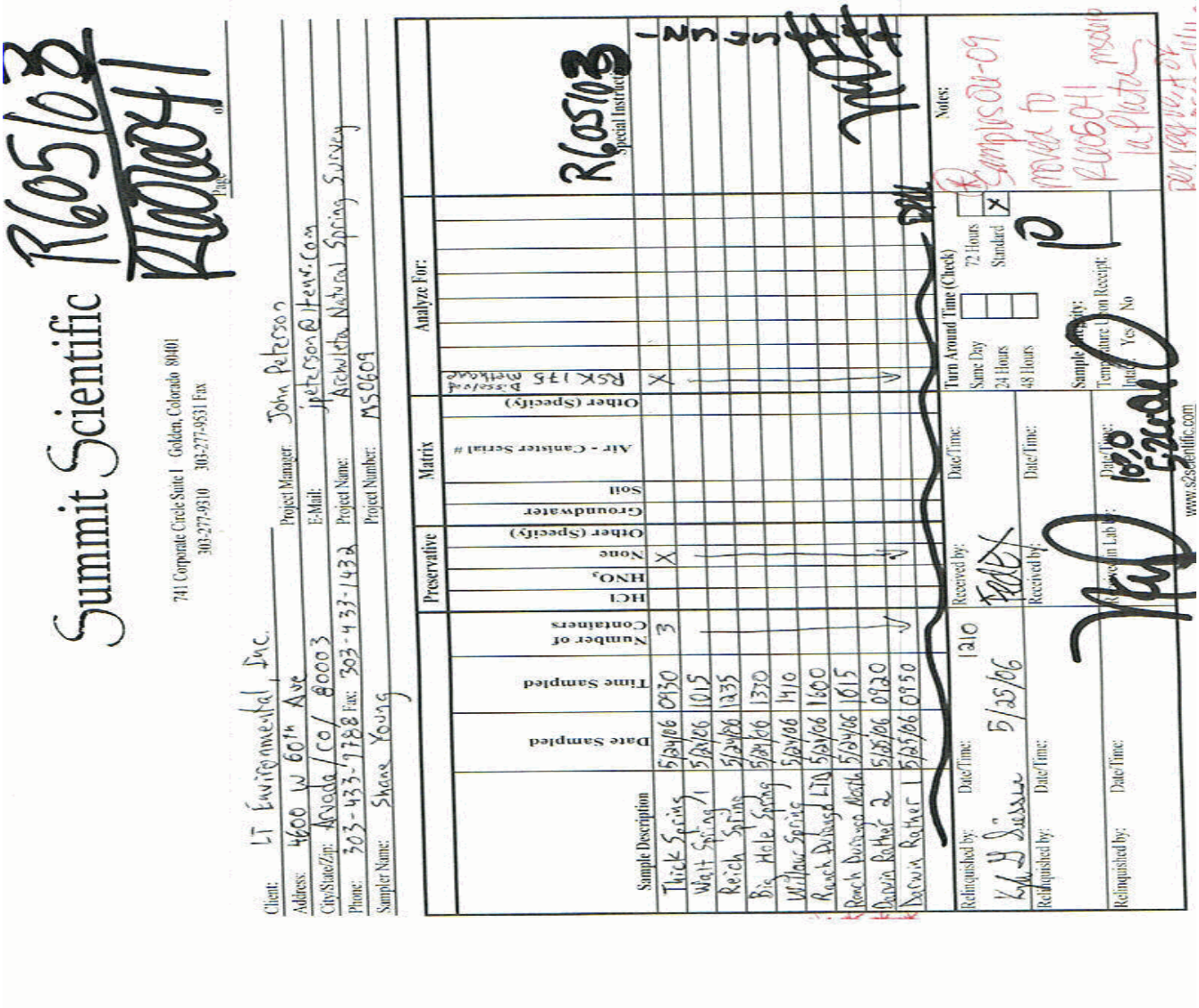
LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30



Summit Scientific

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LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

Thick Spring

R605103-01 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/25/06 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	ND	1.0	ug/l	1	6053003	05/30/06	06/01/06	N/A	

Summit Scientific

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LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

Walt Spring 1

R605103-02 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/25/06 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	ND	1.0	ug/l	1	6053003	05/30/06	06/01/06	N/A	

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

Reich Spring

R605103-03 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/25/06 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	ND	1.0	ug/l	1	6053003	05/30/06	06/01/06	N/A	

Summit Scientific

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LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

Big Hole Spring

R605103-04 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/25/06 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	**1.0**	1.0	ug/l	1	6053003	05/30/06	06/01/06	N/A	

Summit Scientific

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LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

Willow Spring

R605103-05 (Water)

Summit Scientific

RSK-175

Date Sampled: **05/25/06 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	ND	1.0	ug/l	1	6053003	05/30/06	06/01/06	N/A	

Summit Scientific

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LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

RSK-175 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6053003 - General Preparation										
Blank (6053003-BLK1)				Prepared: 05/30/06 Analyzed: 06/01/06						
Methane	ND	1.0	ug/l							

LT Environmental, Inc. 4600 West 60th Avenue Arvada CO, 80003	Project: Archuleta Natural Spring Survey Project Number: MS0609 Project Manager: John Peterson	**Reported:** 06/13/06 14:30

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
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Summit Scientific

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Isotech Gas Data

Job 7587

Isotech Lab No.	Sample Name	Field Name	GC date	He %	H_2 %	Ar %	O_2 %	CO_2 %	N_2 %	CO %	C_1 %	C_2 %	C_2H_4 %	C_3 %	iC_4 %	nC_4 %	iC_5 %	nC_5 %	C_6+ %	MS date	$\delta^{13}C_1$ ‰	δDC_1 ‰	Specific Gravity	BTU
103425	Squaw Creek	Fruitland Outcrop Monitoring	9/07/2006	0.0016	0.0017	0.207	0.0728	3.79	10.47	0	85.46	0	0	0	0	0	0	0	0	10/6/2006	-60.67	-375.1	0.636	866

Chemical analysis based on standards accurate to within 2%