Testimony of Robert Dick, P.E., B.C.E.E.

South Coast Air Quality Management District Hearing

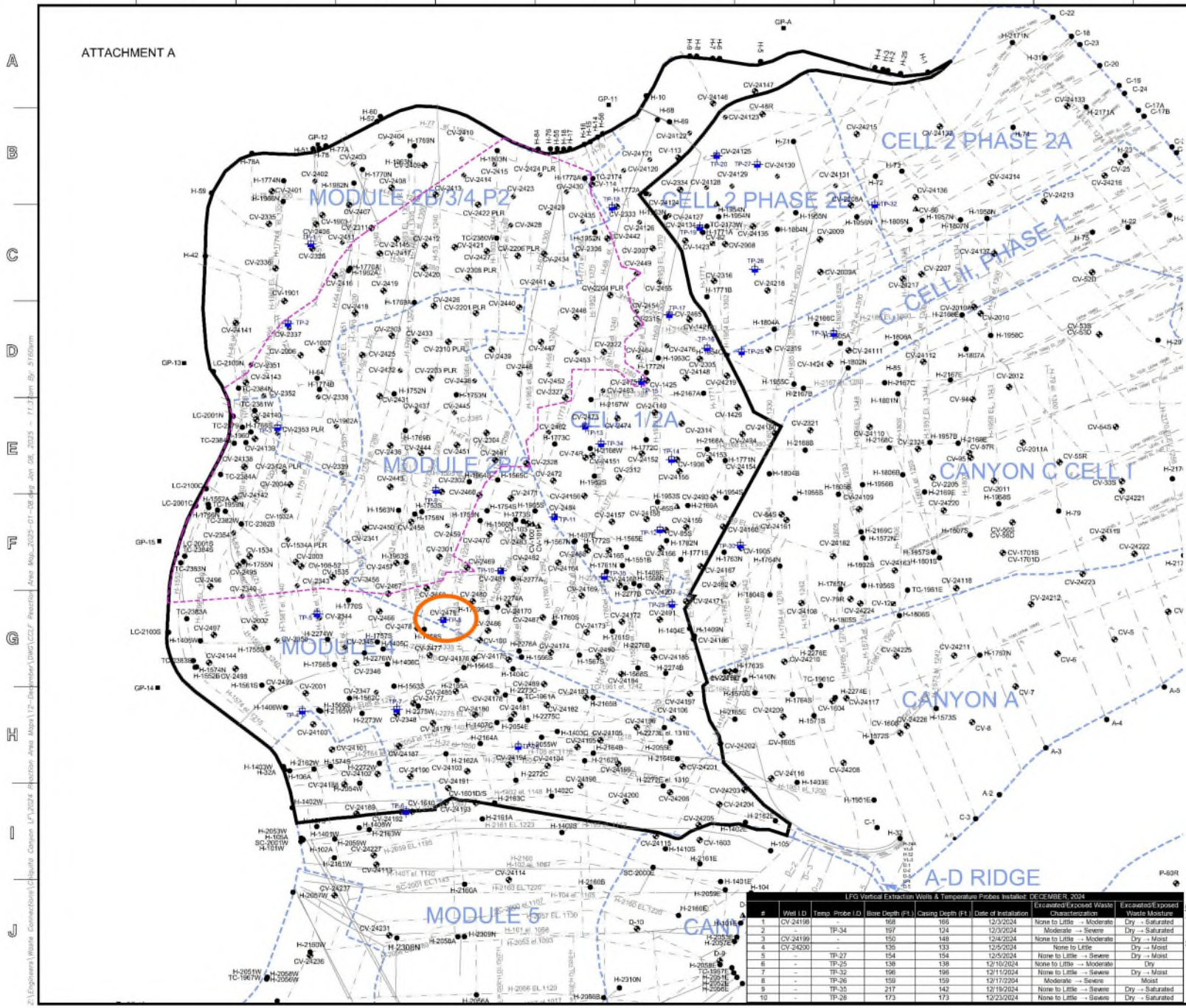
Case No. 6177-4

June 4, 2025

Factors the Reaction Committee Considers

- LFG wellhead temperatures in excess of approximately 160 degrees Fahrenheit.
- Poor gas quality (defined as methane levels of less than 30%) in conjunction with methane-to-carbon dioxide ratios less than 1.0.
- The concentration of hydrogen in the LFG measured greater than 2% by volume.
- The concentration of carbon monoxide in the LFG measured greater than 2,000 ppm.
- Accelerated settlement of the landfill surface
    - Defined as approximately 18 inches or greater within a 60-day period, and cracks in landfill cover. This corresponds to a strain value (i.e., settlement rate) rate of 3% per year for areas with a 300-foot waste column depth.
- First-hand observations of Landfill and/or SCS engineering, construction, and operations and maintenance field personnel who are on-site related to:
    - 1) atypical excess leachate quantities (presence and quantity of liquids);
    - 2) instances of pressurized liquids emitting from the landfill surface, from boreholes during drilling, and from LFG wells; and
    - 3) the characteristics of the odors originating from the select areas of the waste footprint (often described as “chemical-like” and distinctly different from typical LFG or landfill working face odors).
- Observations of subsurface waste conditions and characteristics as noted on borehole drilling logs for recently installed new wells and/or probes.
