Appendix K

Methane Report

CITADEL ENVIRONMENTAL SERVICES, INC.

assess
resolve
strengthen

PRIVILEGED AND CONFIDENTIAL

July 10, 2017

Mindy Sheps
WOLF, RIFKIN, SHAPIRO, SCHULMAN & RABKIN, LLP
11400 West Olympic Boulevard, 9th Floor
Los Angeles, California 90064

Re: CITADEL Project No. 1097.1001.0
Methane Testing Report
Our Lady of Mt. Lebanon – St. Peter Maronite Catholic Cathedral – Real Estate Trust
333 South San Vicente Boulevard
Los Angeles, California 90048

Dear Ms. Sheps:

Citadel Environmental Services, Inc. is pleased to provide you with this Methane Testing Report for the above-referenced location.

The Methane Testing Report was conducted in accordance with Citadel's Proposal 1097.1001.P, dated May 12, 2017, and a mutually agreed upon scope of work.

If, after your review, you have any questions or require additional information, please do not hesitate to telephone me at the Citadel Office in Glendale at (818) 246-2707.

Sincerely,
CITADEL ENVIRONMENTAL SERVICES, INC.

Mark Drollinger, M. Eng., CSP, CHMM, EiT
Director, Engineering and Environmental Sciences

Enclosure

CITADEL ENVIRONMENTAL SERVICES, INC.

assess
resolve
strengthen

Wolf, Rifkin, Shapiro, Schulman & Rabkin, LLP
11400 West Olympic Boulevard, 9th Floor
Los Angeles, California 90064

Methane Testing Report

July 10, 2017

Citadel Project Number 1097.1001.0

Our Lady of Mt. Lebanon – St. Peter Maronite Catholic
Cathedral-Real Estate Trust
333 South San Vicente Boulevard
Los Angeles, California 90048

www.citadelenvironmental.com

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1.0 INTRODUCTION

Citadel Environmental Services, Inc., (Citadel) was requested to perform a subsurface methane investigation for the property located at 333 South San Vicente Boulevard in Los Angeles, California (Site). A Site Location Map and Site Map of the Site is included in this report as **Figure 1** and **Figure 2**, respectively.

According to the Los Angeles County Office of the Assessor, the Site consists of three structures of 6,242 SF built in 1937, 3,719 square feet (SF) built in 1939, and 5,127 SF built in 1969; surface parking areas; and associated landscaping on approximately 41,770 SF of land. The Assessor's Parcel Number (APN) associated with the Site includes APN 4334-009-161. Historically, the Site has consisted of the following addresses 8531, 8539, 8543, 8549, and 8555 West Burton Way and 331 South San Vicente Boulevard. The Site is located within the City of Los Angeles Methane Zone.

2.0 GEOLOGY/HYDROGEOLOGY

Topographically, the Site has a southward gradient and a lower elevation than both the east and west directions. The Site is identified on the Geologic Map of the Beverly Hills and Hollywood (east half) Quadrangles (P.G. Schruben, R.E. Arndt and W.J. Bawiec, 1994) as being Cenozoic aged older surficial sediments (Q). These sediments are described on the map as being a combination of silt, sand, and clay. Subsurface soils encountered during soil boring activities at the Site consisted of clay and silty clay.

Based on Historical Groundwater Maps in the Seismic Hazard Evaluation of the Beverly Hills 7.5 Minute Quadrangle (Department of Conservation, 1997), approximate groundwater depth is shown at 15 feet below ground surface (bgs) with regional flow to the east. Groundwater was tagged at approximately 14.1 feet bgs from groundwater well MW-13located west of the Site, on South Holt Avenue. Well MW-13 was installed as part of a groundwater monitoring network for the Perfect Cleaners Facility located 8550 West Third Street, approximately 220 feet northwest of the Site (EnviroMonitoring Services, Inc, January 12, 2017). The Perfect Cleaners is located hydraulically upgradient of the Site.

3.0 METHANE

Methane is lighter than air, colorless, odorless, non-carcinogenic**,** and flammable. When methane is mixed with other gases, e.g., carbon dioxide or hydrocarbons, the methane gas mixtures typically have densities comparable to, or less than, air. Methane occurs as natural gas in coal mines, oil and gas fields, and other geological formations; as a byproduct of petroleum refining; and as a product of decomposition of organic matter in natural settings (e.g., wetlands) and man-made settings (e.g., landfills, engineered fill, hydrocarbon waste, food processing facilities, sewer lines, septic systems, dairies, and concentrated animal feedlots) (DTSC, 2005).

There are two primary mechanisms by which methane is produced. Thermogenic methane is generated at depth under elevated pressure during and following the formation of petroleum (e.g., in oil fields). Biogenic methane is formed at relatively shallow depths by the bacteriological decomposition of organic matter in the soil (e.g., in landfills). Biogenic methane is rarely found under a pressure in excess of a few inches of water.

Methane is an asphyxiant and is combustible and potentially explosive when it is present at concentrations in excess of 53,000 parts per million by volume (ppmv) in the presence of oxygen. This concentration is referred to as the Lower Explosive Limit (LEL). In order to provide some margin

of safety, a concentration of approximately 10 percent (10%) of the LEL or 5,000 ppmv is commonly utilized as an "action level" above which mitigative measures are recommended. Where it is present at concentrations in excess of 5,000 ppmv, it is often conservatively presumed that methane may infiltrate through flooring material or cracks, accumulate under footings and in enclosed spaces (e.g., small rooms, vaults, wall spaces), and then cause a fire or explosion when an ignition source (e.g., pilot flame, electrical spark, cigarette) is present.

In March, 2004, Ordinance Number 175790 was adopted into the Los Angeles Municipal Code (Section 91.106.4.1 and Division 71, Chapter IX) to establish city wide methane mitigation requirements, and included updated construction standards to control methane intrusion into buildings. This ordinance established defined geographic areas as Methane Zones and Methane Buffer Zones, which relate to specific assessment and mitigation requirements per area, and set forth a standard of assessment and mitigation in the planning stages of all new construction in these areas.

The City of Los Angeles Department of Building and Safety (LADBS) Methane Standard Plan provides a guide in the development of a site-specific plan. The Site will fall into one of five methane mitigation design levels identified as Levels I through V. As on-Site methane concentrations increase, so do the requirements needed to mitigate the dangers of methane intrusion. There is a direct relationship between project zoning, test results, and the final design. Once the methane level is determined, the methane mitigation requirements can be implemented into the building design, under the permit and approval of LABDS and the City of Los Angeles Fired Department.

4.0 HEALTH AND SAFETY PLAN

A site-specific health and safety plan (HASP) was prepared prior to on-site activities. This HASP identified existing and potential hazards for workers at the Site during drilling and sample collection activities. A copy of the HASP is included in **Appendix A**.

5.0 ENVIRONMENTAL SITE ASSESSMENT

Prior to the commencement of methane testing, the Site was surveyed by a Citadel representative in order to determine specific sampling locations. The general areas of concern were marked for Underground Surface Alert (USA) to identify underground utilities within the proposed sampling areas. The proposed sampling locations were determined to be clear of underground utilities, structures, or piping before proceeding.

