PARTNER
Engineering and Science, Inc.®

LIMITED PHASE II SUBSURFACE INVESTIGATION AND LIMITED METHANE INVESTIGATION REPORT

Lanting Land
9032 Merrill Avenue
Ontario, California 91762

August 31, 2018
Partner Project Number: 18-221385.2

Prepared for:

Prologis
Pier 1, Bay 1
San Francisco, California 94111

Engineers who understand your business

PARTNER
Engineering and Science, Inc.

August 31, 2018

Ms. Janet Frentzel
Prologis
Pier 1, Bay 1
San Francisco, California 94111

Subject: Limited Phase II Subsurface Investigation and
Limited Methane Investigation Report
Lanting Land
9032 Merrill Avenue
Ontario, California 91762
Partner Project Number: 18-221385.2

Dear Ms. Frentzel:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed on the above-referenced property. The following report describes the field activities, methods, and findings of the Limited Phase II Subsurface Investigation and Limited Methane Investigation conducted at the above-referenced property.

This assessment was performed utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Misty Ponce at (818) 337-1203.

Sincerely,

Partner Engineering and Science, Inc.

Kathy Lehnus, PG, LEP
Senior Project Manager

Misty Ponce
Principal

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ATTACHMENTS

1.0 INTRODUCTION

1.1 Purpose

Partner Engineering and Science, Inc. (Partner) performed a Phase I Environmental Site Assessment (ESA) dated August 24, 2018, for the property at 9032 Merrill Avenue in the City of Ontario, California (the Site or the subject property). In the Phase I ESA, Partner identified the historical use of the subject property as a dairy farm and current use as a truck maintenance with fueling areas and recommended sampling. The purpose of this investigation was to investigate the soil vapor on the subject property for the presence of methane in the former dairy areas, as well as volatile organic compounds (VOCs) in the past and present truck maintenance areas. Primarily this work was conducted to evaluate the potential for methane in subgrade soil gas in order to provide support for the future commercial/industrial development. Prologis provided project authorization of Partner Proposal Number P18-221385 on August 21, 2018, and the work was conducted under the Master Services Agreement between Prologis and Partner dated April 18, 2013.

1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. However, it cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally-accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.3 User Reliance

Prologis engaged Partner to perform this assessment as set forth by the Master Services Agreement between Prologis and Partner dated April 18, 2013 governing the nature, scope, and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Prologis. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be

irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted the Terms and Conditions for which this report was completed.

2.0 SITE BACKGROUND

2.1 Site Description

The subject property is currently occupied by two tenanted single-family residences and multiple commercial/industrial structures used by Gardner Trucking (with associated business Lanting Hay) and Fleet Yards Inc. as truck storage centers. Gardner Trucking occupies the southern half of the subject property for truck and trailer storage and service at 9032 Merrill Avenue. Trucks carrying paper products and bottled water are stored on-site for short periods or overnight and are serviced and fueled as needed. Service operations include typical maintenance, which includes oil changes, repair, washing, tire changes, parts replacement. In addition, fiberglass repair and touch-up painting are conducted. No major body painting is performed on the subject property. Fleet Yards, Inc., at 8911 Eucalyptus Avenue occupies the northern portion of the subject property, also as a truck and trailer storage lot; however, no service or fueling is performed on this portion of the subject property.

Site improvements for Gardner Trucking and Lanting Hay include a single-story, steel-framed service building connected to a three-story, steel-framed office structure and single-story break room (Main Service/Office Building); a single-story, wood-framed residence converted to an administration building (Administration Building); three storage buildings consisting of the following: a single-story, concrete masonry unit (CMU) storage building (Tire Shop); a single-story, steel-framed storage building with corrugated iron siding (Tool Shop); and a single-story, steel-framed storage building (Fiberglass Repair Shop). In addition, at least three storage structures are present at Gardner Trucking/Lanting Hay lease space consisting of two single-story, steel-framed truck shelter structures and a steel-framed paper storage structure, as well as a single-story, wood-framed single-family residence leased to a private tenant. Site improvements for Fleet Yards, Inc. include a single-story, brick and concrete former dairy building (unoccupied and dilapidated), a single-story, wood-framed single-family residence leased to a private tenant, and a modular office trailer used by Fleet Yards, Inc. The remainder of the northern portion of the subject property is gravel-paved and used for truck and trailer storage. An aboveground storage tank (AST) fueling area and truck wash station are present on the southern portion of the subject porperty.

2.2 Site History

Partner completed a *Phase I Environmental Site Assessment Report* (Phase I) dated August 24, 2018, prepared on behalf of Prologis. According to the reviewed historical sources, the subject property was previously undeveloped land circa 1902 and was utilized as orchard and agricultural land from at least 1938 to 1967. The northern and central portions of the subject property were developed between 1967 and 1975 with a dairy and associated retention pond, which was active until 2009. The former dairy structures on the northern and central portions were demolished between 2012 and 2016, with the exception of the primary dairy building and the single-family residence.

The southern portion of the subject property was first developed in 1954 with a single-family residence and two of the current shop/storage buildings on the eastern half, with additional structures added as late as 2006. The dairy operations on the northern portion of the subject property extended onto the western half of southern portion of the subject property from the 1980s through the 2000s. The northern portion of the subject property was historically occupied by members of the Oosten family and also Double O' Dairy,

Majestic Farms #2, and Inland Empire Dairy. The southern portion of the subject property was occupied by private residences as well as Ted Terpstra in 1970 (later Terpstra Construction in 1985 and 1990), and Coastal Transport Co (unknown dates) before occupied by Gardener Trucking in 1993.

The former use of the subject property as a dairy farm was considered a recognized environmental condition (REC) in the Phase I due to the potential for the build-up of methane, nitrates, and ammonia in soil from animal waste. The City of Ontario has indicated that they require mitigation measures for methane on dairy farms during redevelopment activities. In addition, the former construction yard use and current truck maintenance were noted as environmental concerns for the subject property. This Limited Phase II Subsurface Investigation and Limited Methane Investigation Report serves to assess those concerns.

2.3 Geology and Hydrogeology

The subject property is situated within the Peninsular ranges of the geomorphic province of the State of California. The Peninsular range is a series of ranges separated by northwest-trending valleys and traversed by several major active faults. The Whittier-Elsinore, San Jacinto, Newport-Inglewood, and San Andreas faults are major active fault systems located in the vicinity of the subject property. Major tectonic activity associated with these and other faults within this regional tectonic framework are typically right-lateral strike-slip movements. The Peninsular ranges extend into lower California, are bound to the east by the Colorado River, and extend into the Los Angeles Basin and the island group surrounding the continental shelf.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Delhi fine sands. A typical profile of these soils is fine sands from 0 to 18 inches and sand from 18 to 60 inches. Soils are somewhat-excessively drained, with 0 to 2 percent slopes. During Partner's investigation activities, soils encountered at the subject property were observed to generally consist of poorly-graded, fine- and medium-grained sands with trace silt as deep as 15 feet bgs.

According to topographic map interpretation, the direction of groundwater in the vicinity of the subject property is inferred to flow toward the south. The nearest surface water in the vicinity of the subject property is the Cucamonga Creek, located approximately 0.47 miles east of the subject property. No settling ponds, lagoons, surface impoundments, wetlands, or natural catch basins were observed at the subject property during this assessment.

Water is supplied to the subject property via two on-site wells. The property owner reported that to the best of his knowledge the wells are not typically sampled for water quality; however, according to file materials, sampling was performed in 2017 related to a regional trichloroethene (TCE) plume that has impacted groundwater in the vicinity of the subject property. TCE was not detected above detection limits during the 2017 sampling round.

No depth to groundwater information was identified for the on-site wells at the subject property. The nearest well with available data from the California Department of Water Resources (CDWR) is identified as Well 339689N1176279W001, located approximately 1.1 miles southwest of the subject property. Depth to groundwater has been measured in this well at approximately 70 to 85 feet below ground surface (bgs).

3.0 FIELD ACTIVITIES

The scope of the Limited Methane Investigation included the advancement of 7 soil borings (B1 through B7) for sampling soil vapor to a maximum depth of 15 feet bgs for the collection of representative soil gas grab samples for laboratory analysis.

The scope of the Limited Phase II Subsurface Investigation included the advancement of 4 soil borings (SB-8 through SB-11) for sampling soil vapor to a maximum depth of 5 feet bgs using a Geoprobe for the collection of soil gas grab samples for laboratory analysis.

Refer to Tables 1 through 3 for a tabulated summary of the borings advanced, sampling schedule, and laboratory analyses for this investigation.

Refer to Figures 2 and 3 for sample point locations with analytical results.

3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

3.1.1 Utility Clearance

Partner contacted Underground Service Alert of Southern California (USA/SC) to clear public utility lines as required by law at least 48 hours prior to drilling activities (not including the day of notification). USA/SC issued ticket number A182290967-00A for the project. In addition, Partner advanced samples by hand to a depth of at least 3 feet bgs in order to avoid damaging any shallow utilities present.

3.1.2 Permitting

No specific permits were required by regulatory oversight agencies for this limited subsurface investigation.

3.1.3 Health and Safety Plan

Partner prepared and reviewed a site-specific Health and Safety Plan with on-site personnel involved in the project prior to the commencement of drilling activities.

3.2 Drilling Equipment

Partner subcontracted with Munoz Direct Push (Munoz) to provide and operate drilling equipment to advance the environmental soil borings at the subject property. Munoz, under the direction of Partner, advanced borings SB-1 through SB-11 with a Geoprobe direct push rig (truck-mounted and limited access). Non-dedicated sampling equipment was decontaminated between sample intervals and boring locations to prevent cross-contamination.

3.3 Boring Locations

Soil borings / temporary soil gas probes B1 through B7 were installed across the subject property spaced to allow for an overall assessment of methane distributed throughout the subject property. The soil gas sampling locations were targeted within areas suspected to have a high accumulation of methane (e.g. historical ponds and pen areas).

Borings B-8 through B-11 were advanced on the southern end of the subject property in and around building structures associated with truck maintenance and fiberglass/body repair activities.

