APPENDIX E:
PHASE II ENVIRONMENTAL SITE ASSESSMENT

Phase II Environmental Site Assessment Report

Prepared for

Alan Enterprise LLC.
22690 Stevens Creek Boulevard,
Cupertino, California 95014
(Three parcels with APNs 342-14-04, 342-14-05, and 342-14-66)

By

Achievement Engineering Corp.
2455 Autumnvale Drive, Unit E
San Jose, California, 95134

Project Number: 3974
Date: October 17, 2019

ACHIEVEMENT ENGINEERING CORP.

Project Number: 3974
Date: October 17, 2019

Alan Enterprise LLC.
Mr. Ali Mozafari

Subject: Phase II Environmental Site Assessment Report
22690 Stevens Creek Boulevard,
Cupertino, California 95014
(Three parcels with APNs 342-14-04, 342-14-05, and 342-14-66)

Dear Sir,

Achievement Engineering Corp. (AEC) is pleased to submit this Phase II Environmental Site Assessment Report for the above-referenced project. The purpose of this study was to evaluate the subsurface conditions at the subject site and for the proposed development. The subject site is currently owned by Bateh Brothers Liquors and Mini Mart (George and Nahida Bateh) and is a land totaling of three parcels, approximately 0.75 acre located on the west south corner of Stevens Creek Blvd. and Foothill Blvd. intersection, at 22690 Stevens Creek Boulevard, Cupertino, California 95014, within mixed-use plan development (General Commercial) zone of Cupertino. The site itself has not been listed in any searched data bases (Please refer to reference 1).

In May 2017, EIS performed a limited Phase II investigation to assess the impact of the neighboring site (Cupertino Beacon at 22510 Stevens Creek Blvd.) at this property. Above-ESL benzene concentration in soil vapor was found in the borings at the subject site at that time.

There is one site listed on various databases in the close proximity to and at higher elevation of the subject site;

- ✓ Santa Clara County Fire Station (Also recorded as Monta Vista Fire station) at 22620 Stevens Creek Blvd., 332 ft. west of the subject site.

There are two sites in the close proximity of the site, but at lower elevations:

- ✓ Cupertino Beacon at 22510 Stevens Creek Blvd., 180 ft. east of the subject property.
- ✓ Foothill Auto Services at 10121 N. Foothill Blvd., 620 ft., north of the subject property.

The review of the aerial photos and historical use of the property as an orchard, from at least 1939 to 1950, indicate that there is also a potential of metals and pesticides existing in shallow site soil. Above-ESL benzene concentration in soil vapor was found in the borings at the subject site is also a recognized environmental conditions. Besides, the open LUST case and documented soil, groundwater, and soil vapor contamination at neighboring property 22510 Stevens Creek Blvd. (Cupertino Beacon) represents an offsite controlled recognized environmental condition. To assess the impacts of the neighboring site at the subject site, conducting a limited Phase II investigation was recommended. This subsurface investigation program was designed to evaluate the soil and water conditions regarding the above mentioned contaminants.

We appreciate the opportunity to be of service to you on this project and would be happy to discuss our findings with you. We look forward to serving as your geotechnical/ environmental engineer on the future projects.

Respectfully Submitted,
Achievement Engineering Corp.

Sadaf Safaai, PE
Project Engineer

Copies: Alan Enterprise LLC.
Mr. Ali Mozafari

Table of Contents

1- INTRODUCTION 1
2- SCOPE OF WORK 2
3- PROPERTY DESCRIPTION 2
3-1- Topography and Geological Setting 3
4- PROJECT INVESTIGATION 3
4-1- Field Investigation and Exploratory Boreholes 4
4-2- Laboratory Analysis 4
5- ENVIRONMENTAL SCREENING LEVELS 5
6- INVESTIGATION RESULTS AND RECOMMENDATIONS 6
6-1- Soil and Water: Organics 6
6-2- Soil and Water: Heavy Metals 7
6-3- Soil Vapor 7
6-4- Recommendations 9
7- LIMITATIONS 9
8- REFERENCES 10

Exhibit I – Site Location Plan

Exhibit II – Environmental Screening Levels and STLC and TTLC Regulatory Limits Tables

Exhibit III – Analytical Test Results

1- INTRODUCTION

Achievement Engineering Corp. (AEC) was retained by Alan Enterprise LLC. to conduct a Phase II Environmental Site Assessment (Phase II ESA) for 22690 Stevens Creek Boulevard, Cupertino, California 95014, (three parcels with APNs 342-14-04, 342-14-05, and 342-14-66).