6.0 ON-SITE SUBSURFACE SAMPLING

Upon completion of the Environmental Site Assessment, under the direction of Citadel, H&P Mobile Geochemisty, Inc. (H&P) of Carlsbad, California advanced soil borings for methane gas probe installation on June 14, 2017. Due to lack of access of the Site, the methane investigation was limited to the parking area. A Site Plan showing test locations is included in **Figure 3**. Per the LADBS Methane Standard Plan, shallow soil vapor probes were to be placed across the Site at a rate of one sample point per 10,000 square feet of Site area. This would result in five shallow and three deeper soil borings, however, due to the presence of the buildings, only the parking lot area was accessed for this activity.

Soil Gas Probe Testing

Three soil borings (SV1 through SV3) were advanced in accessible areas throughout the parking area of the Site using a direct push drill rig to a depth of approximately 13 feet bgs. Within the excavated borings, methane gas probes were installed per the LADBS Site testing Standards for Methane. Per the LADBS, gas probes are to be placed at approximately five, 10, and 20 feet below the lowest footing of the proposed development. However, due to extremely dense soil encountered during drilling activities and groundwater tagged by others at approximately 14.1 feet bgs, the deepest probe was set at approximately 13 feet bgs. The probes were encapsulated by approximately one foot of Monterey #3 Sand to allow methane gas to flow into the probes. The space separating the probes was filled with a bentonite seal. Dry angular bentonite was placed between each probe interval. Probe tips were connected to polyethylene tubing with gas-tight quick connect fittings at the surface. Field data was collected from the installed methane probes by means of a portable Landtec GEM 2000 Landfill Gas Monitor (GEM 2000).

Approximately 120 minutes after setting the gas probes, the monitor was connected to the gas-tight quick connect fittings and subsequently recorded for methane concentration and probe pressure at each probe depth. Two sequential measurements were taken on each probe within a 24-hour period.

Upon completion of testing, the installed probes were removed from each boring and the boring hole was patched to match the existing surface. Soil observations and methane completion log were recorded for soil boring SV1 and a methane completion log is included in **Appendix B.**

7.0 MONITORING AND ANALYTICAL RESULTS

June 14, 2017

Methane gas was detected in each gas probe during the screening gas probe testing via a portable GEM 2000. The field gas probe test data is included in **Appendix C,** page 2 of the Form 1 – Certificate of Compliance for Methane Test Data. Methane testing conducted on the installed probes detected the highest presence of methane in SV2 at 10 feet bgs with a maximum concentration of 1.3% (13,000 ppmv). The monitor has an instrument accuracy of ± 0.1% (1,000 ppmv). Total pressure was measured at a maximum of 11.3 inches of water column during the gas probe testing. According to Table 1A – Mitigation Requirements for Methane Zones derived from Table 71 and Division 71 of Article 1, Chapter IX of the Los Angeles Municipal Code, using the highest laboratory reported concentration and Design Pressure (13,000 ppmv and greater than two inches of water column, respectively) for methane gas, the Site is considered Design Level V (**Appendix D**).

With the exception of Soil boring SV1 at 10 and 13 feet bgs, methane was detected in each of the gas probes. Due to the methane detections, two soil vapor samples were collected from soil boring SV2 at 10 feet bgs (SV2-10) and SV3-5 in tedlar bags by H&P. Samples were analyzed for Methane using EPA Method 8015M. The H&P laboratory report, including chain-of-custody, is provided in **Appendix E**. As shown in the laboratory report, methane was not detected in SV2-10 and SV3-5.

June 16, 2017

Low concentrations of methane were detected in gas probes SV2-5, SV2-10, SV2-13, and SV-5 during the initial and/or secondary readings via the GEM 2000. Methane was detected at a concentration of 0.1 % (1,000 ppmv). With the exception of SV1-10, SV2-10, and SV3-5, soil vapor pressure was measured at 0 inches of water column. Initial readings of SV1-10, SV2-10, and SV3-5 measured pressured at 0.1, 43, and 31 inches of water column, respectively. During the second reading, no pressure was recorded in gas probes SV2-10 and SV3-5 gas. No additional soil vapor samples were collected for analysis.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The current investigation was intended to provide an independent assessment for the presence of methane gas in the subsurface using targeted borings at the Site. As stated above, based on the Mitigation Requirements for Methane Zone and results of this field investigation, the Site is considered to be Design Level V. Based on this design, each new structure proposed for the Site would include the following:

Passive System:

- De-watering system
- Perforated horizontal pipes
- A gravel blanket under impervious membrane
- Vent risers, and an
- Impervious membrane

Active System:

- Pressure sensors below the impervious membrane
- Mechanical extraction system
- Control panel
- Lowest occupied space should include:
    - Gas detection system
    - Mechanical ventilation, and an
    - Alarm system

Miscellaneous system:

- Trench dam, and
- Conduit or Cable or Seal

9.0 REFERENCES CITED

California Department of Conservation, 1997, Seismic Hazard Zone Report for Beverly Hills 7.5 Minute Quadrangle, Los Angeles, County, California.

EnviroMonitorig Services, Inc., Groundwater Monitoring Report, Second Semester 2016, Perfect Cleaners Facility, Former Merry Go Round Dry Cleaners, 8550 West Third Street, Los Angeles, California, RWQCB Site ID No. 18468, January 12, 2017.

City of Los Angeles Department of Building and Safety, Site testing Standards for Methane, 2014.

P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale – a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS-11 (1994)

10.0 LIMITATIONS

This Subsurface Investigation was performed in accordance with generally and currently accepted engineering practices and principles. Although the data in this report is indicative of subsurface conditions in areas investigated, no further conclusions regarding the absence or presence of subsurface contamination at the site should be construed or inferred other than those expressly stated in this report. The conclusions made are based on information obtained from field observations, and from relevant Federal, State, regional, and local agencies.

11.0 SIGNATURES

Report Prepared by:

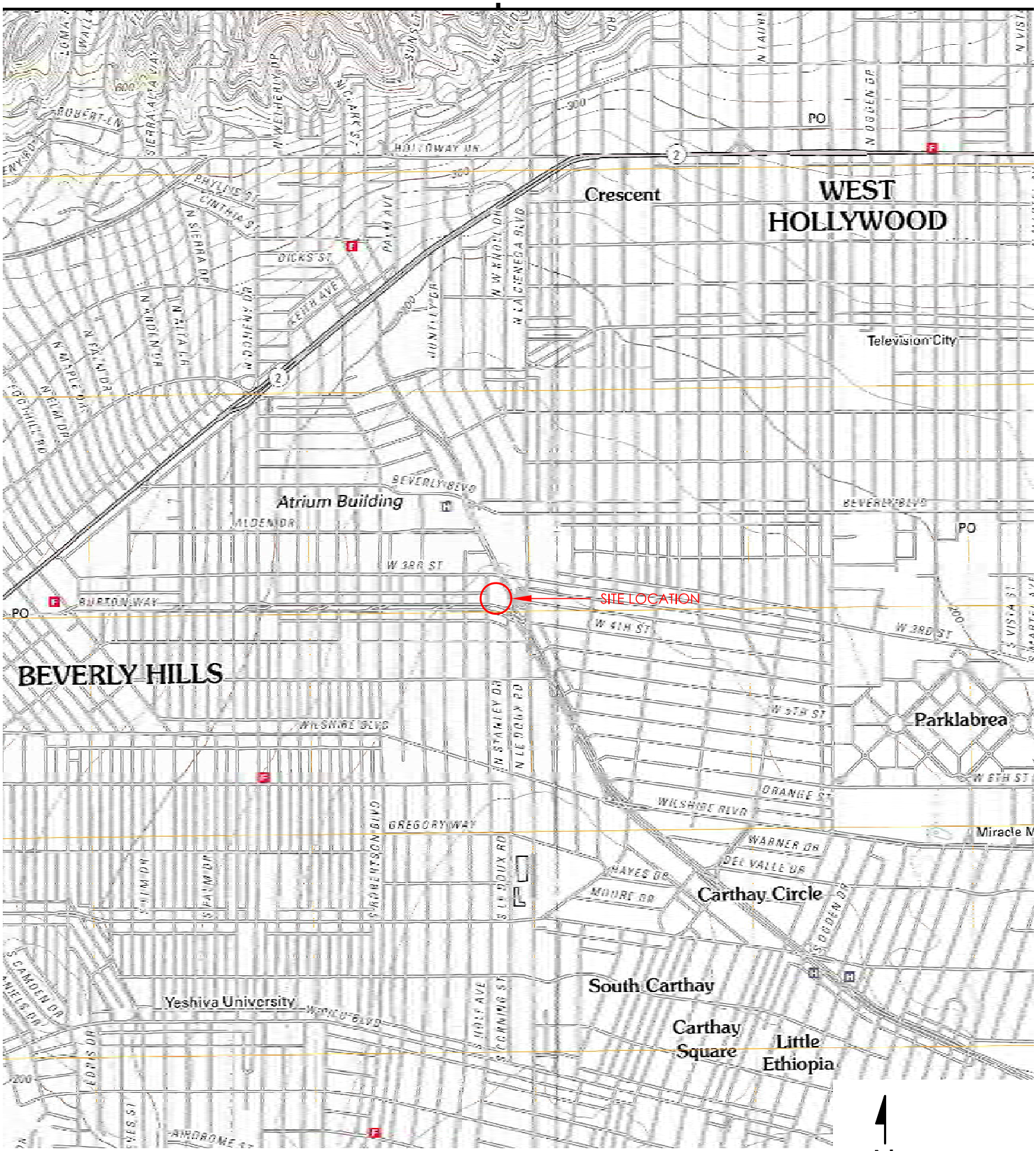
Cindy Hernandez
Staff Geologist

Reviewed by

T. Mike Pendergrass, P.G.
Senior Geologist

Mark Drollinger, M. Eng., CSP, CHMM, EiT
Director, Engineering and Environmental Sciences

FIGURES



LEGEND

SITE LOCATION

SOURCE: UNITED STATES GEOLOGICAL SURVEY, BEVERLY HILLS, CA 7.5 MINUTE TOPOGRAPHIC MAP, 2012.

CITADEL
•ASSESS •RESOLVE •STRENGTHEN
1725 VICTORY BOULEVARD
GLENDALE, CALIFORNIA 91201
(818) 246-2701

CITADEL PROJECT NO.: 1097.1001.0

APPROVED BY: M.DROLLINGER

DESIGN BY: C.HERNANDEZ

CHECKED BY: M.PENDERGRASS

CLIENT

OUR LADY OF MT. LEBANON - ST PETER MARONITE CATHOLIC CATHEDRAL - REAL ESTATE TRUST
333 SOUTH SAN VICENTE BOULEVARD
LOS ANGELES, CALIFORNIA

SHEET TITLE

LOCATION MAP

SCALE 1" = 2,000'

DATE JULY 2017

PROJECT SITE
OUR LADY OF MT. LEBANON - ST PETER MARONITE CATHOLIC CATHEDRAL
333 SOUTH SAN VICENTE BOULEVARD
LOS ANGELES, CALIFORNIA

FIGURE NO. 1

LEGEND

SITE BOUNDARY

N

0 60 120

CITADEL
•ASSESS •RESOLVE •STRENGTHEN
1725 VICTORY BOULEVARD
GLENDALE, CALIFORNIA 91201
(818) 246-2701

CITADEL PROJECT NO.: 1097.1001.0	APPROVED BY: M.DROLLINGER
DESIGN BY: C.HERNANDEZ	CHECKED BY: M.PENDERGRASS

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333 SOUTH SAN VICENTE BOULEVARD
LOS ANGELES, CALIFORNIA

SHEET TITLE

SITE MAP

PROJECT SITE

OUR LADY OF MT. LEBANON - ST PETER MARONITE CATHOLIC CATHEDRAL
333 SOUTH SAN VICENTE BOULEVARD
LOS ANGELES, CALIFORNIA

SCALE 1" = 60'

DATE JULY 2017

FIGURE NO. 2

LEGEND

SITE BOUNDARY

METHANE PROBE LOCATION

N

0 60 120

CITADEL
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1725 VICTORY BOULEVARD
GLENDALE, CALIFORNIA 91201
(818) 246-2701

CITADEL PROJECT NO.: 1097.1001.0	APPROVED BY: M.DROLLINGER
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CLIENT

OUR LADY OF MT. LEBANON - ST PETER MARONITE CATHOLIC CATHEDRAL - REAL ESTATE TRUST
333 SOUTH SAN VICENTE BOULEVARD
LOS ANGELES, CALIFORNIA

SHEET TITLE

SITE MAP SHOWING METHANE PROBE LOCATIONS

PROJECT SITE

OUR LADY OF MT. LEBANON - ST PETER MARONITE CATHOLIC CATHEDRAL
333 SOUTH SAN VICENTE BOULEVARD
LOS ANGELES, CALIFORNIA

SCALE: 1" = 60'

DATE: JULY 2017

FIGURE NO.: 3

APPENDIX A

Health and Safety Plan

CITADEL ENVIRONMENTAL SERVICES, INC.

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Wolf, Rifkin, Shapiro, Schulman & Rabkin, LLP
11400 West Olympic Boulevard, 9th Floor
Los Angeles, California 90064

Health and Safety Plan

June 13, 2017

Citadel Project Number 1097.1001.0

Methane Testing
333 South San Vicente Boulevard
Los Angeles, California 90048

www.citadelenvironmental.com

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1.0 SITE DESCRIPTION

The Site is located at 333 South San Vicente Boulevard in Los Angeles, Los Angeles County, California; and is bounded by South San Vicente Boulevard to the east; Burton Way to the south; South Holt Avenue to the west; and an unnamed alley to the north.

Citadel Environmental Services, Inc. (Citadel) has prepared this Health and Safety Plan (HASP) for use during drilling activities to be conducted at the Site. Activities conducted under Citadel's direction at the Site will be in compliance with applicable Occupational Safety and Health Administration (OSHA) regulations, particularly those in Title 8 California Code of Regulations (CCR) 5192, and other applicable federal, state, and local laws, regulations, and statutes. A copy of this HASP will be kept onsite during scheduled field activities.

2.0 BACKGROUND

In March 2004, Ordinance Number 175790 was adopted into the Los Angeles Building Code (LABC) (Section 91.106.4.1 and Division 71, Chapter IX) to establish citywide methane mitigation requirements, and included updated construction standards to control methane intrusion into buildings. This ordinance established defined geographic areas as Methane Zones and Methane Buffer Zones, which relate to specific assessment and mitigation requirements per area, and set forth a standard of assessment and mitigation in the planning stages of all new construction in these areas. The Site is located within the City of Los Angeles Methane Buffer Zone recognized by the Los Angeles Department of Building Services (LADBS). Citadel was contracted by Wolf, Rifkin, Shapiro, Schulman & Rabkin, LLP (Client) to conduct on-Site subsurface soil vapor probe installation and testing for methane.