- Subsurface temperatures recorded at the in-situ waste temperature probes.
- Temperature of gas or liquids measured at depth within the LFG well riser pipe.
- Data related to subsurface temperature and pressures associated with drilling.

ATTACHMENT A



LFG Vertical Extraction Wells & Temperature Probes Installed: DECEMBER, 2024

#	Well I.D	Temp. Probe I.D.	Bore Depth (Ft.)	Casing Depth (Ft.)	Date of Installation	Excavated/Exposed Waste Characterization	Excavated/Exposed Waste Moisture
1	CV-24198		168	166	12/3/2024	None to Little → Moderate	Dry → Saturated
2	-	TP-34	197	124	12/3/2024	Moderate → Severe	Dry → Saturated
3	CV-24199		150	148	12/4/2024	None to Little → Moderate	Dry → Moist
4	CV-24200	-	135	133	12/5/2024	None to Little	Dry → Moist
5	-	TP-27	154	154	12/5/2024	None to Little → Severe	Dry → Moist
6	-	TP-25	138	138	12/10/2024	None to Little → Moderate	Dry
7	-	TP-32	196	196	12/11/2024	None to Little → Severe	Dry → Moist
8	-	TP-26	159	159	12/17/2024	Moderate → Severe	Moist
9	-	TP-35	217	142	12/19/2024	None to Little → Severe	Dry → Saturated
10	-	TP-28	173	173	12/23/2024	None to Little → Severe	Dry → Saturated

GENERAL DRAWING NOTES:

1. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
2. THE LOCATION OF ANY EXISTING PIPING, VALVES, TIE-IN LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.

NO. | REVISION | DATE

SHEET TITLE: REACTION AREA MAP DECEMBER, 2024

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON, LANDFILL CASTAIC, CALIFORNIA

