

## Emissions Monitoring Report ECMC Orphaned Well Program

**Monitoring Site:** State #31-16 (OWP)  
API #: 05-081-06083  
ECMC Location ID: 391788  
Well Status: Post-Plugging  
Lat 40.918529 Long -106.293516  
NWNE Sec 16 T11N R97W 6th PM, CO

**Monitoring Result:** NON-DETECT

### **Background:**

Emissions monitoring was conducted at the State #31-16 (OWP). The well was drilled in 1969 to a measured total depth of 3,502 feet and completed in an unknown formation. The well was plugged and abandoned (P&A) in November 2025.

### **Methodology:**

Cottonwood was on-site to conduct the post-plugging emissions monitoring on November 17, 2025.

Cottonwood utilized a GEM™5000 Landfill Gas Meter to determine if methane emissions were present at the wellhead, flowlines, and associated production equipment (if present). Cottonwood utilized a photoionization detector (PID) to determine onsite concentrations of volatile organic compounds (VOCs). Where emissions were detected, the GEM™5000 Landfill Gas Meter was utilized to determine the approximate percent (%) of methane and other gases contained in the emissions. Cottonwood also utilized the GEM™5000 Landfill Gas Meter and PID to determine background conditions. Additionally, Cottonwood performed a fifteen-minute bubble test to confirm that no methane emissions were leaking from the P&A well.

Other observations, including auditory, visual, and olfactory observations were also noted. Observations regarding vegetation and general site conditions were recorded in a field notebook.

### **Results:**

No methane emissions were detected from the State #31-16 (OWP) P&A well.

A summary of the emissions monitoring is included on the following data sheet. Results of the emissions monitoring are shown on Figure 1 and photographic documentation of site conditions during the monitoring is included as Attachment 1.

### **Conclusion**

Based on results of the emissions monitoring, no methane emissions were detected from the State #31-16 (OWP) P&A well.



**Emissions Monitoring Data Sheet  
ECMC Orphaned Well Program**

**Well Name: State #31-16 (OWP)**  
**API #: 05-081-06083**

**Date: 11/17/2025**  
**Monitoring Specialist: DS**

**Meteorological Conditions**

Temperature: 45 °F  
 Barometric Pressure: 22.38 inHg  
 Relative Humidity: 65 %  
 Wind Speed and Direction: 5-10 mph

**Monitoring Results**

Background Conditions	Methane:	0.0	%
	Carbon Dioxide (CO <sub>2</sub> ):	0.3	%
	Hydrogen Sulfide (H <sub>2</sub> S):	0.0	ppm
	Volatile Organic Compounds (VOCs):	0.0	ppm
P&A Well Conditions	Methane:	0.0	%
	Carbon Dioxide (CO <sub>2</sub> ):	0.3	%
	Hydrogen Sulfide (H <sub>2</sub> S):	0.0	ppm
	Volatile Organic Compounds (VOCs):	0.1	ppm

**Equipment Used:**

GEM 5000	PID	Bubble Test

**Notes:**

No methane detected. No surface water was observed and vegetation was consistent with seasonal and surrounding conditions within the vicinity of the well pad.

# State #31-16 (OWP)

Post-Plugging Methane Assessment

## Legend

- No Methane Detected
- 📌 State #31-16 (OWP)