3.0 SAFETY POLICY

Safety will be given primary importance in the planning and operation of this project. It is the policy of Citadel to conform to current OSHA standards in construction and local government agency requirements having authority over the project as regards to Citadel employees and public safety.

Each subcontracting firm will assume primary responsibility for the safety of their own work in regards to their employees and other persons. Subcontractors will assume the duty to comply with OSHA, and all other federal, state and local regulations.

The subcontractors work will be monitored by Citadel project managers for implementation of the Citadel HASP, while adhering to their own safety program. Citadel will retain the authority and power to enforce this HASP during the progress of the work. Any deficiencies in safe work practices will be brought to the attention of the subcontractor firm's supervisor for immediate corrective action. If the subcontractor fails or refuses to take corrective action promptly a stop work order shall be issued and the subcontractor or the subcontractor employee may be removed from the project.

4.0 WORK DESCRIPTION

H&P Mobile Geochemistry has been contracted by Citadel to install two soil vapor testing probes per LADBS Methane Mitigation Standard installation specifications. Prior to drilling activities, the Site will be marked for Underground Service Alert (USA) to have underground utilities identified at

the Site. The soil borings will be advanced using a direct push drill rig to a maximum depth of 18 feet below ground surface (bgs), or to groundwater. A soil gas sampling probe will be installed in each of the borings. Nested gas sampling probes will be set at five, 10, and 18 feet bgs. The probes will be encapsulated by approximately one foot of sand to provide any methane gas to flow into the probes. The space separating the probes will be filled with a bentonite seal. Probe tips will be connected to polyethylene tubing with gas-tight quick connect fittings at the surface.

Following a 120 minutes equilibration period, field data will be collected from the installed methane probes by means of a portable Landtec GEM 2000 Plus Landfill Gas Monitor. Two sequential measurements will be taken on each probe within a 24-hour period. If the Landtec methane or pressure readings are above 0.0 part per million by volume, approximately two vapor samples will be collected to be analyzed for methane and hydrogen sulfide. Upon completion of testing, the installed probes will be properly decommissioned and the borings will be patched to match the existing surface.

Hazards that may be associated with the project include traffic, heavy and rotating equipment, and soil vapor potentially impacted with methane gas.

5.0 KEY PROJECT PERSONNEL AND RESPONSIBILITIES

Project Manager	Mark Drollinger (Citadel)
Site Safety Officer (SSO)/Project Monitor	Mike Pendergrass (Citadel)
Subcontractor Personnel	H&P Mobile Geochemistry

PROJECT MANAGER

The Project Manager has the ultimate responsibility for the health and safety of personnel at the Site. The Project Manager is responsible for:

- Ensuring that project personnel review and understand the requirements of this HASP;
- Keeping on-site personnel informed of the expected hazards and appropriate protective measures at the Site; and
- Providing resources necessary for maintaining a safe and health work environment.

SITE SAFETY OFFICER/PROJECT MONITOR

The SSO is responsible for enforcing the requirements of this HASP once site work begins. The SSO has the authority to immediately correct situations where noncompliance with this HASP is noted and to immediately stop work in cases where an immediate danger to site workers or the environment is perceived. Responsibilities of the SSO also include:

- Obtaining and distributing PPE and air monitoring equipment necessary for this project;
- Limiting access at the Site to authorized personnel;
- Communicating unusual or unforeseen conditions at the Site to the Project Manager;
- Supervising and monitoring the safety performance of site personnel to evaluate the effectiveness of health and safety procedures and correct deficiencies;
- Conducting daily tailgate safety meetings before each day's activities begin; and
- Conducting a site safety inspection prior to the commencement of each day's field activities.

SUBCONTRACTOR PERSONNEL

Subcontractor personnel are expected to comply with the minimum requirements specified in this HASP. Failure to do so may result in the dismissal of the subcontractor or any of the subcontractor's workers from the job site. Subcontractors may employ health and safety procedures that afford them a greater measure of personal protection than those specified in this plan as long as they do not pose additional hazards to themselves, the environment, or others working in the area.

6.0 SITE CONTROL MEASURES

The SSO or Project Manager has been designated to coordinate access and security on site.

7.0 STANDARD OPERATING PROCEDURES

GENERAL SAFETY

- Maintain good housekeeping at all times in all project work areas.
- Check the work area to determine what problems or hazards may exist.
- Designate specific areas for the proper storage of materials.
- Store tools, equipment, materials, and supplies in an orderly manner.
- Provide containers for collecting trash and other debris.
- Clean up all spills quickly.
- Report unsafe conditions or unsafe acts to your supervisor immediately.
- Report all occupational illnesses, injuries, and vehicle accidents.
- Do not wear loose clothing, wristwatches, and other loose accessories when within arm's reach of moving machinery.
- Emergency exits and evacuation areas should be clearly marked during work activities.
- Personnel fall protection is required when climbing to perform maintenance six feet or higher above ground.
- Inspect hand tools and use proper PPE.
- Ensure proper grounding and guarding of equipment.
- Keep hands and fingers out of pinch points.
- Use good ergonomic posturing when working with heavy items.

COMMUNICATION PROCEDURES

Due to the close proximity of all field crew members, the necessity for radio communication is not necessary.

The following standard hand signals will be used:

Hand drawn across throat ..... Cease operation immediately
Hand gripping throat ..... Out of air, can't breathe
Grip partner's wrist or both hands around waist ..... Leave area immediately
Hands on top of head ..... Need assistance
Thumbs up ..... OK, I am alright, understood
Thumbs down ..... No, negative

FIELD VEHICLES

- Equip vehicles with emergency supplies and equipment.

- Maintain both a first aid kit and fire extinguisher in the field vehicle at all times.
- Utilize a rotary beacon on vehicle if working adjacent to active roadway.
- Always wear seatbelt while operating vehicle.
- Tie down loose items.

MANUAL LIFTING

- Personnel shall seek assistance when performing manual lifting tasks that appear beyond their physical capabilities.
- Assess the situation before lifting, ensure good lifting and body positioning practices, and ensure good carrying and setting down practices.

HEAT EXPOSURE

- Limit exposure to the sun, or take extra precautions when the UV index rating is high.
- Take lunch and breaks in shaded areas.
- Create shade by using umbrellas, tents, and canopies.
- Wear proper clothing: long sleeved shirts with collars, long pants, and UV-protective sunglasses or safety glasses.
- Apply sunscreen generously to all exposed skin surfaces at least 20 minutes before exposure. Re-apply sunscreen at least every 2 hours, and more frequently when sweating or performing activities where sunscreen may be wiped off.
- Communicate any concerns regarding heat stress to a supervisor.
- Keep hydrated throughout the day (about 4 cups per hour).
- OHSA's Heat Index:

Heat Index	Risk Level	Protective Measures
Less than 91°F	Lower (Caution)	Basic heat safety and planning
91°F to 103°F	Moderate	Implement precautions and heighten awareness
103°F to 115°F	High	Additional precautions to protect workers
Greater than 115°F	Very High to Extreme	Triggers even more aggressive protective measures

Utilities (Under Ground and Above Ground): Low Hazard. All boring locations will be hand drilled and stop work will be enforced if any utilities are encountered.

Biological Hazards: Low to Medium Hazard. Beware of spiders, insects and other possible animals.

