

# Air Resources Board Enforcement Division

# **Inspection Report**

# Sunray Petroleum in Kern Bluff Field 20220520

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

Inspection Date: May 20, 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 complaints, CARB staff inspected the wells identified in the emails to CARB on May 20, 2022.

## **CARB Staff Present at Inspection**

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

### Other Agency Personnel Present at Inspection

- Rohit Sharma (CalGEM)
- Clarissa Price (SJVAPCD)

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

Operator: Sunray Petroleum Inc.

Agent Name: James Scott Lease Name: Bloemer Oilfield Name: Kern Bluff Bakersfield, CA 93306

County: Kern

CalEnviroScreen Score: 49% (CalEnviroScreen 4.0)

## Background

On May 17, 2022, SJVAPCD staff conducted EPA Method 21 to survey three idle wells, Wells 10, 16 and 120, and found methane leaks from Wells 10 and 120 at 26,000 parts per million (ppm) and over 50,000 ppm, respectively.

#### **Description of Inspection**

From 3:00 pm to 5:00 pm on May 20, 2022, CARB, along with the California Geologic Energy Management (CalGEM) and SJVAPCD, conducted an onsite inspection of Wells 10 and 120. The two idle wells inspected by CARB on May 20 are in purple and are circled on the map in Figure 1, below (map source: Well Finder).





When CARB staff arrived onsite on May 20, 2022, CalGEM's contractors told CARB staff they were repairing the leaks. Sunray's owner was also onsite repairing Well 10. Sunray pumped 50 barrels of water into Well 10. CARB and SJVAPCD inspectors then measured methane leak concentrations from the 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 the leaks on Well 10 were stopped, and that Well 120 was leaking above 50,000 ppm (>50,000 ppm).

Table 1, on the next page, gives the following information about the two wells that CARB inspected on May 20: the American Petroleum Institute (API) number; the well number; the methane leak concentration of each well, in parts per million, as measured by CARB and SJVAPCD; the number of years each well has been idle, based

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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 20, 2022

| API Number | Well Number | Leak (ppm) | Years Idle<br>(years) | Lease Name | Repair Status |
|------------|-------------|------------|-----------------------|------------|---------------|
| 402908789  | 10          | 0          | 37                    | Bloemer    | Repaired      |
| 402969434  | 120         | >50,000    | 30                    | Bloemer    | Repaired      |

CalGEM later informed CARB that the repairs on Wells 10 and 120 were completed on the evening of May 20, 2022.

#### **Works Cited**

- "CalEnviroScreen 4.0." California Office of Environmental Health Hazard Assessment, 20 Oct. 2021, <a href="https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40">https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40</a>.
- "Method 21 Volatile Organic Compound Leaks." *U.S. Environmental Protection Agency*, 4 Oct. 2021, <a href="https://www.epa.gov/emc/method-21-volatile-organic-compound-leaks">https://www.epa.gov/emc/method-21-volatile-organic-compound-leaks</a>.
- "Organization Detail." WellSTAR, CalGEM, 2022, <a href="https://wellstar-public.conservation.ca.gov/Entity/Organization/Detail/13">https://wellstar-public.conservation.ca.gov/Entity/Organization/Detail/13</a>.
- "Well Detail." WellSTAR, CalGEM, 2022, <a href="https://wellstar-public.conservation.ca.gov/Well/Well/Detail?api=0402908789#">https://wellstar-public.conservation.ca.gov/Well/Well/Detail?api=0402908789#</a>.