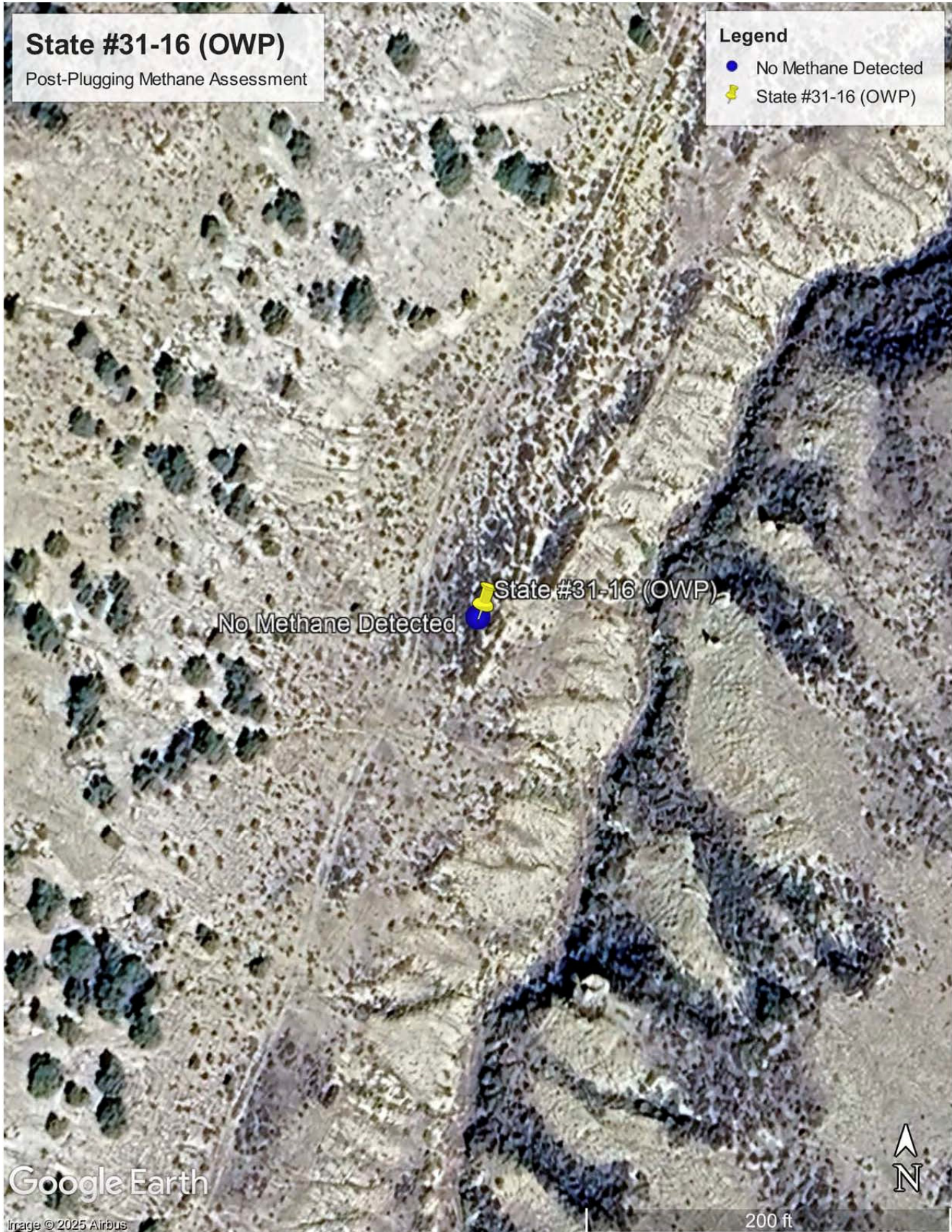


Image © 2025 Airbus

200 ft

Notes: Post-plugging methane assessment conducted 11/17/2025. No methane detected.



Mapping by: D. Songer  
Date: 9/5/2025

**Figure 1**  
**State #31-16 (OWP) Map**  
**Colorado Energy & Carbon**  
**Management Commission**

**State #31-16 (OWP)  
Photographic Log  
Colorado Energy and Carbon Management Commission**



Photo 1: State #31-16 (OWP) P&A well, view from above, no methane detected.



Photo 2: State #31-16 (OWP) P&A well, view north, no methane detected.

**State #31-16 (OWP)  
Photographic Log  
Colorado Energy and Carbon Management Commission**



Photo 3: State #31-16 (OWP) P&A well, view east, no methane detected.



Photo 4: State #31-16 (OWP) P&A well, view south, no methane detected.

**State #31-16 (OWP)**  
**Photographic Log**  
**Colorado Energy and Carbon Management Commission**



Photo 5: State #31-16 (OWP) P&A well, view west, no methane detected.