Site Instability: Low to Medium Hazard. The Site will be inspected prior to equipment placement and closely monitored. Any settling of the equipment will cause the work to stop immediately.

Equipment Refueling: Low Hazard. Equipment shall not be refueled with the engine running. Cigarettes, open flames, or other ignition sources are not allowed within 50 feet of the fueling location.

Personnel Injury: Upon notification of an injury, the Project Field Leader should evaluate the nature of the injury, and the affected person should be decontaminated to the extent possible prior to movement. The Project Field Leader shall initiate the appropriate first aid, and contact should be made for an ambulance and with the designated medical facility (if required).

Fire/Explosion: The fire department shall be alerted and all personnel moved to a safe distance from the involved area.

Other Equipment Failure: If any other equipment on site fails to operate properly, the Project Team Leader shall be notified and then determine the effect of this failure on continuing operations on site. If the failure affects the safety of personnel or prevents completion of the Work Plan tasks, work will cease until the situation is evaluated and appropriate actions taken.

8.0 EXPOSURE MONITORING

The following substances are known or suspected to be on site. The primary hazards of each are identified as follow:

Substances	Concentration	Primary Hazards
Methane	5,000 ppmv	Inhalation, Explosive

METHANE: Methane is an asphyxiant and is combustible and potentially explosive when methane is present at concentrations in excess of 53,000 parts per million by volume (ppmv) in the presence of oxygen. This concentration is referred to as the Lower Explosive Limit (LEL). In order to provide some margin of safety, a concentration of approximately ten percent (10%) of the LEL or 5,000 ppmv is commonly utilized as an "action level" above which mitigative measures are recommended. Where methane is present at concentrations in excess of 5,000 ppmv, it is often conservatively presumed that methane may infiltrate through flooring material or cracks, accumulate under footings and in enclosed spaces (e.g., small rooms, vaults, wall spaces), and then cause a fire or explosion when an ignition source (e.g., pilot flame, electrical spark, cigarette) is present.

The SSO will monitor on-site worker exposure to airborne contaminants during intrusive site activities. Measurements should be taken within the breathing zones of workers. A calibrated portable Landtec GEM 2000 Landfill Gas Monitor will be used as a monitor.

ACTION LEVELS

The following concentrations must not be exceeded when working in areas where these hazardous gases may be present.

- Methane: Not to exceed 10% of the LEL or 5,000 ppmv

If these concentrations are exceeded and cannot be controlled by local methods, an evacuation of the immediate area and possibly the site will be ordered in accordance with the evacuation route in Section 11.0.

9.0 PERSONAL PROTECTIVE EQUIPMENT

The purpose of PPE is to protect employees from hazards and potential hazards they are likely to encounter during site activities. The amount and type of PPE used will be based on the nature of the hazard encountered or anticipated. Respiratory protection will be utilized when an airborne hazard has been identified using real-time air monitoring devices, or as a precautionary measure in areas designated by the SSO, elevating to level C. If this occurs, contractor personnel shall be respirator-approved.

Dermal protection, primarily in the form of chemical-resistant gloves and coveralls, will be worn

whenever contact with chemically affected materials (e.g. soils, groundwater, sludge) is anticipated, without regard to the level of respiratory protection required.

Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas or tasks:

Location	Job Function	Level of Protection
Controlled Area	All workers	A B C (D) Other

Specific protective equipment for each level of protection is as follows:

Level A
- Fully-encapsulating suit
- SCBA
- Disposable coveralls

Level B
- Splash gear
- SCBA

Level C
- Splash gear
- Half-face canister respirator with H_2S/VOC cartridge
- Mouth/nose canister respirator
- Efficiency 100 (HEPA)

Level D
- Hard hat
- Ear plugs
- Neoprene or leather gloves - nitrile gloves
- Safety vests and Glasses
- Hard toe boots

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SSO OR PROJECT MANAGER.

10.0 DECONTAMINATION PROCEDURES

Despite protective procedures, personnel may come in contact with potentially hazardous compounds while performing work tasks. If so, decontamination needs to take place using an Alconox or tri-sodium phosphate (TSP), followed by a rinse with clean water. Standard decontamination procedure for levels C and D are as follows:

- Equipment drop
- Boot cover and outer glove wash and rinse
- Boot cover and out glove removal
- Suit wash and rinse
- Suit removal
- Safety boot wash and rinse
- Inner glove wash and rinse
- Respirator removal
- Inner glove removal
- Field wash of hands and face

Workers should employ only applicable steps in accordance with level of PPE worn and extent of contamination present. The SSO shall maintain adequate quantities of clean water to be used for personal decontamination (i.e. field wash of hands and face) whenever a suitable washing facility is not located in the immediate vicinity of the work area. Disposable items will be disposed of in an

appropriate container. Wash and rinse water generated from decontamination activities will be handled and disposed of properly. Non-disposable items may need to be sanitized before reuse. Each site worker is responsible for the maintenance, decontamination, and sanitizing of his/her own PPE.

Used equipment may be decontaminated as follows:

- An Alconox or TSP and water solution will be used to wash the equipment.
- The equipment will then be rinsed with clean water.

Each person must follow these procedures to reduce the potential for transferring chemically affected materials offsite.

11.0 EMERGENCY PROCEDURES

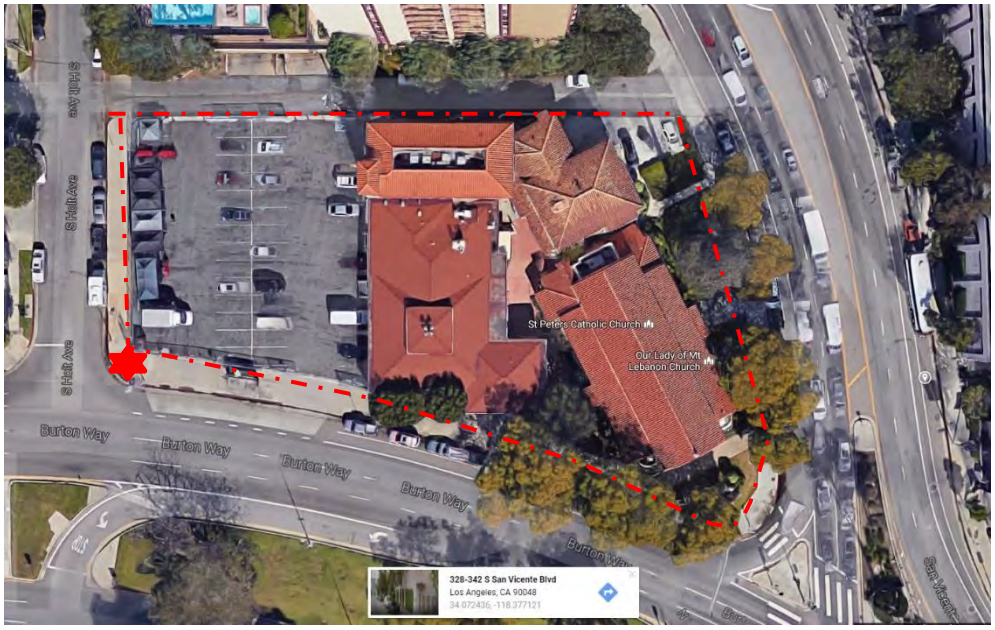
In the event of an emergency, site personnel will signal distress with three blasts of a horn (a vehicle horn will be sufficient), or other predetermined signal. Communication signals, such as hand signals, must be established where communication equipment is not feasible or in areas of loud noise.