Some boring placements may have been modified based on the presence of utilities and/or access limitations by the drill rig, although the overall objectives of the sampling event were still met.

3.4 Boring Depths

For the limited methane investigation, Borings B-1, B-2, B-4, B-5, and B-7 were advanced to 7 feet bgs. A duplicate sample was collected at Boring B7 at 7 feet. Borings B3 and B6 were advanced to a depth of 15 feet bgs to assess deeper methane zones.

For the Limited Phase II ESA, Borings B-8 through B-11 were all advanced to a depth of 5 feet bgs.

3.5 Soil Sampling

Soil samples were collected from Borings B-1 through B11 using a four-foot long by 1.5-inch diameter sampler with a four-foot long acetate liner and sampling point. The sampler was advanced by the direct-push drill rig using four-foot by 1.25-inch diameter hollow rods with the inner rods in place. At approximately one foot above the desired sampling depth, an inner rod was removed and the sampler was advanced to the desired sampling depth to allow undisturbed soil to enter the sampling liner. The sampler was retrieved from the subsurface and the soil-filled liner was removed.

Each acetate liner was marked with the depths and were opened using a pipe-cutter and visually inspected for discoloration, monitored for odors, classified in accordance with the Unified Soil Classification System (Modified). They were also field-screened with a photoionization detector (PID). None of the samples exhibited extreme discoloration or odor and no elevated PID readings were encountered.

This assessment did not include the analysis of physical soil but rather soil gas.

3.6 Soil Gas Sampling

Partner contracted Jones Environmental, Inc. (Jones) to collect soil gas samples from the temporary soil gas probes. Purging was completed using a pump set at approximately 200 cubic centimeters per minute (cc/min), except if noted on the chain of custody record. Three purge volumes were used, as recommended by July 2015 Department of Toxic Substances Control (DTSC)/Regional Water Quality Control Board (RWQCB) guidance documents.

Prior to purging and sampling, probe pressure was measured with a magnehelic gauge able to reach a limit of detection of 0.1 inches of H_2O and recorded in the field logs. No probes were found to be pressurized prior to purging and sampling. A shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system, and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then collected using a glass-tight syringe and containerizing into a Tedlar bag with a sampling rate of approximately 200 cc/min, except if noted differently on the chain of custody record.

A duplicate sample was collected from Boring B7 at 7 feet bgs for quality control.

3.7 Post-Sampling Activities

Probes were removed from the subsurface and the boreholes were backfilled with hydrated bentonite chips following sampling activities.

No significant amounts of derived wastes were generated during this investigation.

4.0 LABORATORY ANALYSIS

4.1 Laboratory Analysis

Jones Environmental Inc., under the direction of Partner, collected a total of 14 soil gas samples on August 24, 2018 (13 samples and one duplicate), which were transported in an iced cooler under proper chain-of-custody protocol to Jones' state-certified laboratory (Environmental Laboratory Accreditation Program (ELAP) certificate number 2484) in the City of Santa Fe Springs, California, for analysis.

Ten soil gas samples were analyzed for methane using American Society of Testing Materials (ASTM) Method D1946. Four soil samples were analyzed using EPA Method 8260B Volatile Organics (VOCs) by GC/MS and Oxygenates/Gasoline Range Organics (GROs). A Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with the soil gas samples. In addition, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. All samples were injected into the GC/MS system within 6 hours of sampling and no contamination was noted in the blanks.

4.2 Laboratory Analytical Results

Laboratory analytical results are included in Appendix B and discussed below.

4.2.1 Soil Gas Sample Analytical Results

Methane was detected in three soil gas samples located at Boring B4 at 7 feet (7,800 parts per million per volume (ppmV)), Boring B6 at 7 feet (900 ppmV), and Boring B6 at 15 feet (700 ppmV). Methane was not detected in the other samples above detection limits or in the duplicate sample at the subject property. Boring B4 is located along the middle east side of the subject property, and Boring B6 is located along the southern end of the subject property (in the vicinity of the former retention ponds).

Low concentrations of tetrachloroethene (TCE) was detected in each of samples collected from Borings B8 through B11 ranging in concentration from 0.045 micrograms per liter (ug/L) to 1.29 ug/L. Toluene was detected in one sample at Boring B10 at a concentration of 0.039 ug/L.

The laboratory analytical report is included in Appendix B. Refer to Tables 2 and 3 and Figures 2 and 3 for a summary of the soil sample laboratory analysis results.

5.0 DISCUSSION AND CONCLUSIONS

5.1 Regulatory Agency Guidance

Environmental Protection Agency Regional Screening Levels

Environmental Protection Agency Regional Screening Levels (EPA RSLs) (formerly Preliminary Remediation Goals or PRG) are generic, risk-based chemical concentrations developed by EPA Region 9 for use in initial screening-level evaluations. EPA RSLs combine human health toxicity values with standard exposure factors to estimate contaminant concentrations that are considered to be health protective of human exposures over a lifetime through direct-contact exposure pathways (e.g., via inhalation and/or ingestion of and/or dermal contact with impacted soil and/or indoor air). EPA RSLs are not legally enforceable standards, but rather are considered guidelines to evaluate if potential risks associated with encountered chemical impacts may warrant further evaluation.

EPA has not developed EPA RSLs for methane in environmental media. The EPA RSLs for VOCs are provided on Tables 3 and 4.

Department of Toxic Substances Control Attenuation Factor and Recommended Screening Levels

The DTSC Office of Human and Ecological Risk (HERO) developed California-Modified Recommended Screening Levels (DTSC RSLs) for soil and indoor air based on a review of 1) the differences in methodology between EPA PRGs/EPA RSLs 2) EPA RSL concentrations, and 3) recent toxicity values. Per DTSC, if a HERO value has not been developed, the EPA RSL can be used.

For soil gas, since soil gas detections are not immediately comparable to the indoor air quality guidelines within the RSLs, the DTSC issued recommended default attenuation factors of 0.05 (subslab sampling locations) and 0.002/0.001 (residential/commercial contaminant source sampling locations) for sites where the attenuation factor for the building slab is unknown or cannot be determined in the October 2011 document *Guidance for the Evaluation and Mitigation of Subsurface Gas Intrusion to Indoor Air*. With the subsurface contaminant concentrations and default attenuation factors, the associated contaminant concentrations in indoor air can be estimated as Calculated Residential and Commercial/Industrial Soil Gas Screening Levels (SGSLs). The calculated DTSC RSLs for VOCs are provide on Table 3.

DTSC has not developed RSLs for methane in environmental media. DTCS has developed two white papers on sampling of methane in California (*Evaluation of Biogenic Methane*, dated March 2012 and DTSC *Advisory on Methane Assessment and Common Remedies at School Sites*, dated June 2005). In addition, DTSC provides for soil gas sampling probe installation details in their *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*, dated October 2011. Partner adhered to all three of those documents when sampling the Site and evaluating the resulting data.

City of Ontario Building Department Regulations

The City of Ontario has published Methane Design Guidelines for "Projects in the New Model Colony". According to Building Department personnel, those guidelines are applicable to any building development on farm properties (including dairy farms) and is independent of the planned building use (i.e. residential or commercial/industrial). Therefore, Partner has confirmed that the City of Ontario *Methane Assessment for*

Projects in the New Model Colony document (Methane Design Document) is applicable to the subject property.

The Methane Design Document indicates that a Methane Site Assessment is required of any parcels used as animal farms or composting / fertilizer farms, and that the survey must be completed within "all lots in potential methane areas". The Methane Site Assessment must be completed within properties 30 days after building footprints have been put in place.

The Methane Design Document further indicates that all buildings are to be installed with 10-mil methane barrier with sealed penetrations, and that for properties with methane concentrations over 15,000 ppmV, is it additionally required that any remediation required by the engineer after the Methane Site Assessment is completed. A copy of the regulation is attached as Appendix C and a summary of the threshold criteria are presented in Table 2.

5.2 Discussion

The purpose of the investigation was to investigate the soil vapor on the subject property for releases at the southern end of the subject property associated with truck maintenance and for the presence of methane in order to provide support for the future commercial/industrial development.

No evidence of a significant release was detected in the truck maintenance area. Although VOCs and one gasoline-related VOC (toluene) were detected, the concentrations are well below applicable regulatory criteria.

Methane was not detected above state and local regulatory screening levels as discussed above in Section 5.1 at the subject property during this sampling event.

During redevelopment of the subject property, it is possible that the City of Ontario will require further methane evaluation when the footprints of the proposed buildings are confirmed and approved. At that time, the appropriate mitigation measures, if any, will be determined.

5.3 Conclusions and Recommendations

Based on the results of this subsurface investigation, no significant releases appear to have occurred at the truck maintenance area, and no significant concentrations of methane in soil gas appear to be present at the subject property.

Partner recommends no further subsurface assessment at the subject property at this time. However, since a release of solvent and gasoline-related VOCs has been detected in the southern portion of the subject property, Partner recommends that a site-specific Soil Management Plan is prepared for the subject property that provides procedures for the proper handling of any contaminated soil encountered during redevelopment activities.

Partner notes that further testing requirements may be required by the City of Ontario during site development.

