



Converse Consultants

Geotechnical Engineering, Environmental & Groundwater Science, Inspection & Testing Services

August 9, 2022

Mr. Christ Kirikian
Principal
Meridian Consulting
920 Hampshire Road
Suite A5
Westlake Village, California 91361

Subject: **REPORT - SITE TESTING FOR METHANE**
1420 Coil Avenue
Wilmington, California
Converse Project No. 22-41-138-00

Mr. Kirikian:

Converse Consultants (Converse) appreciates this opportunity to present our report of the methane testing that was conducted at 1420 Coil Avenue, in the Wilmington area of the City of Los Angeles, California herein referred to as the Site. The Site location is indicated on **Figure 1** attached. The work was conducted in accordance with our proposal dated July 7, 2022, and Meridian Consulting Professional Services Agreement.

Background

The proposed project is the construction of approximately 73,000 square feet new dock level freezer additions.

The project is located in a City of Los Angeles methane zone due to its location in the Wilmington Oil Field. As such, the project may be required to incorporate methane mitigation measures in the project design.

A gas detection system is currently present at the facility. Recent testing of the system in April 2022 indicated that the system was functioning properly.

Converse is an LADBS approved testing agency for methane. A copy of our approval is attached.

Scope of Work

The objective of our service is to identify levels of methane and hydrogen sulfide as well as soil gas pressure in the subsurface at the Site to evaluate the required design level for methane mitigation.

To accomplish that objective, per LADBS criteria, eight (8) shallow probes were initially installed at a depth of 5 feet below ground surface (bgs). Based on initial monitoring of the shallow probes, four (4) deep probe sets were installed at 5, 10 and 20 feet below the lowest proposed bottom of footings. Based on the most recent drawings, the probes were installed at depths of 7, 12 and 22-feet bgs.

Probe Installation

Prior to probe installation, the locations were marked, and Underground Service Alert was notified. On July 26, 2022, the shallow probes were installed and on July 26 and 27 the deep probe sets were installed using a direct push drill rig operated by BC2 Environmental. See **Figure 2** attached for boring locations.

Probes consisted of a ½-inch long stainless-steel probe tip attached to ¼-inch diameter nylaflow tubing. Three (3)-inches of sand was initially placed in the bottom of the borehole and then the probe tip was placed in the borehole followed by another 9-inches of sand. 12-inches of granular bentonite was then placed, followed by hydrated bentonite chips up to the next probe interval where the process was repeated. The borehole was sealed with hydrated bentonite chips up to 0.5 feet bgs. The probes were marked to identify the depth and boring number.

The probes were removed at the completion of monitoring.

Monitoring

Soil gas was evaluated for methane, hydrogen sulfide and fixed gases in accordance with the LADBS Methane Sampling Guidelines. Per LADBS guidelines, probes were measured a minimum of 2 hours after installation and monitored again a minimum of 24-hours later.

Field monitoring was conducted using a LANDTEC GEM 5000 Gas Analyzer. The GEM 5000 is an infrared gas analyzer that measures methane, carbon dioxide and oxygen percent by volume (%), hydrogen sulfide in parts per million volume (ppmv), static pressure and differential pressure in inches-of-water (In-H₂O).

Monitoring was conducted by connecting the GEM 5000 directly to the probe tubing. The pressure in the tubing was measured when the three-way valve on the tubing was opened. After recording the pressure in each of the probes in the borehole, the pump of the meter was activated and allowed to run until the gas readings stabilized, indicating that the tubing had been purged and the readings were representative of the subsurface conditions.

Monitoring Results

Monitoring of the shallow probes was conducted on July 26 and 27, and again on August 1, 2022. Monitoring of the deep probes sets was conducted on July 27 and August 1, 2022.

The shallow probes reported levels of methane between 0.0% and 1.0%, and differential pressure of 0.00 to 1.95 In-H₂O.



The deep probe sets reported methane concentrations ranging from 0.0% to 8.4% (84,000 ppmv), and differential pressure ranged from 0.0 to 0.52 In-H₂O.

The highest methane readings of 8.4% was reported at location DP-1 at the 22-foot depth. Readings of methane at location DP-2 ranged from non detect to 1.0% (10,000 ppmv). Locations DP-3 and DP-4 were non detect for methane at all depths during both monitoring events.

Please see **Tables 1 and 2** – Field Measured Soil Gas Parameters, attached.

LADBS Form 1 – Certificate of Compliance for methane test data is also attached.

Based on the reported methane levels at location DP-1, the Site would fall under Methane Zone Site Design Level V (methane concentrations greater than 12,500 ppmv). Design Level V includes a passive system that includes a subslab vent system, vent risers and an impervious membrane; an active system including gas detection and alarm, mechanical ventilation of the lowest occupied space, mechanical extraction and a control panel plus trench dams and conduit or cable seal fittings.