The SSO will designate evacuation routes and refuge areas to be used in the event of an emergency. Site personnel will stay upwind from vapors or smoke and upgradient from spills. Workers should exit through the established decontamination areas wherever possible. If evacuation cannot be done through an established decontamination area, site personnel will go to the nearest safe location and remove contaminated clothing there. Personnel will assemble at the predetermined refuge following evacuation and decontamination. The SSO will count and identify site personnel to verify that all personnel have been evacuated safely. Please refer to Figure 1.0 for the evacuation route and refuge location.

FIGURE 1.0 – EVACUATION ROUTE AND REFUGE AREAS

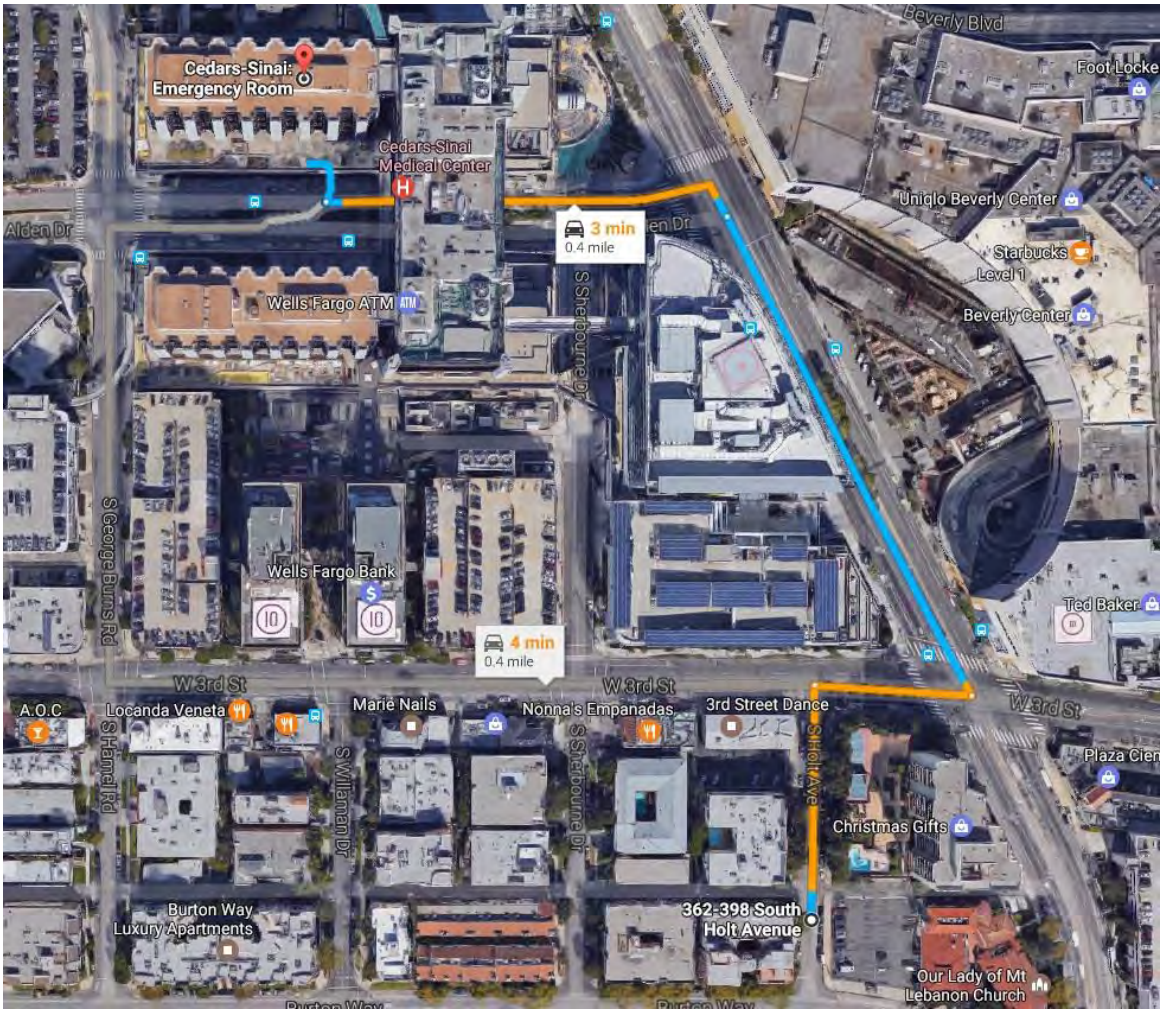
= Approximate Site Boundaries

= Refuge Areas



The designated medical facility is:

Cedars-Sinai Emergency Department
8700 Gracie Allen Drive
Los Angeles, California 90048
(310) 423-2295



Directions:

Head north on S. Holt Ave. toward W. 3rd Street	350 feet
Turn right onto W. 3rd Street	215 feet
Turn left at the 1st cross street onto S. San Vicente Blvd	0.1 mile
Turn left onto Gracie Allen Drive	0.1 mile
Destination is on the right	

Local ambulance service is available from:

Name	Local Paramedics
Phone	911

First-aid equipment is available in the SSO's vehicle.

List of emergency phone numbers:

Agency/Facility	Phone#
Police	911
Fire	911
Hospital	(310) 423-2295

This HASP has been prepared by:

T. Michael Pendergrass
Senior Project Geologist

This HASP has been reviewed by:

Nalinna Rasu, CHMM, LEED AP
Director, Engineering and Environmental Sciences

SIGNATURE PAGE

The following signatures indicate that this Health and Safety Plan (HASP) has been read and accepted by all site personnel.

NAME	COMPANY	SIGNATURE	DATE

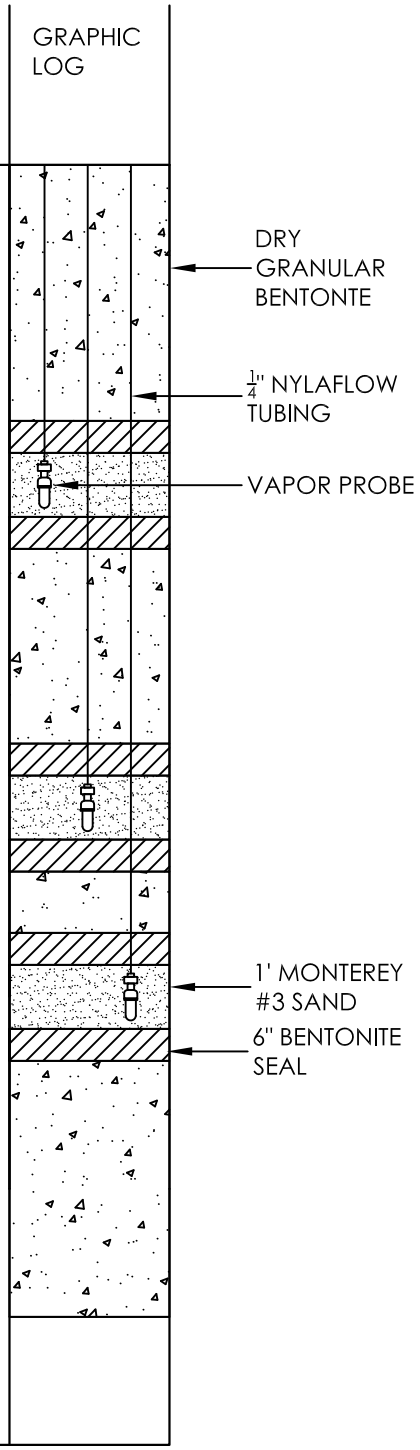
APPENDIX B

Boring Log

CITADEL
ENVIRONMENTAL SERVICES, INC.
1725 Victory Boulevard, Glendale CA 91201
P 818.246.2707 F 818.246.3145

