

# GORDON ENVIRONMENTAL/PSC

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**TO:** Robert Sanchez, Sandoval County Landfill

**cc:** George Schuman, Permit Section Manager, NMED Solid Waste Bureau

**FROM:** Mike Crepeau, P.E.; Gordon Environmental/PSC  
Braden Belliveau, EIT.; Gordon Environmental/PSC

**DATE:** August 9, 2018

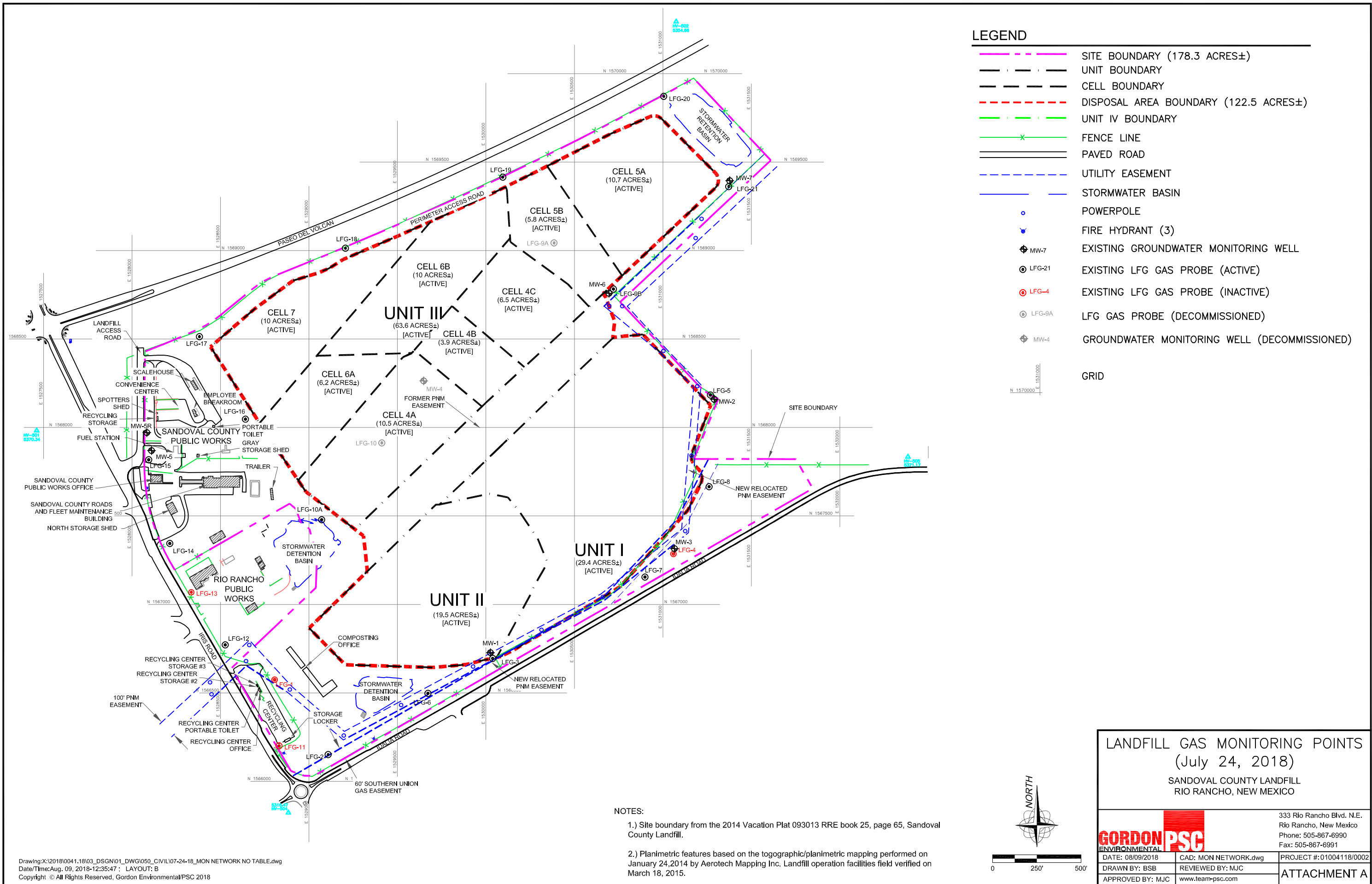
**SUBJECT:** Sandoval County Landfill:  
July 2018 Landfill Gas Monitoring Event [01004117/0002]

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On July 24, 2018, Gordon Environmental/PSC performed quarterly landfill gas (LFG) monitoring at the Sandoval County Landfill (SCLF). Landfill gas measurements were recorded at the seventeen (17) active perimeter gas monitoring probes and sixteen (16) on-site structures shown on **Attachment A**. Monitoring results for this event are provided as **Attachment B**, and a copy of the field notes is included as **Attachment C**.