TABLES

Table 1: Summary of Investigation Scope
Lanting Land
9032 Merrill Avenue
Ontario, California 91762
Partner Project Number 18-221385.2
August 2018

Boring	Location	Depth	Analysis			Rationale
			Methane	VOCs	TPH-G	
B1	Northeast corner of property, in gravel lot	7 feet	X			Vapor points advanced to assess former dairy farm pastures
B2	Northwest corner of property, in gravel lot	7 feet	X			
B3	Western edge of gravel lot, near fuel tank	7 feet	X			
		15 feet	X			
B4	Southeast corner of gravel lot, north of property fence	7 feet	X			
B5	Central lot, south of loading docks	7 feet	X			
B6	Central lot, near truck wash station	7 feet	X			Vapor points advanced to assessor former dairy retention ponds
		15 feet	X			
B7	Southwest corner, employee parking lot	7 feet	X			
		7 feet (duplicate)	X			
B8	Northwest corner of auto workshop	5 feet		X	X	Vapor point advanced to assess maintenance building septic system
B9	Interior fiberglass/body shop	5 feet		X	X	Vapor point advanced to assess the body/fiberglass shop
B10	Auto shop, naer waste storage bins	5 feet		X	X	Vapor point advanced to assess beneath the maintenance building
B11	Auto shop, near front degreaser	5 feet		X	X	

VOCs - Volatile Organic Compounds

TPH-G - Total Petroluem Hydrocarbons-Gasoline

Table 2: Soil Gas Sample Methane Laboratory Results
Langting Land
9032 Merrill Avenue
Ontario, California 91762
Partner Project Number 18-221385.2
August 2018

			Methane
Sample Identification	Sample Depth	Date Collected	Concentration
Units	(feet bgs)		(ppmV)
B1	7	8/24/2018	ND<100
B2	7	8/24/2018	ND<100
B3	7	8/24/2018	ND<100
B3	15	8/24/2018	ND<100
B4	7	8/24/2018	7,800
B5	7	8/24/2018	ND<100
B6	7	8/24/2018	900
B6	15	8/24/2018	700
B7	7	8/24/2018	ND<100
B7	7 (Duplicate)	8/24/2018	ND<100
Ambient Air		8/24/2018	ND<100
Ontario Methane Design Guidelines (Dairy Farm)			15,000

Notes:

United States Environmental Protection Agency Method D1946 used to analyze samples

ppmV = parts per million by volume

ND = not detected above indicated laboratory practical quantitation limits (PQLs) (100 ppmV)

(Rep) = Replicate Sample

Table 3: Soil Gas Sample EPA Method 8260 Results
Lanting Land
9032 Merrill Avenue
Ontario, California 91762
Partner Project Number 18-221385.2
August 2018

Sample Identification Units	Sample Depth (feet bgs)	Date Collected	PCE Concentration (ug/L)	Toluene Concentration (ug/L)	TPH-G Concentration (ug/L)
B8	5	8/24/2018	0.301	ND<0.020	ND<0.020
B9	5	8/24/2018	0.045	ND<0.020	ND<0.020
B10	5	8/24/2018	0.963	0.039	ND<0.020
B11	5	8/24/2018	1.29	ND<0.020	ND<0.020
Calculated Residential Soil Gas DTSC SLs (ug/L)			0.23	155	15.5*
Calculated Commercial/Industrial Soil Gas DTSC SLs (ug/L)			2.0	1,300	130*

Notes:

DTSC SLs - Department of Toxic Substances Control Screening Levels

* Developed from United States Environmental Protection Agency Regional Screening Levels for Total Petroleum Hydrocarbons (Aromatic Low)

United States Environmental Protection Agency Method 8260B used to analyze samples

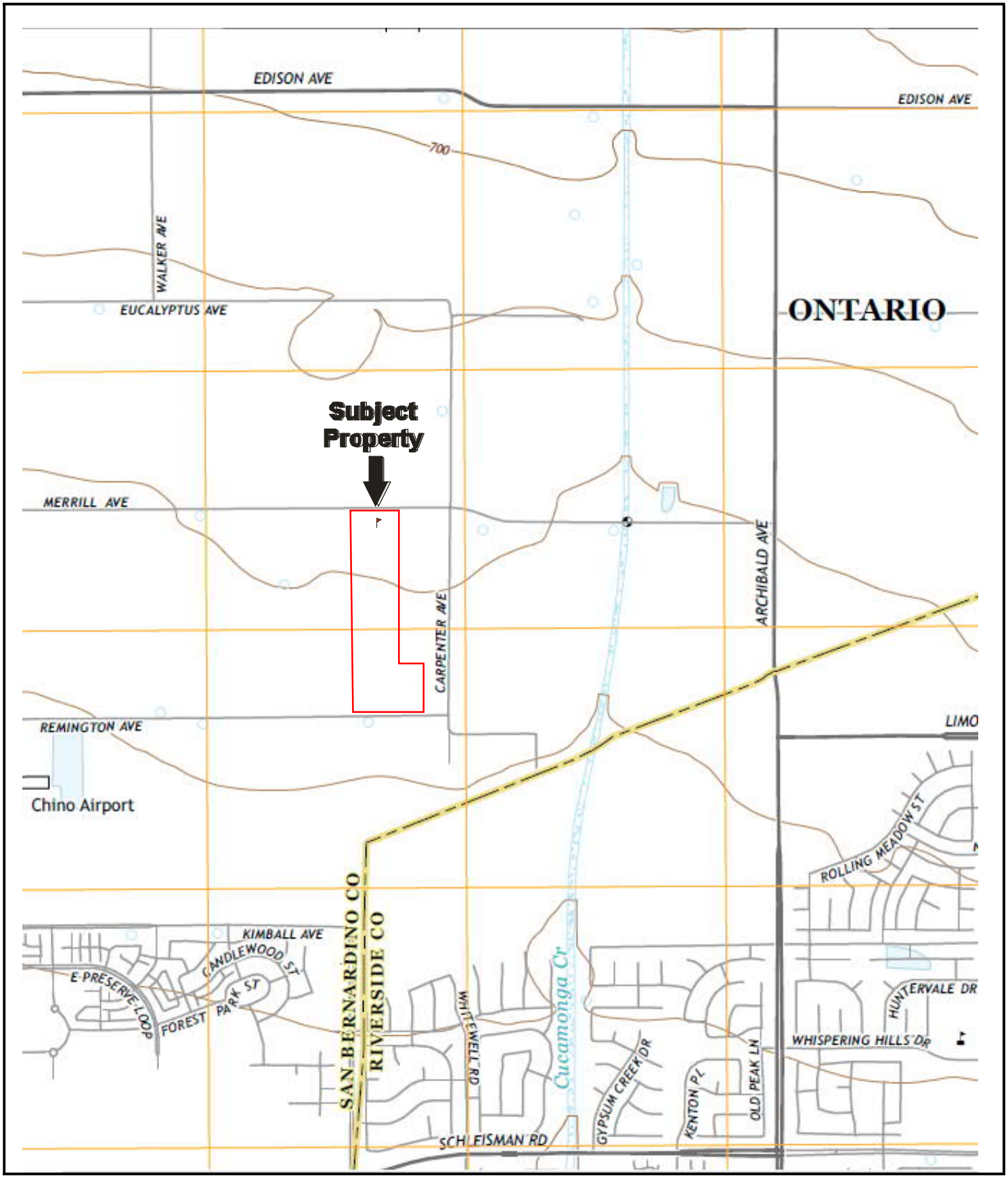
ug/L = microgram per Liter

ND = not detected above laboratory practical quantitation limits (PQLs) (0.020 ug/L)

PCE = Tetrachloroethene

TPH-G - Total Petroluem Hydrocarbons-Gasoline

FIGURES



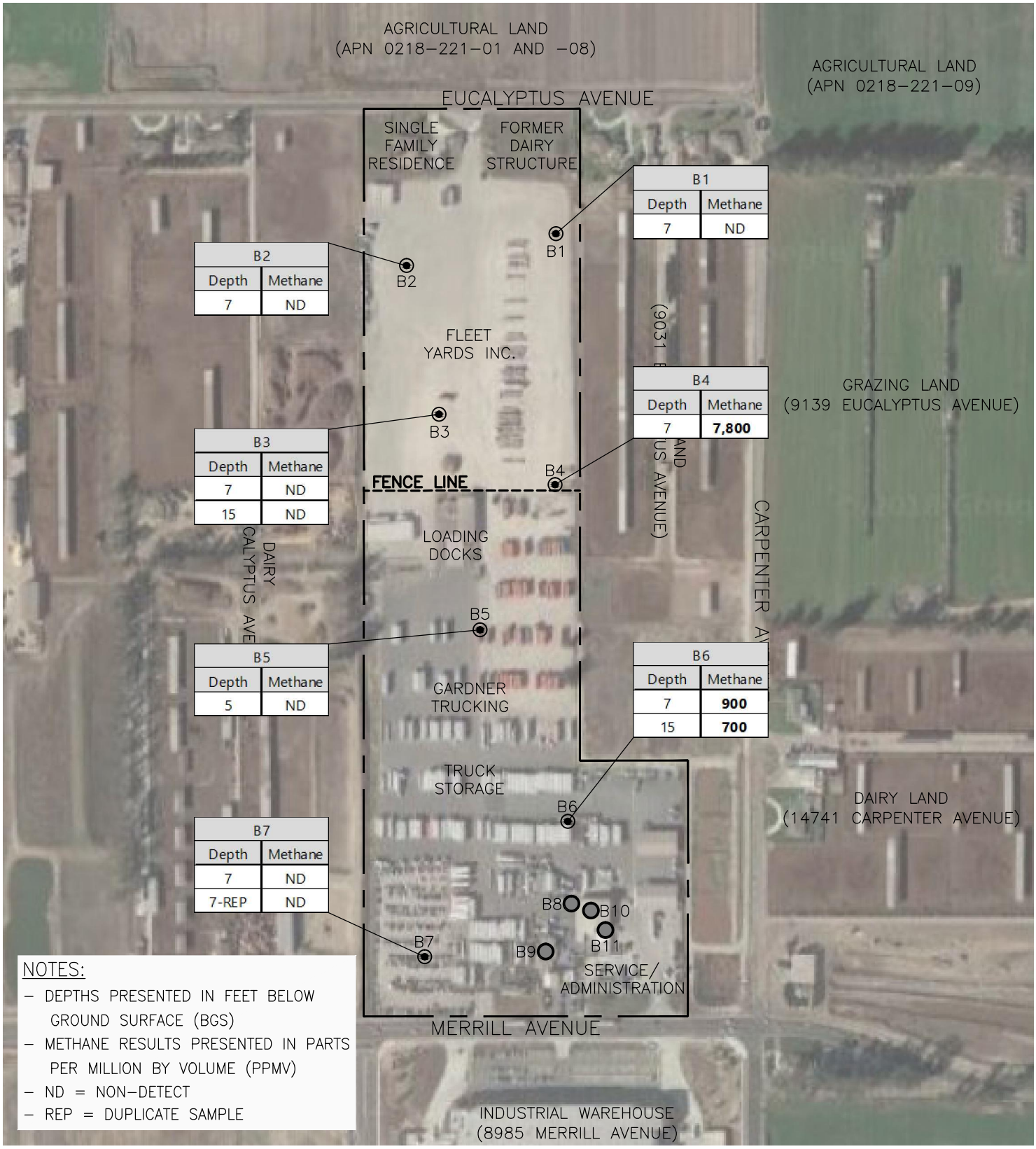
N

USGS 7.5 Minute Corona North, CA Quadrangle
Created: 2012/Revised: 2015

KEY:
Subject Property

FIGURE 1: TOPOGRAPHIC MAP
Project No. 18-221385.2

PARTNER



NOTES:

- DEPTHS PRESENTED IN FEET BELOW GROUND SURFACE (BGS)
- METHANE RESULTS PRESENTED IN PARTS PER MILLION BY VOLUME (PPMV)
- ND = NON-DETECT
- REP = DUPLICATE SAMPLE

LEGEND:

- PROPERTY LINE
- SOIL VAPOR BORING LOCATIONS (SAMPLED FOR METHANE)
- SHALLOW SOIL VAPOR BORING LOCATIONS (SAMPLED FOR VOCs)

150' 0' 150' 300'

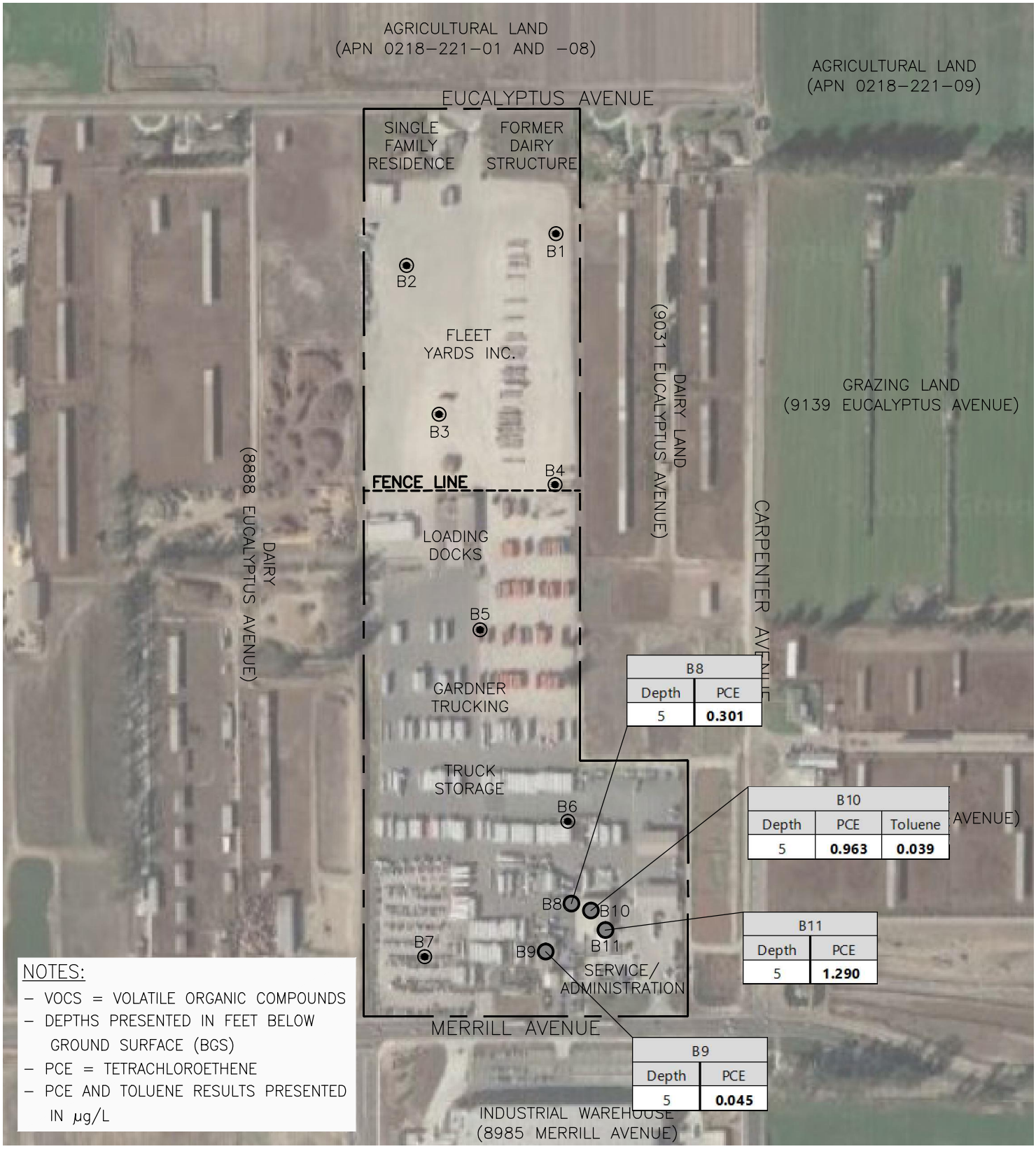
APPROXIMATE SCALE

TITLE: SOIL GAS SAMPLE RESULTS FOR METHANE

FIGURE:	PREPARED BY:	DATE:	PROJECT NUMBER:
2	DH	AUGUST 2018	18-221385

ADDRESS:
LANTING LAND
9032 MERRILL AVENUE AND 8911 EUCALYPTUS AVENUE
ONTARIO, CALIFORNIA 91762

PARTNER
Engineering and Science, Inc.
2154 TORRANCE BOULEVARD, SUITE 200
TORRANCE, CALIFORNIA 90501



NOTES:

- VOCS = VOLATILE ORGANIC COMPOUNDS
- DEPTHS PRESENTED IN FEET BELOW GROUND SURFACE (BGS)
- PCE = TETRACHLOROETHENE
- PCE AND TOLUENE RESULTS PRESENTED IN µg/L

LEGEND:

- PROPERTY LINE
- SOIL VAPOR BORING LOCATIONS (SAMPLED FOR METHANE)
- SHALLOW SOIL VAPOR BORING LOCATIONS (SAMPLED FOR VOCs)

N

150' 0' 150' 300'

APPROXIMATE SCALE

TITLE: SOIL GAS SAMPLE RESULTS FOR VOCS

FIGURE:	PREPARED BY:	DATE:	PROJECT NUMBER:
3	DH	AUGUST 2018	18-221385

ADDRESS:
LANTING LAND
9032 MERRILL AVENUE AND 8911 EUCALYPTUS AVENUE
ONTARIO, CALIFORNIA 91762

PARTNER
Engineering and Science, Inc.
2154 TORRANCE BOULEVARD, SUITE 200
TORRANCE, CALIFORNIA 90501

APPENDIX A: BORING LOGS

PARTNER

BORING LOG

BORING: **B1**

TOTAL DEPTH: **8'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Northeast corner of property, in gravel lot	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	8911 Euchalyptus Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Dual-Tube
JOB NO.:	18-221385	BORING DIAMETER:	2.25"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0		0.0			SP	6" Dry compact dirt, sand, and gravel SAND: brown, with trace silt, fine grained, poorly graded, moist	Hydrated Bentonite 0.25" Diameter Nylaflow Tubing	
5		0.0				- with trace gravel at 6'	Dry Bentonite Chips 0.25" Diameter Implant Probe #3 Sand Pack	
10								
15								
20								

NOTES: Drilling terminated at 8'

BORING LOG

BORING: **B2**

TOTAL DEPTH: **8'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Northwest corner of property, in gravel lot	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	8911 Euchalyptus Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Dual-Tube
JOB NO.:	18-221385	BORING DIAMETER:	2.25"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0		0.0				6" Dry compact dirt, sand, and gravel	Hydrated Bentonite	
		0.0				SAND: brown, with trace silt, fine grained, poorly graded, moist	0.25" Diameter Nylaflow Tubing	
						- with gravel to 3'		
5		0.0			SP		Dry Bentonite Chips	
							0.25" Diameter Implant Probe	
							#3 Sand Pack	
10								
15								
20								

NOTES: Drilling terminated at 8'

BORING LOG

BORING: **B3**

TOTAL DEPTH: **16'**

PARTNER Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Western edge of gravel lot, near fuel tank	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	8911 Euchalyptus Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Dual-Tube
JOB NO.:	18-221385	BORING DIAMETER:	2.25"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0		0.0				6" Dry compact dirt, sand, and gravel		
		0.0				SAND: brown, with trace silt, fine grained, poorly graded, moist		Hydrated Bentonite; 0.25" Diameter Nylaflow Tubing
5		0.0						Dry Bentonite Chips; 0.25" Diameter Implant Probe; #3 Sand Pack
		0.0			SP			0.25" Diameter Nylaflow Tubing
		0.0				- fine to medium grained, 9' to 10'		Hydrated Bentonite
10		0.0						Dry Bentonite Chips; 0.25" Diameter Implant Probe; #3 Sand Pack
		0.0				- with silt, 14' to 16'		
15								
20								

NOTES: Drilling terminated at 16'

BORING LOG

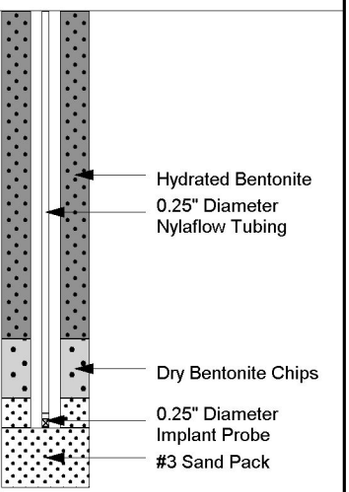
BORING: **B4**

TOTAL DEPTH: **8'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Southeast corner of gravel lot, north of property fence	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	8911 Euchalyptus Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Dual-Tube
JOB NO.:	18-221385	BORING DIAMETER:	2.25"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0						6" Dry compact dirt, sand, and gravel		
		0.0			SP	SAND: brown, with trace silt, fine grained, poorly graded, moist		
		1.8			SC	Clayey SAND: dark brown, with organics and few rootlets, moist		
5		1.2				- with gravel, 4' to 6'		
		0.0			SP	SAND: brown, with trace silt, fine grained, poorly graded, moist		
10								
15								
20								