CITADEL PROJECT NO.	1097.1001.0
BORING NO.	SV1
SITE INFORMATION	OUR LADY OF MT LEBANON CHURCH 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA 90048
DRILLER: H&P MOBILE GEOCHEMISTRY	DRILLING METHOD: DIRECT PUSH
DRILLING DATE: JUNE 14, 2017	SAMPLING METHOD: SPLIT-SPOON
TOTAL DEPTH (FEET BELOW GROUND SURFACE): 20	BACKFILLING: HYDRATED BENTONITE
LOGGED BY: M.PENDERGRASS	DRAWN BY: C.HERNANDEZ
APPROVED BY: M.PENDERGRASS	COMMENTS: HOLE COLLAPSED AT 17.5 FEET BELOW GROUND SURFACE. CONTINUOUS CORE.

DEPTH (FEET)	SAMPLE RECOVERY	BORING ID	PID READING	USCS	DESCRIPTION
		SV1-2		CL	Dark gray, Silty clay, Slightly moist
5		SV1-6		CL	Light gray, Silty clay, Dry
		SV1-9		CL	Greenish gray, Silty clay, Dry
10		SV1-11		CL	Olive gray, Clay, Low plasticity, Slightly moist
		SV1-14		CL	Light gray, Clay, Slightly moist
15		SV1-16		CL	Olive gray, Clay, Moist
		SV1-18		CL	Olive gray with mottled light gray, Clay, Moist
20					



APPENDIX C

Form 1 – Certificate of Compliance for Methane Test Data

LA DBS
DEPARTMENT OF BUILDING AND SAFETY

P/BC 2014-101

FORM 1 - CERTIFICATE OF COMPLIANCE FOR METHANE TEST DATA

Part 1: Certification Sheet

Site Address: 333 SOUTH SAN VICENTE BOULEVARD

Legal Description: Tract: TR 31440-C Lot: LT1 Block: NONE

Building Use: CHURCH BUILDING	Architect's, Engineer's or Geologist's Stamp:
Name of Architect, Engineer, or Geologist: T.MICHAEL PENDERGRASS Mailing Address: 1725 VICTORY BOULEVARD, GLENDALE, CA 91201 Telephone: (818) 246-2707	PROFESSIONAL GEOLOGIST THOMAS MICHAEL PENDERGRASS NO. 5685 EXP. FEB. 28, 2019 STATE OF CALIFORNIA
Name of Testing Laboratory: H&P MOBILE GEOCHEMISTRY, INC. City Test Lab License #: 10231 Telephone: (760) 804-9678	

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: T Michael Pendergrass date July 10, 2017

Required Data:

- Project is in the (Methane Zone) or (Methane Buffer Zone).
- Depth of ground water observed during testing: _14___ feet below the Impervious Membrane.
- Depth of Historical High Ground Water Table Elevation*: 15 feet below the Impervious Membrane.
- Design Methane Concentration**: 13,000 parts per million in volume (ppmv).
- Design Methane Pressure***: 11.3 inches of water column.
- Site Design Level: (Level I, Level II, Level III, Level IV, (Level V)) with 12 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.

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

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

Site Address: 333 S. San Vicente, Los Angeles

Description of Gas Analysis Instrument(s):

Instrument Name and Model: GEM 2000 Instrument Accuracy: ± 1000 ppmv.

City of Los Angeles Testing License #:

Date	Time	Probe Set #	Concentration (ppmv)	Pressure (inches water column)	Probe Depth (feet)	Description / Probe Location
6-14-17	1131	SV-1	0.2%	10.5	5	
6-14-17	1129	SV-1	0.05%	8.6	10	
6-14-17	1128	SV-1	0.0%	0.0	13	
6-14-17	1147	SV-2	0.3%	0.0	5	
6-14-17	1140	SV-2	1.3%	11.3	10	Tedlar Sample
6-14-17	1139	SV-2	0.6%	0.0	13	
6-14-17	1157	SV-3	0.3%	11.2	5	Tedlar Sample
6-14-17	1154	SV-3	0.2%	0.0	10	
6-14-17	1153	SV-3	0.1%	~~11.2~~ 0.0	13	

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

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

Site Address: 333 SOUTH SAN VICENTE , LOS ANGELES, CALIFORNIA

Description of Gas Analysis Instrument(s):

Instrument Name and Model: GEM 2000 Instrument Accuracy: ± 1,000 ppmv.

City of Los Angeles Testing License #:

Date	Time	Probe Set #	Concentration (ppmv)	Pressure (inches water column)	Probe Depth (feet)	Description / Probe Location
6/16/17	12:30	SV1	0.0 %	0.0	5	
6/16/17	12:36	SV1	0.0 %	0.1	10	
6/16/17	12:41	SV1	0.0 %	0.0	13	
6/16/17	12:53	SV2	0.1 %	0.0	5	
6/16/17	12:57	SV2	0.1 %	0.0	5	
6/16/17	13:00	SV2	0.1 %	43	10	
6/16/17	13:02	SV2	0.0 %	0.0	10	
6/16/17	13:05	SV2	0.1 %	0.0	13	
6/16/17	13:07	SV2	0.1 %	0.0	13	
6/16/17	13:14	SV3	0.0 %	31	5	
6/16/17	13:17	SV3	0.1 %	0.0	5	
6/16/17	13:20	SV3	0.0 %	0.0	10	
6/16/17	13:22	SV3	0.0 %	0.0	10	
6/16/17	13:25	SV3	0.0 %	0.0	13	
6/16/17	13:27	SV3	0.0 %	0.0	13	

APPENDIX D

Table 1A – Mitigation Requirements for Methane Zone

Table 1A - MITIGATION REQUIREMENTS FOR METHANE ZONE (See note 1)

Site Design Level			Level I		Level II		Level III		Level IV		Level V
Design Methane Concentration (ppmv)			0 - 100		101 - 1,000		1,001 - 5,000		5,001 - 12,500		> 12,500
Design Methane Pressure (inches of water column)			≤ 2"	> 2"	≤ 2"	> 2"	≤ 2"	> 2"	≤ 2"	> 2"	All Pressure
PASSIVE SYSTEM	De-watering System		X	X	X	X	X	X	X	X	X
	Sub-Slab Vent System	Perforated Horizontal Pipes	X	X	X	X	X	X	X	X	X
		Gravel Blanket Thickness Under Impervious Membrane	2"	2"	2"	3"	2"	3"	2"	4"	4"
		Gravel Thickness Surrounding Perforated Horizontal Pipes	2"	2"	2"	3"	2"	3"	2"	4"	4"
		Vent Risers	X	X	X	X	X	X	X	X	X
	Impervious Membrane		X	X	X	X	X	X	X	X	X
ACTIVE SYSTEM	Sub-Slab Vent System	Pressure Sensors Below Impervious Membrane								X	X
		Mechanical Extraction System								X	X
	Lowest Occupied Space System	Gas Detection System		X		X	X	X	X	X	X
		Mechanical Ventilation		X		X	X	X	X	X	X
		Alarm System		X		X	X	X	X	X	X
	Control Panel			X		X	X	X	X	X	X
MISC. SYSTEM	Trench Dam		X	X	X	X	X	X	X	X	X
	Conduit or Cable Seal Fitting		X	X	X	X	X	X	X	X	X
	Additional Vent Risers (See note 4)										X

NOTES FOR TABLES 1A AND 1B:

1. Components required for this project are identified by an "X" in the column circled.
2. Table 1A - Mitigation Requirements for Methane Zone and Table 1B - Mitigation Requirements for Methane Buffer Zone are based on Table 71 and Chapter 71 of the Los Angeles Building Code.
3. De-watering not required when the maximum Historical High Ground Water Table Elevation, or projected post-construction ground water level, is more than 12 inches below the bottom of the Perforated Horizontal Pipes.
4. The total quantity of installed Vent Risers shall be increased to double the calculated rate for the Passive System.