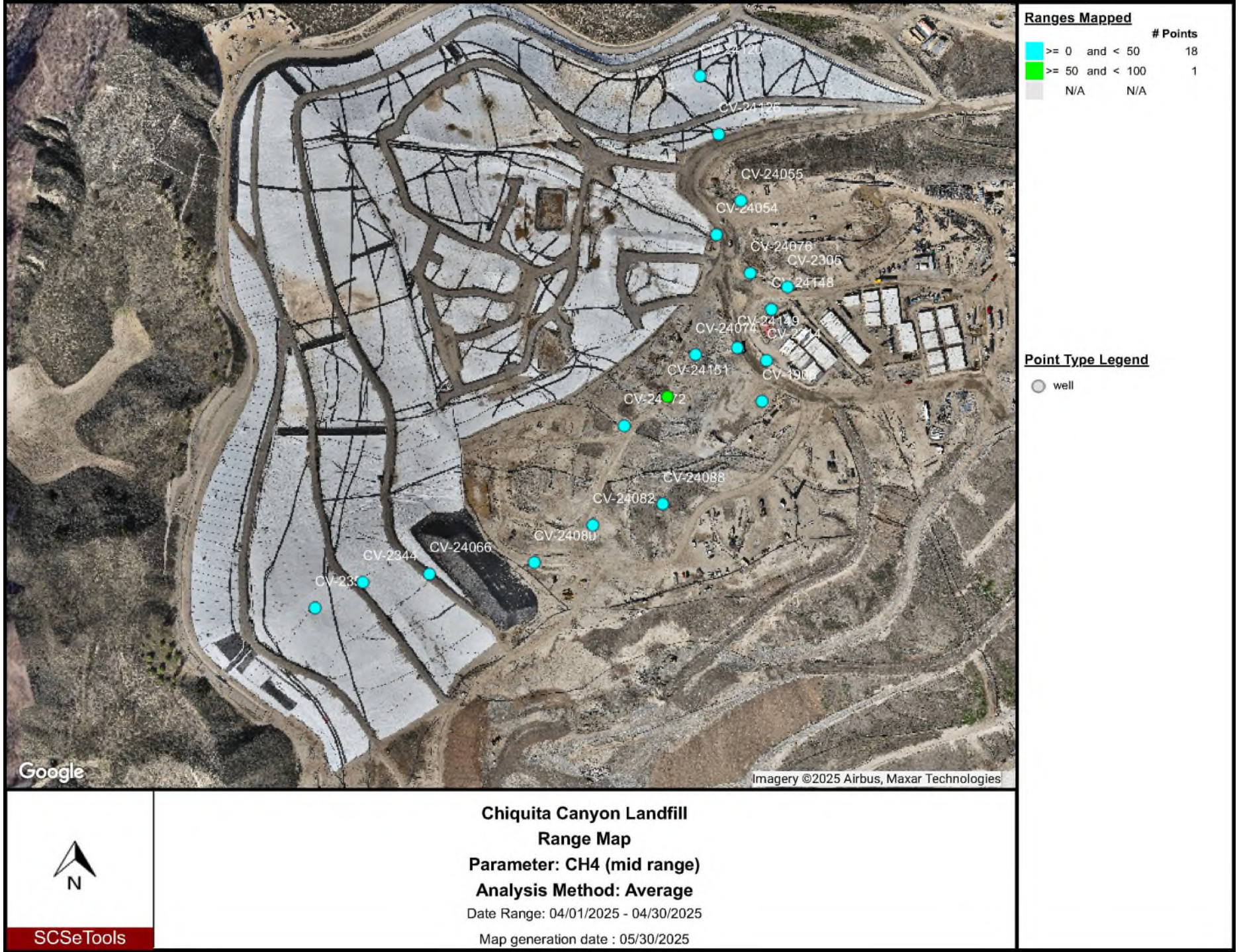
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123-1531
(858) 571-5500 FAX (562) 427-0965

PROJ. NO. 01204123.35 | DSN. BY: - | DWN. BY: SRM | CHK. BY: WCH | APP. BY: WCH | FILE: F:\ENGINEERS

DATE: 01/08/2025

SCALE: AS SHOWN

SHEET: 1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CV-2305
CV-24148
CV-24149
CV-24074
CV-24151
CV-24088
CV-24082
CV-24080
CV-24066
CV-2344
Google
Imagery ©2025 Airbus, Maxar Technologies
N
SCSeTools
Chiquita Canyon Landfill
Range Map
Parameter: CH4 (mid range)
Analysis Method: Average
Date Range: 04/01/2025 - 04/30/2025
Map generation date : 05/30/2025

