



# Air Resources Board Enforcement Division

## Inspection Report

## Sunray Petroleum in Kern Bluff Field 20220521

|                                     |      |
|-------------------------------------|------|
|                                     |      |
| Lead Inspector Signature (Leng Mut) | Date |

**Inspection Date: May 21, 2022**

### **Purpose of Inspection**

On May 17, 2022, the San Joaquin Valley Air Pollution Control District (SJVAPCD) responded to a complaint in the Morningstar community, in Bakersfield, that the idle oil wells in Kern Bluff field near residents were leaking methane at high levels. On May 19, 2022, California Air Resources Board (CARB) enforcement staff received two emails from community groups, informing CARB of a well leak complaint to SJVAPCD. In response to these emails, CARB staff inspected the wells identified in the emails on May 20, 2022, and re-inspected them on May 21, 2022, after they were reported to CARB to be repaired on the evening of May 20, 2022.

### **CARB Staff Present at Inspection**

- Leng Mut, Air Resources Engineer
- Ron Oineza, Air Resources Engineer

### **Other Agency Personnel Present at Inspection**

- Godswill Chiorlu (CalGEM)
- Clarissa Price (SJVAPCD)

### **Site Information** (Organization Detail)

Operator: Sunray Petroleum Inc.  
Agent Name: James Scott  
Lease Names: Bloemer / Hood-Bloemer  
Oilfield Name: Kern Bluff  
Bakersfield, CA 93306  
County: Kern

CalEnviroScreen Score: 49% (CalEnviroScreen 4.0)

## Description of Inspection

On May 21, 2022, CARB, along with the California Geologic Energy Management (CalGEM) and SJVAPCD, re-inspected Wells 10 and 120, and confirmed that the wells were no longer leaking methane at measurable levels. In addition, a community member identified an additional 7 idle wells for CARB to inspect, which are the rest of Sunray's idle wells in the field.

During the inspection of Wells 10 and 120, and those additional 7 wells, CARB inspectors measured methane leak concentrations from the 9 wells using Method 21- (Method 21- Volatile Organic Compound Leaks) approved equipment: a Detecto-Pak Infrared (DP-IR) and a Toxic Vapor Analyzer (TVA). CARB staff used a DP-IR to measure leak concentrations, and SJVAPCD staff verified the leaks with a TVA. This testing showed that of the additional 7 wells inspected, 4 wells were leaking above 50,000 ppm (>50,000 ppm). The 4 leaking wells were covered with a piece of sheet metal bolted to the well's openings, instead of the standard well cap to prevent leaks.

The 9 idle wells CARB inspected on May 21, 2022, are shown in purple and circled on the map in Figure 1, below (map source: Well Finder). The wells in red circles are the 4 of the 9 wells that CARB and SJVAPCD tests, described above, determined were leaking.

**Figure 1**

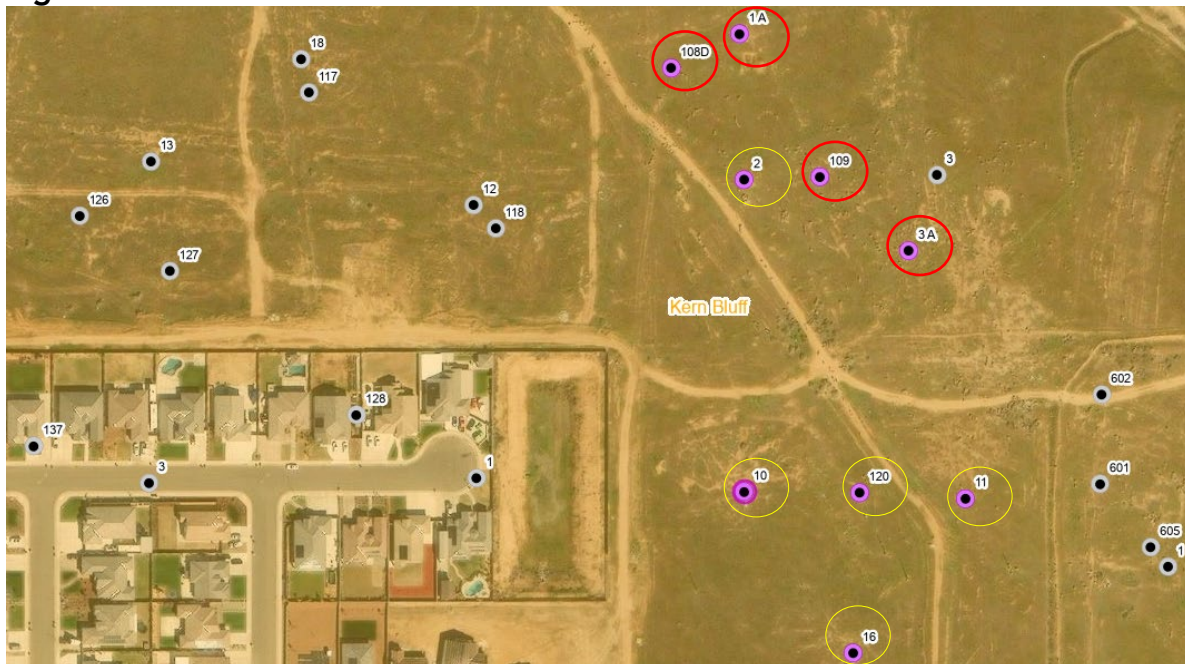


Table 1, on the next page, gives the following information about the 9 wells that CARB inspected on May 21, 2022: the American Petroleum Institute (API) number; the well number; the methane leak concentration of each well measured by CARB and

SJAVCD, in parts per million; the number of years each well has been idle, based on information from Well Detail; the location of each well (lease name); and the repair status of each well, as reported to CARB.

**Table 1: Sunray Wells Inspection Results – May 21, 2022**

| API Number | Well Number | Leak (ppm) | Years Idle (years) | Lease Name   |
|------------|-------------|------------|--------------------|--------------|
| 402908789  | 10          | 0          | 37                 | Bloemer      |
| 402908790  | 11          | 0          | 36                 | Bloemer      |
| 402908791  | 16          | 0          | 35                 | Bloemer      |
| 402969434  | 120         | 0          | 30                 | Bloemer      |
| 402908792  | 1A          | >50,000    | 36                 | Hood-Bloemer |
| 402908793  | 2           | 0          | 36                 | Hood-Bloemer |
| 402908794  | 3A          | >50,000    | 39                 | Hood-Bloemer |
| 402971724  | 108D        | >50,000    | 36                 | Hood-Bloemer |
| 402969433  | 109         | >50,000    | 30                 | Hood-Bloemer |

On June 1, 2022, CARB and SJVAPCD staff re-inspected wells 1A, 3A, 108D and 109 after they were repaired, and no methane was detected. The agencies re-inspected all 9 wells and found no leaks.

### Works Cited

"CalEnviroScreen 4.0." *California Office of Environmental Health Hazard Assessment*, 20 Oct. 2021, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.

"Method 21 - Volatile Organic Compound Leaks." *U.S. Environmental Protection Agency*, 4 Oct. 2021, <https://www.epa.gov/emc/method-21-volatile-organic-compound-leaks>.

"Organization Detail." *WellSTAR, CalGEM*, 2022, <https://wellstar-public.conservation.ca.gov/Entity/Organization/Detail/13>.

"Well Detail." *WellSTAR, CalGEM*, 2022, <https://wellstar-public.conservation.ca.gov/Well/Well/Detail?api=0402908789#>.