Closure/Reliance

This report is for the sole benefit and exclusive use of Meridian Consultants in accordance with the terms and conditions that are presented in our Master Subconsultant Agreement dated June 21, 2022, under which these services have been provided. The preparation of this report has been in accordance with generally accepted environmental practices. No other warranty, either express or implied, is made. This report should not be regarded as a guarantee that no further contamination beyond that which could be detected within the scope of this assessment is present at the Site.

This report should not be regarded as a guarantee that no further contamination, beyond that which could be detected within the scope of this assessment, is present at the Site. Converse makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is possible that information exists beyond the scope of this assessment. It is not possible to absolutely confirm that no hazardous materials and/or substances exist at the Site. If none are identified as part of a limited scope of work, such a conclusion should not be construed as a guaranteed absence of such materials, but merely the results of the evaluation of the Site at the time of the assessment. Also, events may occur after the Site visit, which may result in contamination of the Site. Additional information, which was not found or available to Converse at the time of report preparation, may result in a modification of the conclusions and recommendations presented.

Any reliance on this report by Third Parties shall be at the Third Party's sole risk. Should Meridian Consultants wish to identify any additional relying parties not previously identified, a completed Application of Authorization to Use (see following page) must be submitted to Converse Consultants.



Thank you for this opportunity to be of service. Should you have questions regarding this confirmation of services letter, please contact John Ziegler at (626) 930-1234 or Michael Van Fleet at (626) 930-1267.

Sincerely,

CONVERSE CONSULTANTS



John Ziegler, RA
Senior Professional



Michael Van Fleet, PG
Senior Geologist

Attch: Figures 1 and 2
Testing Agency Approval
Tables 1 and 2 – Field Monitored Soil Gas Parameters
Form 1 – Certificate of Compliance for Methane Test Data

Dist: 2/Addressee





Image Source: Google Maps

SITE LOCATION MAP



Meridian Consulting
KPAC Methane Survey
1420 Coil Avenue
Wilmington, California

Project No:

22-41-138-01



Converse Consultants

FIGURE 1

KPAC



SP-1

SP-2

SP-3

SP-4

SP-5

SP-6

SP-7

SP-8

DP-4

DP-3

DP-2

DP-1

East American Foods

KPAC

EAG Solutions Inc

Konoike Transport & Trading USA

Wilmington Diamond Ra

Google Earth

200 ft

CITY OF LOS ANGELES
CALIFORNIA



ERIC GARCETTI
MAYOR

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATELOS
PRESIDENT

E. FELICIA BRANNON
VICE PRESIDENT

JOSELYN GEAGA-ROSENTHAL
GEORGE HOVAGUIMIAN
JAVIER NUNEZ

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

FRANK M. BUSH
GENERAL MANAGER

OSAMA YOUNAN, P.E.
EXECUTIVE OFFICER

February 26, 2018

Michael Van Fleet
Converse Consultants West
717 S. Myrtle Ave.
Monrovia, CA 91016

LABORATORY ADDRESS : 717 South Myrtle Avenue, Monrovia, California 91016

MODIFICATION TO APPROVED TESTING AGENCY CERTIFICATE TA12117

An approval granted to Converse Consultants West by the Los Angeles Department of Building and Safety, is modified. This Testing Agency's accepted capabilities are now Aggregate, Concrete, Fireproofing, High Strength Bolts, Masonry, Methane Field Testing, Rebar and Soils. Based on previous reviews of this facility's capabilities and on a recent evaluation of code and laboratory experience of the technicians who are responsible for conducting testing, **Converse Consultants West**, is continuing to maintain the essential conditions of an 'APPROVED TESTING AGENCY' as prescribed by the Los Angeles Department of Building and Safety.

Tim Day
Building Inspector
Materials Control Section

Table 1
Field Monitored Soil Gas Parameters
Shallow Probes
 KPAC - 1420 Coil Avenue Wilmington,
 California