NOTES: Drilling terminated at 8'

BORING LOG

BORING: **B5**

TOTAL DEPTH: **15.5'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Central lot, south of loading docks	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	9032 Merrill Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Dual-Tube
JOB NO.:	18-221385	BORING DIAMETER:	2.25"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0		0.0				6" Dry compact dirt, sand, and gravel	Hydrated Bentonite	
						SAND: brown, with trace silt, fine grained, poorly graded, moist	0.25" Diameter Nylaflow Tubing	
		0.0						
5					SP		Dry Bentonite Chips	
							0.25" Diameter Implant Probe	
							#3 Sand Pack	
10		0.0						
		0.2			SP	SAND: brown, with trace silt, with trace gravel, fine to coase grained, poorly to medium graded, moist		
15		0.0			SP	SAND: brown, with silt, fine grained, poorly to medium graded, more dense, moist	Hydrated Bentonite	
20								

NOTES: Drilling terminated at 15.5'

BORING LOG

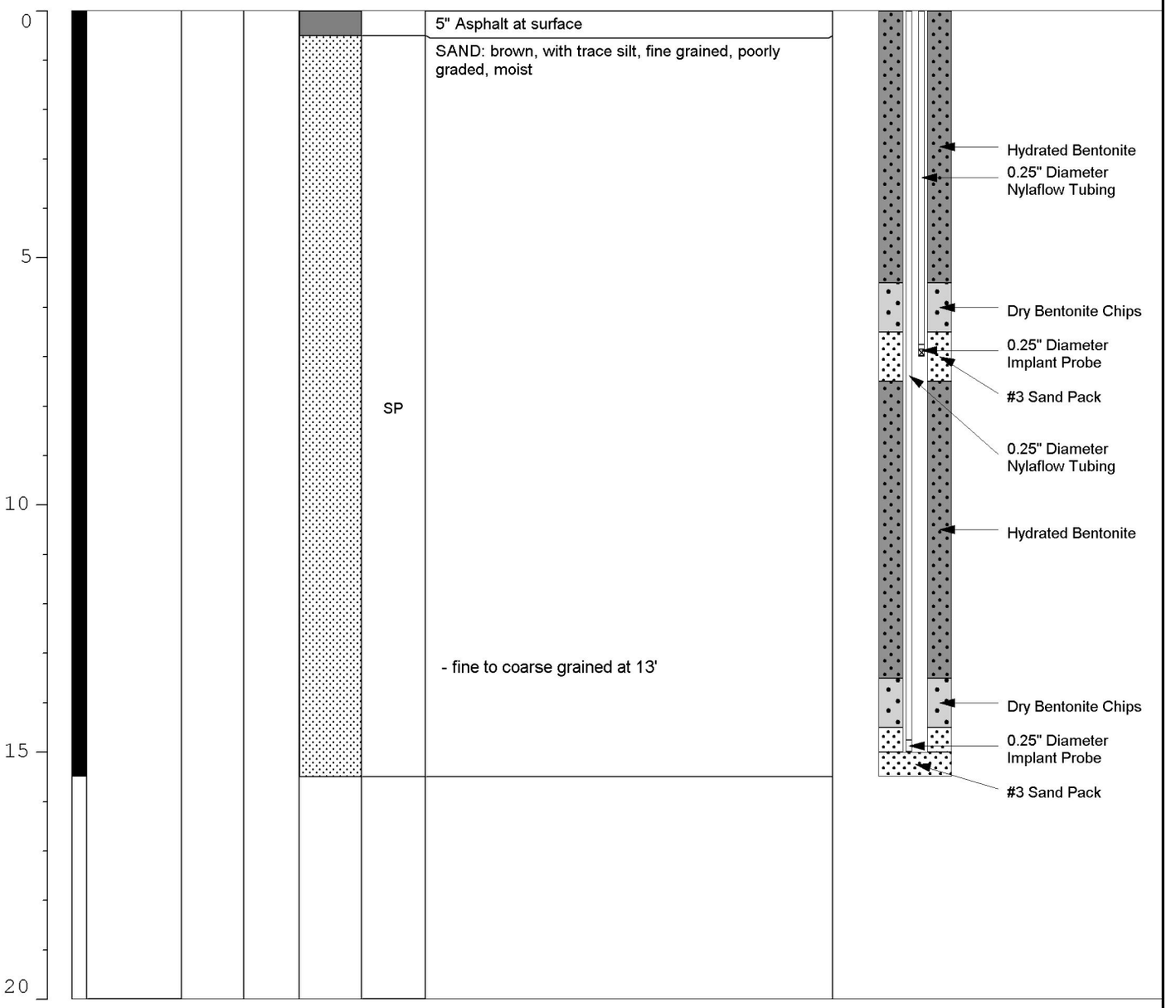
BORING: **B6**

TOTAL DEPTH: **16'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Central lot, near truck wash station	RIG TYPE:	Limited-Access Geoprobe
SITE ADDRESS:	9032 Merrill Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Macro-core
JOB NO.:	18-221385	BORING DIAMETER:	1.5"
DATES DRILLED:	8/24/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION



NOTES: Drilling terminated at 15.5'

BORING LOG

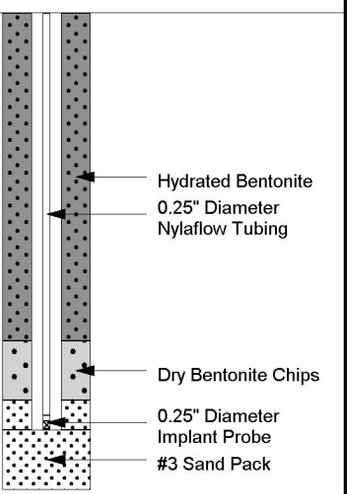
BORING: **B7**

TOTAL DEPTH: **8'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Southwest corner, employee parking lot	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	9032 Merrill Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Dual-Tube
JOB NO.:	18-221385	BORING DIAMETER:	2.25"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0		0.0			SW	SAND: brown, with gravel, fine to coarse grained, medium to well graded, moist		
5		0.0			SP	SAND: brownish gray, with trace silt, fine grained, poorly graded, moist		
10								
15								
20								



NOTES: Drilling terminated at 8'

BORING LOG

BORING: **B8**

TOTAL DEPTH: **8'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Northwest corner of auto workshop	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	9032 Merrill Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Macro-core
JOB NO.:	18-221385	BORING DIAMETER:	1.5"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0		0.0			SP	6" Asphalt black top SAND: grayish brown, fine grained, poorly to medium graded, moist	Hydrated Bentonite 0.25" Diameter Nylaflow Tubing	
5		0.0 0.0				- with medium sand at 6.5'	Dry Bentonite Chips 0.25" Diameter Implant Probe #3 Sand Pack	
10		0.0					Hydrated Bentonite	
15								
20								

NOTES: Drilling terminated at 8'

BORING LOG

BORING: **B9**

TOTAL DEPTH: **5.5'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Interior parts shop	RIG TYPE:	Truck-Mounted Geoprobe
SITE ADDRESS:	9032 Merrill Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Macro-core
JOB NO.:	18-221385	BORING DIAMETER:	1.5"
DATES DRILLED:	8/22/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION
0		0.0			SP	5" Concrete at surface SAND: light brown, with trace silt, fine grained, poorly graded, moist	Hydrated Bentonite 0.25" Diameter Nylaflow Tubing Dry Bentonite Chips 0.25" Diameter Implant Probe #3 Sand Pack	
5		0.0						
		0.0						
10								
15								
20								

NOTES: Drilling terminated at 5.5'