APPENDIX E

H&P Mobile Geochemistry Laboratory Report

Mobile
Geochemistry Inc.

19 June 2017

Mr. Mike Pendergrass
Citadel Environmental Services, Inc.
1725 Victory Blvd.
Glendale, CA 91201

H&P Project: CIT061517-10
Client Project: 333 N. San Vicente

Dear Mr. Mike Pendergrass:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 14-Jun-17 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis La Roux
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Citadel Environmental Services, Inc.	Project: CIT061517-10	
1725 Victory Blvd.	Project Number: 333 N. San Vicente	Reported:
Glendale, CA 91201	Project Manager: Mr. Mike Pendergrass	19-Jun-17 10:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV2-10	E706055-01	Vapor	14-Jun-17	14-Jun-17
SV3-5	E706055-02	Vapor	14-Jun-17	14-Jun-17

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Citadel Environmental Services, Inc.	Project: CIT061517-10	
1725 Victory Blvd.	Project Number: 333 N. San Vicente	Reported:
Glendale, CA 91201	Project Manager: Mr. Mike Pendergrass	19-Jun-17 10:40

Soil Gas and Vapor Analysis

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-10 (E706055-01) Vapor Sampled: 14-Jun-17 Received: 14-Jun-17									
Methane	ND	10	ppmv	1	EF71510	15-Jun-17	15-Jun-17	EPA 8015M	
Hexane (LCC)	ND	10	"	"	EF71511	15-Jun-17	15-Jun-17	"	
SV3-5 (E706055-02) Vapor Sampled: 14-Jun-17 Received: 14-Jun-17									
Methane	ND	10	ppmv	1	EF71510	15-Jun-17	15-Jun-17	EPA 8015M	
Hexane (LCC)	ND	10	"	"	EF71511	15-Jun-17	15-Jun-17	"	

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Citadel Environmental Services, Inc.	Project: CIT061517-10	
1725 Victory Blvd.	Project Number: 333 N. San Vicente	Reported:
Glendale, CA 91201	Project Manager: Mr. Mike Pendergrass	19-Jun-17 10:40

Soil Gas and Vapor Analysis - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF71510 - GC										
Blank (EF71510-BLK1)				Prepared & Analyzed: 15-Jun-17						
Methane	ND	10	ppmv							
Batch EF71511 - GC										
Blank (EF71511-BLK1)				Prepared & Analyzed: 15-Jun-17						
Hexane (LCC)	ND	10	ppmv							

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Citadel Environmental Services, Inc.	Project: CIT061517-10	
1725 Victory Blvd.	Project Number: 333 N. San Vicente	Reported:
Glendale, CA 91201	Project Manager: Mr. Mike Pendergrass	19-Jun-17 10:40

Notes and Definitions

LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

H&P is approved by the State of Arizona as an Environmental Testing Laboratory and Mobile Laboratory, certification numbers AZM758 and AZ0779.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743, 2744, 2745, 2754 & 2930.

H&P is approved by the State of Florida Department of Health under the National Environmental Laboratory Accreditation Conference (NELAC) certification number E871100.

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

H&P Mobile Geochemistry, Inc.

2470 Impala Drive, Carlsbad, CA 92010
& Field Office - Signal Hill, CA
W handpmg.com E info@handpmg.com
P 760.804.9678 F 760.804.9159

VAPOR / AIR Chain of Custody

DATE: 6/14/17
Page 1 of 1

Lab Client and Project Information

Lab Client/Consultant: Citadel	Project Name / #: 333 N. San Vicente
Lab Client Project Manager: Mike Pendergrass	Project Location: L.A.
Lab Client Address: 1725 Victory Blvd.	Report E-Mail(s): mpendergrass@ and MDROLLINGER@citadelenvironmental.com KIM 6/15/17
Lab Client City, State, Zip: Glendale, CA	
Phone Number: 818-482-1176	

Reporting Requirements

- [x] Standard Report ☐ Level III ☐ Level IV KIM 6/15/17
- ☐ Excel EDD ☐ Other EDD:
- ☐ CA Geotracker Global ID:

Turnaround Time

- [x] ~~5-7 day Stnd~~ KIM 6/15/17
- ☐ 24-Hr Rush
- ☐ 3-day Rush
- ☐ Mobile Lab
- ☐ 48-Hr Rush
- [x] Other: x KIM 6/15/17

Sampler Information

Sampler(s): E. Carson
Signature:
Date: 6/14/17

Sample Receipt (Lab Use Only)

Date Rec'd: 6/15/17	Control #: 170528.01
H&P Project # CIT061517-10	
Lab Work Order # E706055	
Sample Intact: [x] Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID:	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: KIM	

Additional Instructions to Laboratory: * analyze within 3-day Tedlar hold time KIM 6/15/17

Preferred VOC units (please choose one):
☐ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound (Hexane) ☐ DFA ☐ HPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
SV2-10		6/14/17	1210	SV	Tedlar	—								X	X					
SV3-5		↓	1220	↓	↓	—								X	X					

Approved/Relinquished by: Mike Pendergrass	Company: Citadel	Date: 6-14-17	Time: 1250	Received by:	Company: H&P	Date: 6/14/17	Time: 1250
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

H&P Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with ~~Summa~~ Tedlar

H&P Project #: MC61417-SPS/CAN
Date: 6/14/17
Site Address: 333 S. San Vicente Ave, L.A.
Page: 1 of 1
Consultant: Citadel Env.
H&P Rep(s): E. Corsen
Reviewed: PB
Consultant Rep(s): Mike Pendergrass
Scanned: I Torres

Equipment Info
Inline Gauge ID#: T29
Pump ID#: N/A

Purge Volume Information
PV Amount: N/A PV Includes: ☐ Tubing ☐ Sand 40% ☐ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☐ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☑ Other: Hexane

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☑ Hg ☐ H_2O
1	SV2-10	—	—	1208	—	1210	—	10	11	1/8	12	2.25	12	2.25	✓	✓	250	4100	—	—	-8
2	SV3-5	—	—	1218	—	1220	—	5	6	1/8	12	2.25	12	2.25	✓	✓	240	4100	—	—	-8
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):

(1) (2) Due to soil conditions, high vac. tedlars taken after Landtec. Only able to purge & collect up to a certain vol. before reaching too high of vac.

* Tedlars taken after Landtec readings, per client choice.