Boring ID	Depth (feet)	Date	Time	Differential Pressure (Inches H ₂ O)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Hydrogen Sulfide (ppmv)	Carbon Monoxide (ppmv)	Balance (%)	Barometric Pressure (Inches Hg)
SP-1	5	7/26/2022	13:18	0.00	0.0	4.0	13.4	0	3.0	82.2	29.87
		7/27/2022	10:03	0.00	0.0	6.6	12.2	0	0.0	81.4	29.89
		8/1/2022	9:10	0.00	0.0	7.5	11.6	0	0.0	80.9	29.93
SP-2	5	7/26/2022	13:25	0.00	0.0	6.5	9.6	0	1.0	83.6	29.87
		7/27/2022	10:06	0.00	0.0	7.0	10.9	0	0.0	82.1	29.89
		8/1/2022	9:13	0.00	0.0	7.2	10.9	0	0.0	81.9	29.93
SP-3	5	7/26/2022	13:28	0.00	0.0	5.3	11.5	0	1.0	83.2	29.87
		7/27/2022	10:10	0.00	0.0	4.2	14.6	0	0.0	81.2	29.89
		8/1/2022	9:15	0.00	0.0	2.9	16.0	0	0.0	80.9	29.93
SP-4	5	7/26/2022	13:31	0.00	0.0	8.7	4.3	0	1.0	86.9	29.87
		7/27/2022	10:13	0.00	0.0	5.9	4.8	0	0.0	86.2	29.89
		8/1/2022	9:18	0.00	0.0	9.1	4.8	0	0.0	86.1	29.93
SP-5	5	7/26/2022	13:37	0.30	0.0	1.3	11.1	1	109.0	87.6	29.87
		7/27/2022	10:17	0.40	0.0	2.6	3.6	1	141.0	94.0	29.89
		8/1/2022	9:21	1.95	0.1	3.4	1.3	0	1.0	95.9	29.93
SP-6	5	7/26/2022	13:42	0.00	0.2	5.1	7.0	1	71.0	87.4	29.87
		7/27/2022	10:22	0.00	0.6	10.8	0.6	1	20.0	87.3	29.89
		8/1/2022	9:23	0.00	0.8	11.4	0.3	0	1.0	87.0	29.93
SP-7	5	7/26/2022	14:32	0.00	0.2	3.0	2.2	1	238.0	95.2	29.87
		7/27/2022	10:24	0.00	0.0	4.6	0.6	1	77.0	95.2	29.89
		8/1/2022	9:25	0.00	0.2	7.8	0.4	0	2.0	91.6	29.93
SP-8	5	7/26/2022	14:37	0.05	0.7	6.0	2.7	1	214.0	90.6	29.87
		7/27/2022	10:28	0.10	1.0	7.8	0.5	2	156.0	90.9	29.87
		8/1/2022	9:27	0.00	1.0	10.2	0.7	0	4.0	88.2	29.93

Table 2
Field Monitored Soil Gas Parameters
Deep Probe Sets
 KPAC - 1420 Coil Avenue
 Wilmington, California

Boring ID	Depth (feet)	Date	Time	Differential Pressure (Inches H ₂ O)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Hydrogen Sulfide (ppmv)	Carbon Monoxide (ppmv)	Balance (%)	Barometric Pressure (Inches Hg)
DP-1	7	7/27/2022	14:00	0.45	6.2	3.6	4.2	3	232.0	91.6	29.86
	12	7/27/2022	14:04	0.48	8.4	15.1	1.3	1	0.0	77.5	29.86
	22	7/27/2022	14:08	0.50	0.0	16.3	0.3	0	0.0	74.8	29.86
DP-2	7	7/27/2022	14:12	0.25	0.7	7.7	6.3	0	2	85.1	29.86
	12	7/27/2022	14:15	0.52	0.9	11.5	3.0	0	0	84.6	29.86
	22	7/27/2022	14:19	0.52	0.0	12.1	2.2	0	0	84.9	29.86
DP-3	7	7/27/2022	14:24	0.00	0.0	3.4	9.7	2	140	86.9	29.86
	12	7/27/2022	14:27	0.10	0.0	1.5	13.2	0	500	85.4	29.86
	22	7/27/2022	14:30	0.50	0.0	9.4	4.1	0	0	86.4	29.86
DP-4	7	7/27/2022	14:33	0.15	0.0	6.9	7.6	0	9	85.5	29.86
	12	7/27/2022	14:35	0.35	0.0	0.6	15.1	0	455	84.6	29.86
	22	7/27/2022	14:38	0.42	0.0	6.5	7.9	0	0	85.4	29.86