BORING LOG

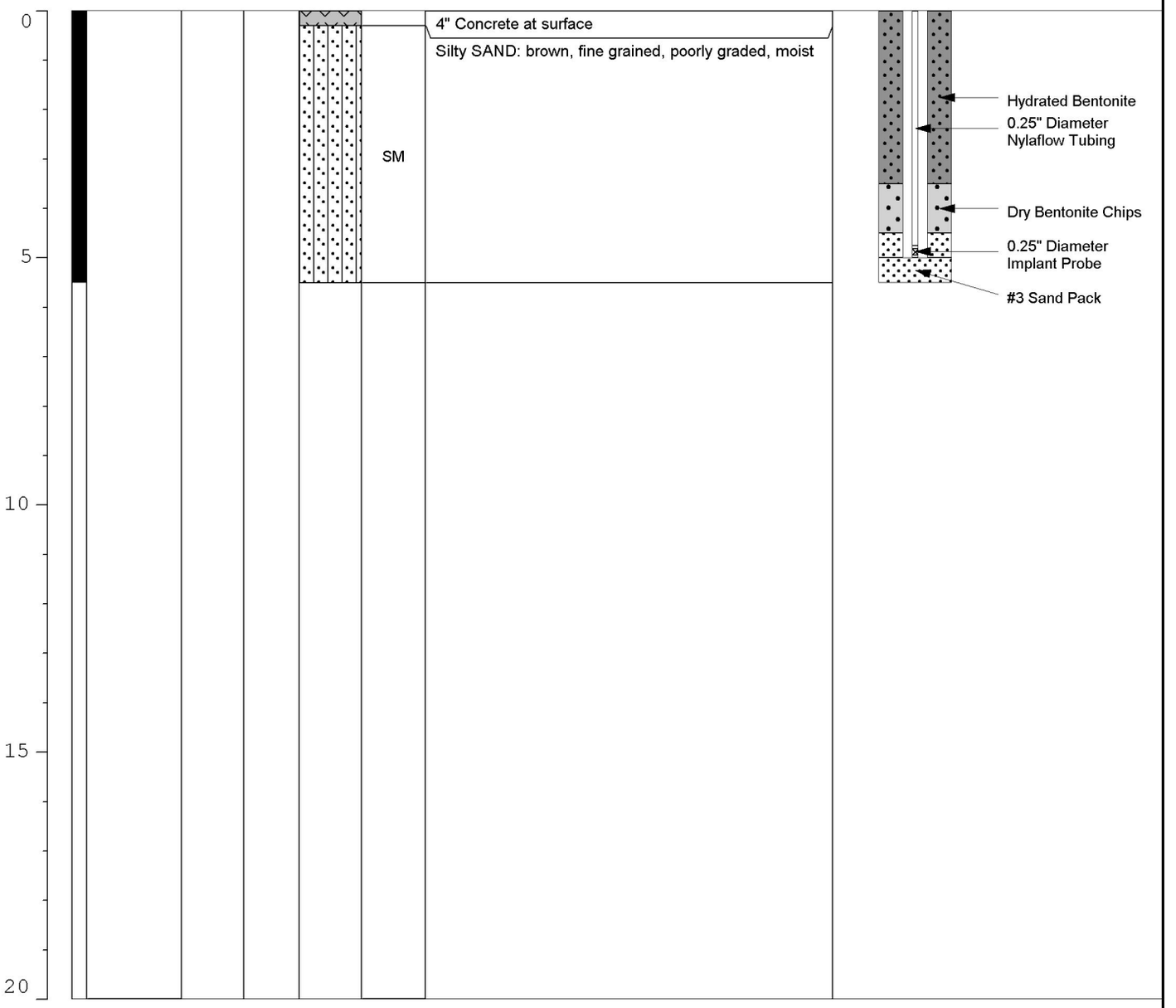
BORING: **B10**

TOTAL DEPTH: **5.5'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Auto shop, near waste storage bins	RIG TYPE:	Limited-Access Geoprobe
SITE ADDRESS:	9032 Merrill Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Macro-core
JOB NO.:	18-221385	BORING DIAMETER:	1.5"
DATES DRILLED:	8/24/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION



NOTES: Drilling terminated at 5.5'

BORING LOG

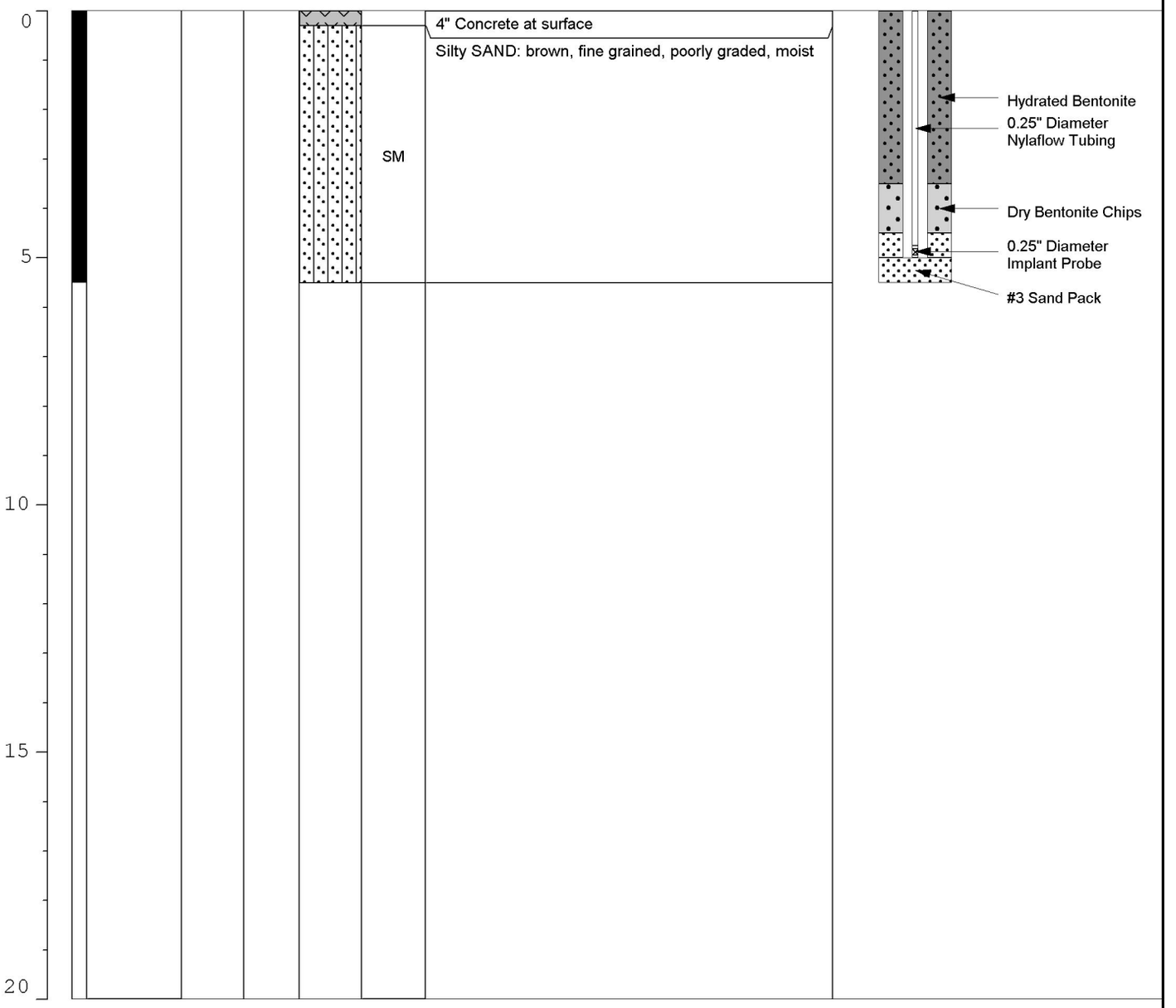
BORING: **B11**

TOTAL DEPTH: **5.5'**

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	Lanting Land	DEPTH TO GROUNDWATER:	N/A
LOCATION:	Auto shop, near front de-greaser	RIG TYPE:	Limited-Access Geoprobe
SITE ADDRESS:	9032 Merrill Avenue	METHOD OF DRILLING:	Direct Push
	Ontario, CA 91762	SAMPLING METHODS:	Macro-core
JOB NO.:	18-221385	BORING DIAMETER:	1.5"
DATES DRILLED:	8/24/18	FIELD TECHNICIAN:	DH

DEPTH	SAMPLE	PID (ppm)	BLOW COUNT	USCS	SOIL TYPE	SOIL TYPE	BORING COMPLETION	WELL DESCRIPTION



NOTES: Drilling terminated at 5.5'

APPENDIX B: LABORATORY ANALYICAL REPORTS

PARTNER

JONES ENVIRONMENTAL, INC.

714-449-9937
562-646-1611
805-399-0060

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SANTA FE SPRINGS, CA 90670
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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	1761 E. Garry Ave. Santa Ana, CA 92705	**JEL Ref. No.:** **Client Ref. No.:**	ST-12534 18-221385
Attn:	Kathy Lehnus	**Date Sampled:** **Date Received:**	8/24/2018 8/24/2018
Project Name:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrit Ave. Ontario, CA 91762	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sampling – Soil Gas samples were collected in Tedlar bags.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No n-pentane, n-hexane, or n-heptane was found in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except if noted differently on the chain of custody record, using a Tedlar Bag. Purging was completed using a pump set at approximately 200 cc/min, except if noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 6 hours of sampling.

2. ASTM D1946 – Fixed Gases

Analytical – Soil Gas samples were analyzed using ASTM D1946 by GC/TCD. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 6 hours of sampling.

Approval:

David Mirakian, M.S.
Stationary Lab Chemist

JONES ENVIRONMENTAL, INC.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	2154 Torrance Blvd., Suite 200 Torrance, CA 90501	**Jones Ref. No.:** **Client Ref. No.:**	ST-12534 18-221385
Attn:	Kathy Lehnus	**Date Sampled:** **Date Received:**	8/24/2018 8/24/2018
Project:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrill Ontario, CA 91762	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**B8-5**	**B9-5**	**B10-5**	**B11-5**		
Jones ID:	**ST-12534-07**	**ST-12534-08**	**ST-12534-13**	**ST-12534-14**	**Reporting Limit**	**Units**
Analytes:						
Benzene	ND	ND	ND	ND	0.020	µg/L
Bromobenzene	ND	ND	ND	ND	0.020	µg/L
Bromodichloromethane	ND	ND	ND	ND	0.020	µg/L
Bromoform	ND	ND	ND	ND	0.020	µg/L
n-Butylbenzene	ND	ND	ND	ND	0.020	µg/L
sec-Butylbenzene	ND	ND	ND	ND	0.020	µg/L
tert-Butylbenzene	ND	ND	ND	ND	0.020	µg/L
Carbon tetrachloride	ND	ND	ND	ND	0.020	µg/L
Chlorobenzene	ND	ND	ND	ND	0.020	µg/L
Chloroform	ND	ND	ND	ND	0.020	µg/L
2-Chlorotoluene	ND	ND	ND	ND	0.020	µg/L
4-Chlorotoluene	ND	ND	ND	ND	0.020	µg/L
Dibromochloromethane	ND	ND	ND	ND	0.020	µg/L
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	0.020	µg/L
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.020	µg/L
Dibromomethane	ND	ND	ND	ND	0.020	µg/L
1,2- Dichlorobenzene	ND	ND	ND	ND	0.020	µg/L
1,3-Dichlorobenzene	ND	ND	ND	ND	0.020	µg/L
1,4-Dichlorobenzene	ND	ND	ND	ND	0.020	µg/L
Dichlorodifluoromethane	ND	ND	ND	ND	0.020	µg/L
1,1-Dichloroethane	ND	ND	ND	ND	0.020	µg/L
1,2-Dichloroethane	ND	ND	ND	ND	0.020	µg/L
1,1-Dichloroethene	ND	ND	ND	ND	0.020	µg/L
cis-1,2-Dichloroethene	ND	ND	ND	ND	0.020	µg/L
trans-1,2-Dichloroethene	ND	ND	ND	ND	0.020	µg/L
1,2-Dichloropropane	ND	ND	ND	ND	0.020	µg/L
1,3-Dichloropropane	ND	ND	ND	ND	0.020	µg/L
2,2-Dichloropropane	ND	ND	ND	ND	0.020	µg/L
1,1-Dichloropropene	ND	ND	ND	ND	0.020	µg/L