The attached Figure M01, Exhibit I shows the general location of the subject property. Providing technical assistance to Alan Enterprise LLC, AEC is contracted to assess the subject property for potential contaminants of concern, namely total petroleum hydrocarbons as gasoline, diesel, and motor oil (TPH-g/-d/-o), the aromatic hydrocarbons benzene, toluene, ethylbenzene total xylenes (BTEX) and MTBE. Soil vapor samples were analyzed for TPH and benzene. The samples at B3 have been tested for the presence of the pesticides and heavy metals. The Phase II ESA was performed in conformance with the scope and limitations of the American Society of Testing and Materials (ASTM) Standard Designation E1903-11, Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process. Any limitations have been practiced, is summarized in section7.

The Phase II ESA activities consisted of the drilling of three (3) exploratory borings and the collection of soil samples for submittal to an analytical lab for analyses for potential contaminants of concern.

Soil vapor sampling was also performed during this project following the guidelines of the Department of Toxic Substances Control's (DTSC) "Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air" (DTSC, 2011) and "Advisory – Active Soil Gas Investigations" (DTSC et al, 2015). Temporary soil vapor probes were installed in borings B-1, B-2 and B-3 at a depth of 5.0 ft. bgs. The samples were taken on September 18, 2019. Utilizing 1 L Summa Canisters at negative pressure. Three (3) samples were taken from each of the three (3) boreholes. A purge canister was used to purge the tubes first to minimize contamination from above layers.

This report documents the activities and results of the environmental investigation conducted by AEC on September 11, 2019 and September 18, 2019.

The following report highlights the significant findings and conclusions representing our best professional judgment based on the information and data available to us during the course of this investigation.

2- SCOPE OF WORK

The Phase II ESA was performed in general accordance with the scope of work in AEC Fee Proposal, Phase II Environmental Site Assessment, f22690 Stevens Creek Boulevard, Cupertino, California 95014 (three parcels with APNs 342-14-04, 342-14-05, and 342-14-66). The scope of work was to evaluate shallow subsurface soil conditions of the subject site (at specific new development location) with respect to potential contaminants of concern.

The scope of work for this investigation included the following:

- The drilling on 11 September, 2019 of three (3) exploratory borings to collect soil samples for laboratory analyses.
- Installing micro soil vapor probe on 11 September, 2019.
- Collecting soil vapor samples in canisters on 18 September 2019.
- Laboratory analysis of the soil samples for potential contaminants of concern, namely TPH gasoline, TPH diesel, TPH motor oil, MTBE, BTEX, heavy metals and pesticides.
- Laboratory analysis of soil vapor samples for TPH and benzene.
- Preparation of this technical report documenting the investigation activities and results.

3- PROPERTY DESCRIPTION

The subject site is currently owned by Bateh Brothers Liquors and Mini Mart (George and Nahida Bateh) and is a land totaling 0.75 acre (combined three parcels) located on the west south corner of Stevens Creek Blvd. and Foothill Blvd. intersection at 22690 Stevens Creek Boulevard, Cupertino, California 95014, within mixed use plan development (General Commercial) zone of Cupertino. The site itself has not been listed in any data bases. Review of the historical data available for the subject site reveals that most probably the development of the site, as is, took place between 1950 and 1956 (based on aerial photos), the first city directory listing for this property belongs to 1975, before that, this address does not exist in 1970 and 1968 listings. Bateh Brothers Liquors and Mini Mart has been listed in 2014 back to 1980 listings. In 1975 directory, a Frank's Liquor and Grocery Store has been listed. Also an interview conducted by others in 2017 reveals that before 1976, the place was used as a bar. No building permit was found indicating any other use for this property. Per aerial photos, in 1939 an orchard was in the property that cannot be observed in 1950 aerial photo. Sometime between 1939 and 1950 the trees were gradually cleared, starting from north to south. The existence of fertilizers, pesticides and metals are possible in the shallow soil due to this historical land use.