Boring ID	Depth (feet)	Date	Time	Differential Pressure (Inches H ₂ O)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Hydrogen Sulfide (ppmv)	Carbon Monoxide (ppmv)	Balance (%)	Barometric Pressure (Inches Hg)
DP-1	7	8/1/2022	9:32	0.00	1.6	8.2	0.4	0	5.0	89.8	29.93
	12	8/1/2022	9:33	0.40	5.0	14.8	0.2	0	1.0	79.6	29.93
	22	8/1/2022	9:34	0.00	8.2	16.0	0.2	0	0.0	75.1	29.93
DP-2	7	8/1/2022	9:37	0.00	0.0	11.6	5.3	0	0.0	83.1	29.93
	12	8/1/2022	9:39	0.00	0.9	12.6	0.3	0	0.0	85.6	29.93
	22	8/1/2022	9:41	0.00	1.0	13.5	0.2	0	0.0	85.2	29.93
DP-3	7	8/1/2022	9:43	0.00	0.0	7.4	8.2	0	0.0	84.3	29.93
	12	8/1/2022	9:45	0.00	0.0	7.6	6.5	0	2.0	85.7	29.93
	22	8/1/2022	9:47	0.00	0.0	9.5	4.0	0	0.0	86.2	29.93
DP-4	7	8/1/2022	9:49	0.00	0.0	7.9	7.1	0	0.0	85.0	29.93
	12	8/1/2022	9:50	0.00	0.0	1.6	8.0	0	61.0	90.4	29.93
	22	8/1/2022	9:51	0.00	0.0	5.7	8.7	0	0.0	84.9	29.86

FORM 1 - CERTIFICATE OF COMPLIANCE FOR METHANE TEST DATA

Part 1: Certification Sheet

Site Address: 1420 Coil Avenue, Wilmington

Legal Description: Tract: APN 746-029-007

Lot: _____ Block: _____

Building Use: Cold Storage

Architect's, Engineer's or Geologist's Stamp:

Name of Architect, Engineer, or Geologist:
John Ziegler

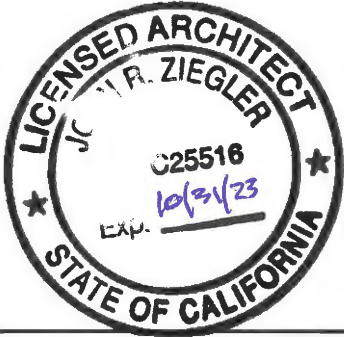
Mailing Address:
717 South Myrtle Avenue
Monrovia, CA 91016

Telephone: _____

Name of Testing Laboratory:
Converse Consultants

City Test Lab License #: TA12117

Telephone: 626 930-1200



I hereby certify that I have tested the above site for the purpose of methane mitigation and that all procedures were conducted by a City of Los Angeles licensed testing agency in conformity with the requirements of the LADBS Information Bulletin P/BC 2014-101. Where the inspection and testing of all or part of the work above is delegated, full responsibility shall be assumed by the architect, engineer or geologist whose signature is affixed thereon.

Signed: _____ date 8/9/22

- Required Data:
- Project is in the (Methane Zone) or (Methane Buffer Zone).
 - Depth of ground water observed during testing: NA feet below the Impervious Membrane.
 - Depth of Historical High Ground Water Table Elevation*: 10 feet below the Impervious Membrane.
 - Design Methane Concentration**: 84,000 parts per million in volume (ppmv).
 - Design Methane Pressure***: 0.5 inches of water column.
 - Site Design Level: (Level I, Level II, Level III, Level IV, Level V) with _____ inches of water column.

- De-watering:
- De-watering (is) (is not) required per Section 7104.3.7.
 - Pump discharge rate _____ cubic feet per minute per reference geology or soil report:
_____ dated _____.

Additional Investigation:
• Additional investigation (was) (was not) conducted.

Latest Grading on Site:
• Date of last grading on site (was) (was not) more than 30 days before Site Testing.
• See Attached explanation of the effect on soil gas survey results by grading operations.

Notes:

* Historical High Ground Water Table Elevation shall mean the highest recorded elevation of ground water table based on historical records and field investigations as determined by the engineer for the methane mitigation system.

** Design Methane Concentration shall mean the highest recorded measured methane concentration from either Shallow Soil Gas Test or any Gas Probe Set on the site.

*** Design Methane Pressure shall mean the highest total pressure measured from any Gas Probe Set on the site.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. For efficient handling of information internally and in the internet, conversion to this new format of code related and administrative information bulletins including MGD and RGA that were previously issued will allow flexibility and timely distribution of information to the public.

FORM 1 (CONTINUED) - CERTIFICATE OF COMPLIANCE FOR METHANE TEST DATA

Part 2: Test Data - Shallow Soil Gas Test and Gas Probe Test

Site Address: 1420 Coil Avenue, Wilmington

Description of Gas Analysis Instrument(s):

Instrument Name and Model: GEM 5000 Instrument Accuracy: + 1000 ppmv.

City of Los Angeles Testing License #: TA 12117

Date	Time	Probe Set #	Concentration (ppmv)	Pressure (inches water column)	Probe Depth (feet)	Description / Probe Location

See Tables 1 and 2
Field Monitored
Soil Gas Parameters

TABLE 1 - DATA COLLECTION EQUIPMENT

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. For efficient handling of information internally and in the internet, conversion to this new format of code related and administrative information bulletins including MGD and RGA that were previously issued will allow flexibility and timely distribution of information to the public.