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**B8-5**	**B9-5**	**B10-5**	**B11-5**		
Jones ID:	**ST-12534-07**	**ST-12534-08**	**ST-12534-13**	**ST-12534-14**	**Reporting Limit**	**Units**
Analytes:						
cis-1,3-Dichloropropene	ND	ND	ND	ND	0.020	µg/L
trans-1,3-Dichloropropene	ND	ND	ND	ND	0.020	µg/L
Ethylbenzene	ND	ND	ND	ND	0.020	µg/L
Freon 113	ND	ND	ND	ND	0.100	µg/L
Hexachlorobutadiene	ND	ND	ND	ND	0.020	µg/L
Isopropylbenzene	ND	ND	ND	ND	0.020	µg/L
4-Isopropyltoluene	ND	ND	ND	ND	0.020	µg/L
Methylene chloride	ND	ND	ND	ND	0.100	µg/L
Naphthalene	ND	ND	ND	ND	0.100	µg/L
n-Propylbenzene	ND	ND	ND	ND	0.020	µg/L
Styrene	ND	ND	ND	ND	0.020	µg/L
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	0.020	µg/L
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	0.020	µg/L
Tetrachloroethene	**0.301**	**0.045**	**0.963**	**1.29**	0.020	µg/L
Toluene	ND	ND	**0.039**	ND	0.020	µg/L
1,2,3-Trichlorobenzene	ND	ND	ND	ND	0.100	µg/L
1,2,4-Trichlorobenzene	ND	ND	ND	ND	0.020	µg/L
1,1,1-Trichloroethane	ND	ND	ND	ND	0.020	µg/L
1,1,2-Trichloroethane	ND	ND	ND	ND	0.020	µg/L
Trichloroethene	ND	ND	ND	ND	0.020	µg/L
Trichlorofluoromethane	ND	ND	ND	ND	0.020	µg/L
1,2,3-Trichloropropane	ND	ND	ND	ND	0.020	µg/L
1,2,4-Trimethylbenzene	ND	ND	ND	ND	0.020	µg/L
1,3,5-Trimethylbenzene	ND	ND	ND	ND	0.020	µg/L
Vinyl chloride	ND	ND	ND	ND	0.020	µg/L
m,p-Xylene	ND	ND	ND	ND	0.040	µg/L
o-Xylene	ND	ND	ND	ND	0.020	µg/L
MTBE	ND	ND	ND	ND	0.100	µg/L
Ethyl-tert-butylether	ND	ND	ND	ND	0.100	µg/L
Di-isopropylether	ND	ND	ND	ND	0.100	µg/L
tert-amylmethylether	ND	ND	ND	ND	0.100	µg/L
tert-Butylalcohol	ND	ND	ND	ND	1.000	µg/L
Gasoline Range Organics (C4-C12)	ND	ND	ND	ND	5.00	µg/L
Dilution Factor	1	1	1	1		
Surrogate Recoveries:					**QC Limits**	
Dibromofluoromethane	101%	100%	103%	103%	60 - 140	
Toluene-d_8	100%	97%	96%	97%	60 - 140	
4-Bromofluorobenzene	97%	92%	95%	98%	60 - 140	
	E2-082418-01	E2-082418-01	E2-082418-01	E2-082418-01		

ND= Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	2154 Torrance Blvd., Suite 200 Torrance, CA 90501	**Jones Ref. No.:** **Client Ref. No.:**	ST-12534 18-221385
Attn:	Kathy Lehnus	**Date Sampled:** **Date Received:**	8/24/2018 8/24/2018
Project:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrill Ontario, CA 91762	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**082418-E2MB1**	**082418-E2SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	0.020	µg/L
Bromobenzene	ND	ND	0.020	µg/L
Bromodichloromethane	ND	ND	0.020	µg/L
Bromoform	ND	ND	0.020	µg/L
n-Butylbenzene	ND	ND	0.020	µg/L
sec-Butylbenzene	ND	ND	0.020	µg/L
tert-Butylbenzene	ND	ND	0.020	µg/L
Carbon tetrachloride	ND	ND	0.020	µg/L
Chlorobenzene	ND	ND	0.020	µg/L
Chloroform	ND	ND	0.020	µg/L
2-Chlorotoluene	ND	ND	0.020	µg/L
4-Chlorotoluene	ND	ND	0.020	µg/L
Dibromochloromethane	ND	ND	0.020	µg/L
1,2-Dibromo-3-chloropropane	ND	ND	0.020	µg/L
1,2-Dibromoethane (EDB)	ND	ND	0.020	µg/L
Dibromomethane	ND	ND	0.020	µg/L
1,2- Dichlorobenzene	ND	ND	0.020	µg/L
1,3-Dichlorobenzene	ND	ND	0.020	µg/L
1,4-Dichlorobenzene	ND	ND	0.020	µg/L
Dichlorodifluoromethane	ND	ND	0.020	µg/L
1,1-Dichloroethane	ND	ND	0.020	µg/L
1,2-Dichloroethane	ND	ND	0.020	µg/L
1,1-Dichloroethene	ND	ND	0.020	µg/L
cis-1,2-Dichloroethene	ND	ND	0.020	µg/L
trans-1,2-Dichloroethene	ND	ND	0.020	µg/L
1,2-Dichloropropane	ND	ND	0.020	µg/L
1,3-Dichloropropane	ND	ND	0.020	µg/L
2,2-Dichloropropane	ND	ND	0.020	µg/L
1,1-Dichloropropene	ND	ND	0.020	µg/L

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**082418-E2MB1**	**082418-E2SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	0.020	µg/L
trans-1,3-Dichloropropene	ND	ND	0.020	µg/L
Ethylbenzene	ND	ND	0.020	µg/L
Freon 113	ND	ND	0.100	µg/L
Hexachlorobutadiene	ND	ND	0.020	µg/L
Isopropylbenzene	ND	ND	0.020	µg/L
4-Isopropyltoluene	ND	ND	0.020	µg/L
Methylene chloride	ND	ND	0.100	µg/L
Naphthalene	ND	ND	0.100	µg/L
n-Propylbenzene	ND	ND	0.020	µg/L
Styrene	ND	ND	0.020	µg/L
1,1,1,2-Tetrachloroethane	ND	ND	0.020	µg/L
1,1,2,2-Tetrachloroethane	ND	ND	0.020	µg/L
Tetrachloroethene	ND	ND	0.020	µg/L
Toluene	ND	ND	0.020	µg/L
1,2,3-Trichlorobenzene	ND	ND	0.100	µg/L
1,2,4-Trichlorobenzene	ND	ND	0.020	µg/L
1,1,1-Trichloroethane	ND	ND	0.020	µg/L
1,1,2-Trichloroethane	ND	ND	0.020	µg/L
Trichloroethene	ND	ND	0.020	µg/L
Trichlorofluoromethane	ND	ND	0.020	µg/L
1,2,3-Trichloropropane	ND	ND	0.020	µg/L
1,2,4-Trimethylbenzene	ND	ND	0.020	µg/L
1,3,5-Trimethylbenzene	ND	ND	0.020	µg/L
Vinyl chloride	ND	ND	0.020	µg/L
m,p-Xylene	ND	ND	0.040	µg/L
o-Xylene	ND	ND	0.020	µg/L
MTBE	ND	ND	0.100	µg/L
Ethyl-tert-butylether	ND	ND	0.100	µg/L
Di-isopropylether	ND	ND	0.100	µg/L
tert-amylmethylether	ND	ND	0.100	µg/L
tert-Butylalcohol	ND	ND	1.000	µg/L
Gasoline Range Organics (C4-C12)	ND	ND	5.00	µg/L
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	99%	100%	60 - 140	
Toluene-d_8	100%	98%	60 - 140	
4-Bromofluorobenzene	91%	98%	60 - 140	
	E2-082418-01	E2-082418-01		

ND= Value less than reporting limit

JONES ENVIRONMENTAL, INC.

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562-646-1611
805-399-0060

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SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	2154 Torrance Blvd., Suite 200 Torrance, CA 90501	**Jones Ref. No.:** **Client Ref. No.:**	ST-12534 18-221385
Attn:	Kathy Lehnus	**Date Sampled:** **Date Received:**	8/24/2018 8/24/2018
Project:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrill Ontario, CA 91762	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Batch ID: E2-082418-01

Jones ID:	**082418-E2LCS1**	**082418-E2LCSD1**			**082418-E2CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	81%	70%	14.5%	70 - 130	101%	80 - 120
1,1-Dichloroethene	102%	103%	1.5%	70 - 130	102%	80 - 120
Cis-1,2-Dichloroethene	105%	114%	7.6%	70 - 130	109%	80 - 120
1,1,1-Trichloroethane	104%	108%	3.8%	70 - 130	113%	80 - 120
Benzene	111%	108%	2.5%	70 - 130	117%	80 - 120
Trichloroethene	103%	106%	2.1%	70 - 130	114%	80 - 120
Toluene	103%	105%	2.0%	70 - 130	110%	80 - 120
Tetrachloroethene	104%	108%	4.2%	70 - 130	113%	80 - 120
Chlorobenzene	104%	106%	1.6%	70 - 130	111%	80 - 120
Ethylbenzene	103%	108%	4.2%	70 - 130	111%	80 - 120
1,2,4 Trimethylbenzene	101%	103%	2.4%	70 - 130	108%	80 - 120
Gasoline Range Organics (C4-C12)	104%	106%	1.5%	70 - 130		
Surrogate Recovery:						
Dibromofluoromethane	103%	104%		60 - 140	97%	60 - 140
Toluene-d_8	99%	101%		60 - 140	98%	60 - 140
4-Bromofluorobenzene	102%	103%		60 - 140	98%	60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	2154 Torrance Blvd., Suite 200 Torrance, CA 90501	**Jones Ref. No.:** **Client Ref. No.:**	ST-12534 18-221385
Attn:	Kathy Lehnus	**Date Sampled:**	8/24/2018
		Date Received:	8/24/2018
Project:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrit Ontario, CA 91762	**Physical State:**	Soil Gas