Also, rev reveals that for the most part, uses were mixed residential and commercial (a veterinary clinic has existed since, at least 1989, at 10012 N. Foothill Blvd. and Beacon Service Station has been in service under different names as follows:

1995- to Present -Cupertino Beacon Service Station, Cupertino Auto Care
1989- Foothill Mobil
1981-1984 -McElroy Mobil Service
1976 -D&D Mobil Service
1971 -Johns Mobil Service, Mobil Oil Corporation
1968 -Johns Mobil

3-1- Topography and Geological Setting

The United States Geological Survey (USGS) maps were reviewed. The topography of the subject site is relatively flat and general topographic gradient is NNE. The site itself is at an approximate average elevation of 386.0 feet above mean sea level.

The project site is located within the Coast Range Geomorphic Province. Local uplift of the Santa Cruz Mountains within the last 2 to 3 million years has occurred due to a restraining bend of the San Andreas Fault, producing transpressional forces across the plate boundary. Thrust faults bound the San Andreas Fault are responsible for uplift of the range. The range is characterized by rugged hills with moderate relief, steep valleys, and locally steep hillsides abutting drainages. East-flowing drainages result in dissection of the mountain range and alluvial deposition within the San Francisco Bay structural trough.

Soils encountered during the investigation included interbedded gravelly sand, silty sand, sandy gravel, clayey sand, and sandy silt to an explored depth of approximately 40ft bgs. Groundwater was not encountered during this investigation, however in previous explorations by others, groundwater had been encountered between 20 and 30 ft. bgs.

4- PROJECT INVESTIGATION

Prior to the field activities, AEC attempted to secure a Soil Boring Permit from the Santa Clara Department of Environmental Health. No need for permitting was confirmed by the DEH.

The proposed boring locations were marked on the ground with white paint. Underground Service Alert (USA) was notified to provide the required utility clearance. The boring locations were cleared of underground utilities. A health and safety plan was prepared to govern and control the field work by AEC staff and subcontractors.

4-1- Field Investigation and Exploratory Boreholes

Three (3) exploratory borings, designated B-1, B-2 and B-3, were completed by AEC on September 11, 2019. Isotech Environmental Corp., a C57 licensed drilling contractor (C57 #799951 B), drilled the borings under the direction of a geologist from AEC. The drilling was accomplished with the use of direct push drilling equipment providing continuous soil sampling capability. B1 and B2 were advanced into approximately forty (40) feet below ground surface (bgs.), B3 was advanced into ten (10) feet. Bgs. DPT drives or pushes small- diameter rods (2 in.) tools into the subsurface by hydraulic or percussive methods. Closed piston, single-tube samplers provided high integrity samples. Dual tube samplers utilize concentric casings to advance the boring. The outer casing remains in place as the inner casing is used to trip out the sample as the boring is advanced incrementally. The outer casing prevents borehole collapse and generally reduces the potential for cross contamination between sampling intervals.

The geologist collected soil samples from each boring for potential laboratory analyses. Sampling consisted of sealing the samples and then labeling and placing the sample in an ice chest for cold storage. Following the protocol provided by the laboratory and manufacturer, Torrent Laboratory Inc. sampling was also performed as follows. A dedicated syringe was driven into freshly exposed soil to retrieve approximately five (5) grams of soil. The extracted soil was then transferred into laboratory-supplied, 40-milliliter volatile organic analysis vials (40 mL VOAs). The VOAs were promptly sealed with Teflon caps provided, labeled with identification information, and placed in the ice chest. AEC followed chain of custody protocol in the transfer of the soil samples to the laboratory, as presented in Exhibit III.

The soil vapor samples were taken on September 19, 2019, using 1L Summa Canisters at negative pressure. Three samples were taken from each of three boreholes. A purge canister was used to purge the tubes first to minimize contamination from above layers.

