### To: Ch 90 Regulations Development Group

Subject: Comments re Identification and Protection of Sensitive Sites

### INTRODUCTION:

In order to identify and assess culturally sensitive sites with the ultimate goal of protecting them against disturbance and disrespect it is useful to first insure that terminology and concepts are both understood and used in specific ways. These issues are relevant to the appropriate development of La Plata County Land Use Code Chapter 90 regulations because the cultural geography of La Plata County is significant and meaningful to indigenous peoples in the area. Unfortunately, the Fruitland coal bed methane formation underlies this same sensitive cultural geography. Surface use for the development and production of Fruitland coal bed methane in La Plata County inherently involves the potential disturbance of sensitive sites. It is therefore necessary to properly assess any site, and possibly use alternate OGLs to avoid damaging or disrespecting culturally sensitive sites.

## CLARIFICATION of TERMINOLOGY:

During the September 28, 2022 workshop on the Chapter 90 regulations draft development, a discussion occurred regarding the impacts of paleontological and archaeological resources on the siting of OGLs. In particular, the discussion explored the matters of setbacks and location exclusions.

Based on a degree from the University of New Mexico, with a major in anthropology and a minor in archaeology, coupled with a background of approximately 20 years working and living with indigenous groups in various capacities, it seems useful to make some observations and clarifications prior to commenting about the impacts of these resources as pertains to the siting of OGLs.

Paleontology is a "branch of science concerned with fossil animals and plants." Paleontological resources fall into two categories; those that can be salvaged and those that can not. The former are isolated instances such as a single fossil that can be removed for later study and where location is not a critical factor. The other type, such as fossil beds or footprints preserved in sediment layers, cannot, however, readily be removed without loss of critical in situ information.

Archaeological resources, archaeology being defined as "a study of human and prehistory through the excavation and analysis of artifacts and other physical remains," similarly fall into two categories. Historically, archaeology focused on the collection, removal, cataloging and subsequent interpretation of artifacts from previous cultures and groups. Ultimately, the critical importance of studying and documenting artifacts in situ in order to analyze locational and contextual relationships was recognized. In many cases, an archaeological salvage approach is not suitable and the site needs to be preserved with minimal disturbance.

Anthropology is the broader "study of human societies and cultures and their development." It is culture on which I want to focus. Culture is defined as "all the ways of life including arts, traditions and beliefs of a population that are passed down from generation to generation." Perhaps more simply put it is the way you see the world; so different cultures are different ways of seeing. It is important to be aware that when a person observes a culture different from their own, they do so through their own cultural filter or culturally derived perceptions.

One aspect of culture that is pertinent to the issue of the siting of OGLs, is cultural geography and hence the cultural landscape. Cultural geography can be defined as "the study of how the physical environment interacts with ways of life and traditions of people;" while the cultural landscape is "a geographic area that includes cultural resources and natural resources associated with the interactions between nature and human behavior." It is important to recognize that these interactions are both tangible, with physical manifestations such as artifacts or evidence of habitation; and intangible aspects that include cultural values and spiritual and kin-based relationships with the land. The land itself can play an important role in the health and well-being of a group of people. In evaluating the potential impact of a proposed OGL, it is suggested it is necessary to seek consultation with nearby indigenous groups whose perceptions may not be apparent to individuals of a different culture.

# SUMMARY:

Developing a meaningful resolution of a conflict between a choice for an OGL and protection of a sensitive site in that vicinity is not just a simple matter of salvaging a few surface artifacts and then proceeding with development. As explained above in the clarification of concepts, it is a complex issue just in terms of the scientific context. An assessment requires an appropriate expert to make a determination from that standpoint.

More importantly, the cultural geography as well as the past and present presence of indigenous peoples in La Plata County also makes it necessary to consult representatives of those cultures to identify the importance of both tangible and intangible significance of any site.

# **RECOMMENDATION:**

The starting point for addressing the issue of culturally sensitive sites might be an invitation to SUIT to provide a county map identifying such sites, particularly if the significance is intangible. Such a map would form a starting point for avoiding OGL choices that might entail a problem or conflict.

An appropriate cultural assessment might be a useful foundational basis for an alternate location analysis if an initially proposed OGL conflicts with resources identified with that site that make disturbance undesirable.

In terms of setbacks and permanent exclusions to avoid disturbance of sensitive sites or resources, the implications of horizontal drilling, need to be considered. Horizontal drilling techniques allow an offset of up to three miles between the location of the surface top hole and OGL and the bottom hole terminus of the horizontal bore. It would seem that an alternate location analysis and the utilization of these offset drilling techniques would be the reasonable methodology to resolve the question of preventing disturbance and protecting sensitive sites.