Ranges Mapped

			# Points
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>= 1	and < 100		1
N/A		N/A	

Point Type Legend

well

N

SCSeTools

Chiquita Canyon Landfill

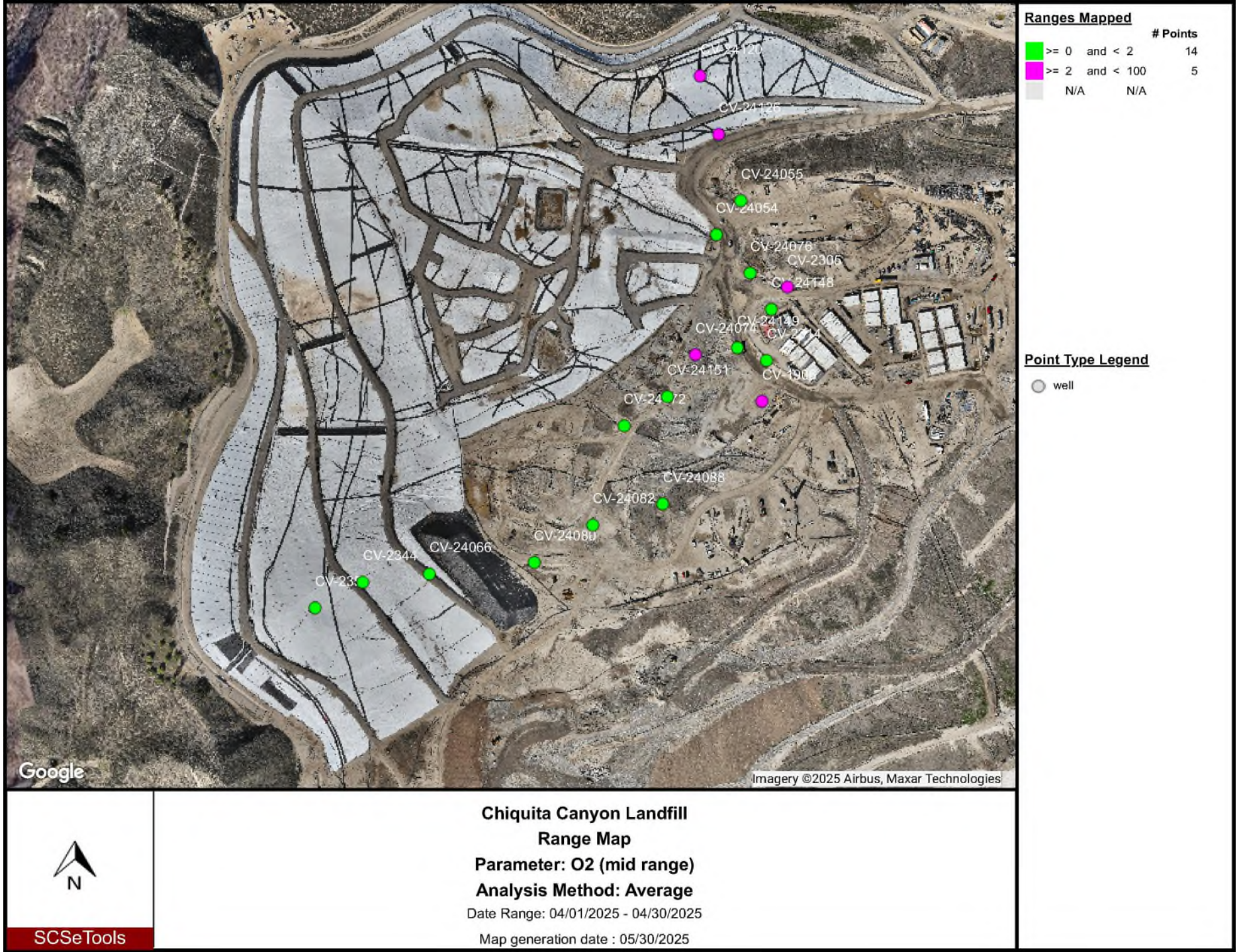
Range Map

Parameter: CH4/CO2 Ratio (mid range)

Analysis Method: Average

Date Range: 04/01/2025 - 04/30/2025

Map generation date : 05/30/2025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CV-24082
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N
SCSeTools
Chiquita Canyon Landfill
Range Map
Parameter: O2 (mid range)
Analysis Method: Average
Date Range: 04/01/2025 - 04/30/2025
Map generation date : 05/30/2025