Monitoring was performed using a CES Landtec™ GEM-2000® portable gas analyzer to measure methane (CH<sub>4</sub>), oxygen (O<sub>2</sub>), carbon dioxide (CO<sub>2</sub>), and balance gas (typically nitrogen) in and around facility structures and in the perimeter probes. The GEM-2000® records gas measurements in terms of percent by volume in air; and was calibrated in the field prior to monitoring with 50% CH<sub>4</sub>, 35% CO<sub>2</sub>, and 4% O<sub>2</sub> calibration gases. Methane was not detected above the regulatory threshold of 25% of the lower explosive limit (LEL) for methane (1.25% by volume in air) at any of the monitoring locations. Methane was detected at a concentration of 0.1% by volume in air in LFG monitoring probe LFG-8. The detected values for carbon dioxide and oxygen are generally consistent with the results of previous monitoring events.

Landfill gas monitoring at the perimeter probes is accomplished by connecting the GEM-2000® to the quick-connect port atop the probe with flexible Teflon tubing. Monitoring within structures is performed by connecting a 3-foot-long fiberglass extension rod to the tubing. For each type of monitoring, the pump on the GEM-2000® was turned on and the instrument was allowed to operate for a minimum of 90 seconds before stabilized instrument readings were recorded.



Drawing: X:\2018\0041.18\03\_DSGN\01\_DWG\050\_CIVIL\07-24-18\_MON NETWORK NO TABLE.dwg  
Date/Time: Aug. 09, 2018-12:35:47; LAYOUT: B  
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LANDFILL GAS MONITORING POINTS  
(July 24, 2018)  
SANDOVAL COUNTY LANDFILL  
RIO RANCHO, NEW MEXICO

<b>GORDON PSC</b> ENVIRONMENTAL		333 Rio Rancho Blvd. N.E. Rio Rancho, New Mexico Phone: 505-867-6990 Fax: 505-867-6991
DATE: 08/09/2018	CAD: MON NETWORK.dwg	PROJECT #: 01004118/0002
DRAWN BY: BSB	REVIEWED BY: MJC	ATTACHMENT A
APPROVED BY: MJC	www.team-psc.com	

# ATTACHMENT B

## LANDFILL GAS MONITORING FIELD LOG SANDOVAL COUNTY LANDFILL SANDOVAL COUNTY, NM

Monitoring Personnel: Braden Belliveau  
Methane Monitoring Type: Dedicated Probe  
Probe Depth: 30'  
Monitoring Date: 7/26/2018

### Weather Information

Date and amount of last precipitation 7/24/18; 0.07 in  
Temp: 79 °F  
Wind Speed: 0-5 mph  
Wind Direction: SSE (observed at site)  
Barometric Pressure: Not Recorded inches mercury (Hg)  
Weather Conditions: Partly cloudy

### Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 2000

Date and Time Last Calibrated: 07/26/18; 0935

### Permanent Landfill Gas Monitoring Probes

Monitoring Probe ID	Time of Measurement	CH <sub>4</sub> (% in air)	CO <sub>2</sub> (% in air)	O <sub>2</sub> (% in air)	Balance Gas (% in air)
LFG-2	1109	0	0.1	19.5	80.4
LFG-3	1123	0	0	19.6	80.4
LFG-5	1158	0	2.4	17.4	80.2
LFG-6	1116	0	0.1	19.3	80.6
LFG-7	1140	0	0.5	19.1	80.4
LFG-8	1145	0.1	0.3	19.2	80.4
LFG-9B	1204	0	0	20.2	79.8
LFG-10A	1029	0	0	19.4	80.6
LFG-12	1039	0	0.1	19.3	80.6
LFG-14	1000	0	0.1	19.5	80.4
LFG-15	0943	0	0.2	19.3	80.5
LFG-16	1241	0	0	20.1	79.9
LFG-17	1233	0	0	19.5	80.5
LFG-18	1226	0	0	20.1	79.9
LFG-19	1221	0	0.1	19.4	80.5
LFG-20	1214	0	0	19.6	80.4
LFG-21	1209	0	0	20.0	80.0

### Landfill Structures

Scalehouse (ticket office)	1304	0	0	20.0	80.0
Scalehouse (supervisor's office)	1307	0	0	20.1	79.9
Employee Breakroom	1301	0	0	20.0	80.0
Spotter's Shed	1255	0	0	20.1	79.9
Recycling Storage	1257	0	0	20.2	79.8
Portable Toilet	1020	0	0	19.6	80.4
Gray Storage Shed	1251	0	0	20.2	79.8
Composting Office	1103	0	0	19.8	80.2
Public Works Dept. Admin.	0952	0	0	19.4	80.6
Roads & Fleet Maintenance Bldg.	1009	0	0	19.5	80.5
Trailer	1014	0	0	19.7	80.3
North Storage Shed	1003	0	0	19.6	80.4
Recycling Center Office	1051	0	0	19.7	80.3
Storage Locker	1055	0	0	19.8	80.2
Recycling Center Storage #2	1058	0	0	19.7	80.3
Recycling Center Storage #3	1046	0	0	19.5	80.5
Recycling Center Portable Toilet	1049	0	0	19.6	80.4

### Ambient Readings

Near Employee Lounge	0940	0	0	19.9	80.1
Near Employee Lounge	1310	0	0	20.1	79.9

Signature(s):



# ATTACHMENT C

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