ASTM D1946 – Methane

Sample ID:	**B1-7'**	**B2-7'**	**B3-7'**	**B3-15'**	**B4-7'**		
Jones ID:	**ST-12534-01**	**ST-12534-02**	**ST-12534-03**	**ST-12534-04**	**ST-12534-05**	**Reporting Limit**	**Units**
Methane (CH_4)	ND	ND	ND	ND	**7800**	100	ppmV
Dilution Factor	1	1	1	1	1		
	ASTM-082418_02	**ASTM-082418_02**	**ASTM-082418_02**	**ASTM-082418_02**	**ASTM-082418_02**		

ND = Not Detected

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	2154 Torrance Blvd., Suite 200 Torrance, CA 90501	**Jones Ref. No.:** **Client Ref. No.:**	ST-12534 18-221385
Attn:	Kathy Lehnus	**Date Sampled:** **Date Received:**	8/24/2018 8/24/2018
Project:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrit Ontario, CA 91762	**Physical State:**	Soil Gas

ASTM D1946 – Methane

Sample ID:	**B5-7'**	**B7-7'**	**B7-7' REP**	**B6-7'**	**B6-15'**		
Jones ID:	**ST-12534-06**	**ST-12534-09**	**ST-12534-10**	**ST-12534-11**	**ST-12534-12**	**Reporting Limit**	**Units**
Methane (CH_4)	ND	ND	ND	**900**	**700**	100	ppmV
Dilution Factor	1	1	1	1	1		
	ASTM-082418_02	**ASTM-082418_02**	**ASTM-082418_02**	**ASTM-082418_02**	**ASTM-082418_02**		

ND = Not Detected

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	2154 Torrance Blvd., Suite 200	**Jones Ref. No.:**	ST-12534
	Torrance, CA 90501	**Client Ref. No.:**	18-221385
Attn:	Kathy Lehnus	**Date Sampled:**	8/24/2018
		Date Received:	8/24/2018
Project:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrit	**Physical State:**	Soil Gas
	Ontario, CA 91762		

ASTM D1946 – Methane

Sample ID:	**Ambient Air**		
Jones ID:	**AA-082418_02**	**Reporting Limit**	**Units**
Methane (CH_4)	ND	100	ppmV
Dilution Factor	1		
	ASTM-082418_02		

ND = Not Detected

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JONES ENVIRONMENTAL
QUALITY CONTROL INFORMATION

Client:	Partner Engineering & Science, Inc.	**Report date:**	8/27/2018
Client Address:	2154 Torrance Blvd., Suite 200 Torrance, CA 90501	**Jones Ref. No.:** **Client Ref. No.:**	ST-12534 18-221385
Attn:	Kathy Lehnus	**Date Sampled:** **Date Received:**	8/24/2018 8/24/2018
Project:	Lanting Land	**Date Analyzed:**	8/24/2018
Project Address:	9032 Merrit Ontario, CA 91762	**Physical State:**	Soil Gas

ASTM D1946 – Methane

GC#: ASTM-082418_02

Jones ID:	**CCV-082418_02**	**CCVD-082418_02**		
Parameter	CCV Recovery (%)	CCVD Recovery (%)	RPD	Acceptability Range (%)
Methane (CH_4)	102%	100%	1.8%	60 - 140

LCS = Lab Control Sample
LCSD = Lab Control Sample Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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Soil-Gas Chain of Custody Record

Client: Partners
Project Name: Lanting Land
Project Address: 9032 Merrill, Ontario, CA 91762
Email:
Phone:
Report To: Kathy Lehnus
Sampler: Chris Jones

Date: 08/24/18
Client Project #: 18-221385

Purge Number: ☐ 1P ☒ 3P ☐ 7P ☐ 10P
Shut-In Test: (Y) / N

Report Options: EDD ____ EDF* - 10% Surcharge____ *Global ID _____

Project # ST-12534

Page 1 of 2

Lab Use Only
Sample Condition as Recieved: Sealed ☐ yes ☐ no

Turn Around Requested:
- ☐ Immediate Attention
- ☐ Rush 24 Hours
- ☐ Rush 48 Hours
- ☐ Rush 72 Hours
- ☐ Normal
- ☐ Mobile Lab

Tracer:
- ☐ n-pentane
- ☐ n-hexane
- ☐ n-heptane
- ☐ Helium
- ☐ 1,1-DFA
- ☐ _____

Analysis Requested

Sample ID	Purge Number	Purge Volume	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate	Pump Used	Magnehelic	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Soil Gas (SG)	Methane	BTEX	TPHG		Magnehelic Vacuum (in/H_2O)	Number of Containers	Remarks & Special Instructions
B1-7	3		08/24	1052		ST-12534-01				SG	X				22	1	
B2-7	3		08/24	1102		ST-12534-02				SG	X				22	1	
B3-7	3		08/24	1117		ST-12534-03				SG	X				22	1	
B3-15	3		08/24	1132		ST-12534-04				SG	X				22	1	
B4-7	3		08/24	1129		ST-12534-05				SG	X				22	1	
B5-7	3		08/24	1148		ST-12534-06				SG	X				22	1	-0.04
B8-5	3		08/24	1204		ST-12534-07				SG	X	X	X		22	1	no methane
B9-5	3		08/24	1217		ST-12534-08				SG	X	X	X		22	1	no methane
B7-7	3		08/24	1240		ST-12534-09				SG	X				22	1	
B7-7 REP	3		08/24	1240		ST-12534-10				SG	X				22	1	

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name		
David Horrell	DAVID HORRELL		Chris Jones		10 Total Number of Containers
Company: Partner ESI	Date: 8/24/18 Time: 1230	Company: JEL	Date: 08/24/18	Time: 1330	
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name		
Company	Date: Time:	Company	Date:	Time:	

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685
www.jonesenv.com

Soil-Gas Chain of Custody Record

Client: Panthers
Project Name: Lanting Land
Project Address: 9032 Merrill, Ontario, CA 91762
Email:
Phone:
Report To: Kathy Lehnus
Sampler: Chris Jones

Date: 08/24/18
Client Project #: 18-221385

Purge Number: □ 1P □ 3P □ 7P □ 10P
Shut-In Test: Y / N

Report Options: EDD ____ EDF* - 10% Surcharge____ *Global ID _____

Project # ST-12534
Page 2 of 2
Lab Use Only
Sample Condition as Recieved: Sealed □ yes □ no

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- □ Mobile Lab

Tracer:
- □ n-pentane
- □ n-hexane
- □ n-heptane
- □ Helium
- □ 1,1-DFA
- □ _____

Analysis Requested

Sample ID	Purge Number	Purge Volume	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate	Pump Used	Magnehelic	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Soil Gas (SG)	Methane	8260B	TPHG		Magnehelic Vacuum (In/H_2O)	Number of Containers	Remarks & Special Instructions
B6-7	3	3	08/24	1253		ST-12534-11				SG	X				22	1	-0.20"
B6-15	3	3	08/24	1259		ST-12534-12				SG	X				22	1	-0.20"
B10-5	3		08/24	1316		ST-12534-13				SG	X	X	X		22	1	-0.08" no methane
B10-5	3		08/24	1324		ST-12534-14				SG	X	X	X		22	1	-0.04" no methane

Relinquished By (Signature): David Horrell
Printed Name: DAVID HORRELL
Company: Partner ESI
Date: 8/24/18
Time: 1330

Received By (Signature):
Printed Name: Chris Jones
Company: OEL
Date: 08/24/18
Time: 1330

Relinquished By (Signature):
Printed Name:
Company:
Date:
Time:

Received By Laboratory (Signature):
Printed Name:
Company:
Date:
Time:

Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

APPENDIX C: CITY REGULATORY INFORMATION

PARTNER

City of Ontario

BUILDING DEPARTMENT

303 EAST "B' STREET, CIVIC CENTER, ONTARIO, CALIFORNIA91764-4196
TELEPHONE: (909) 395-2023 FAX: (909) 395-2180

METHANE ASSESSMENT FOR PROJECTS IN THE NEW MODEL COLONY

Applicants shall provide for the Building Department's review and approval, a methane assessment report addressing whether the property in questions was ever used as a dairy, poultry ranch, hog ranch, livestock feed operation site, manure stockpile site, manure/livestock burial site, run-off ponds, or for any other purpose that might result in the deposition of materials which might produce methane.

The report shall be prepared by a licensed engineer or licensed geologist and shall include the following:

- Historic aerial photos and historic topographic map review.
- Interviewing the owner/land managers for possible locations of potential methane generation areas.
- Site reconnaissance to determine the current site usage and conditions.
- Identifying potential methane areas.
- A proposed scope of work for post-grading methane investigation based on the historical study.

This report may be included as part of the soils and geology report and shall be submitted to the Building Department for review and approval at the time building permit applications are filed.

All lots in potential methane areas identified in the Methane Site Assessment report shall be tested for the presence of any methane and its concentration 30 days after building pads are graded and created.

A report, prepared by a licensed engineer or geologist and separate from the Methane Site Assessment report, summarizing the methane test conducted, the location/lot where methane is found and its concentration, and the recommended mitigation measures shall be submitted to the Building Department for review and approval. This test report could be a standalone report or be a part of the soils and geology report. This test report should be submitted together with building plans when permit applications are filed, or thereafter as soon as it is available. No building permit will be issued until the test report is approved by the Building Department, and the lots with methane and any required mitigation measures are shown on building plans.

METHANE DESIGN GUIDELINES

Measured Methane Concentration (ppm)	Minimum Mitigation Guidelines
< 15,000	Provide a 10-mil moisture barrier. Seal utility conduits and other penetration in an approved method.
> 15,000	Provide a 10-mil moisture barrier. Seal utility conduits and other penetration in an approved method. Also include any remediation required by the Engineer of record.
Waste, Burial Site, Pond, Lowland	Require methane report prepared by a licensed engineer or geologist on required remediation.