All down-hole drilling and sampling equipment was cleaned with environmental detergent and rinsed between uses to prevent cross-contamination.

4-2- Laboratory Analysis

The soil samples were submitted with chain of custody documentation to Torrent Laboratory Inc., of Milpitas, California. Torrent Laboratory Inc. is certified for chemical analyses by the Department of Health Services, Environmental Laboratory Accreditation Program (ELAP No. 1991).

The samples were subjected to the following laboratory analytical methods:

TPH gasoline, Test Method 8260TPH
TPH motor oil, Test Method USEPA Method 8015B

TPH as Diesel, Test Method SW8015B
MTBE, Test Method SW8260B
BTEX, Test Method SW8260B
Pesticides (Organochlorine Pesticides by Method 8081B) and heavy metals (CAM 17, heavy metals)

The latter tests were just performed for samples from B-3.

Soil vapor samples were analyzed for TPH and benzene by USEPA method TO-15.

Please note that it is our understanding that the new development is residential. Laboratory analytical testings have been performed on selected soil samples at 25.0 and 35.0 ft. for B1, 25.0 ft. for B2 and 5.0 ft. for B3 and the rest of the samples were put on hold in case further investigations required (per page 20 of Exhibit III, Analytical Test Results).

The laboratories reported that the samples were received in good condition and with appropriate chain of custody documentation. The analytical results were laboratory certified with no significant anomalies reported in the data. The laboratory analytical reports are provided in Exhibit III.

5- ENVIRONMENTAL SCREENING LEVELS

The Regional Water Quality Control Board, San Francisco Bay Region (RWQCB, February 2016-REV 3.0) guidance, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, presents environmental screening levels (ESLs) for soil and groundwater that address human health exposure risk, ecological habitat protection, and groundwater protection. For carcinogens, the human health screening levels for carcinogens are based on a target cancer risk of one-in-a-million (10-6). A hazard quotient of 0.2 is the basis for non-carcinogenic risk.

The RWQCB (February 2016) considers two (2) groundwater use scenarios: one where groundwater IS a potential source of drinking water resource, and the other where groundwater IS NOT a potential drinking water resource.

The role of environmental screening levels is to screen sites and help identify areas, contaminants and conditions that may require further attention and risk assessment. In general, at sites where contaminants are below screening levels, no further action is warranted provided that the exposure assumptions match or approximate those used in developing the screening levels. Furthermore, contaminants above screening levels, does not automatically trigger or require remedial action. According to RWQCB (February 2016), chemical concentrations in soil and groundwater above ESLs could pose negligible risk.

Factors, such as background levels, have to be considered in evaluating sample data and the need for remedial action or risk management. Remedial action is generally not warranted for naturally-occurring metals in soil and groundwater.

6- INVESTIGATION RESULTS AND RECOMMENDATIONS

Three (3) exploratory borings were completed on September 11, 2019 at the subject site and the result of the investigation is as follows.

6-1- Soil and Water: Organics

Soil samples from 25.0 and 35.0 feet depths for B1 and from 25.0 feet depth for B2 were analyzed for TPH (Gasoline), TPH (Diesel), TPH (Motor oil) MTBE and BTEX. Soil sample from 5.0 feet depth for B3 was analyzed for heavy metals and Organochlorine Pesticides. The soil analytical results for organics are compared with Tier 1 ESL values (that are conservative) as well as Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels as attached in the Exhibit II, Environmental Screening Levels and STLC and TTLC Regulatory Limits Tables.

Analytical Results

B1- 25 ft.: TPH diesel: 16.2 mg/Kg, TPH motor oil: 141 mg/Kg, Pentacosane: 72.6 %4,
(S)4 Bromofluorobenzene: 104 %
(S) Dibromofluoromethane: 106 %
(S) Toluene-d8: 94.7 %
(S) 4-Bromofluorobenzene: 84.6 %

B1-35 ft.: All compounds were non-detectable for this sample.
Pentacosane: 67.1 %4,
(S)4 Bromofluorobenzene: 107 %
(S) Dibromofluoromethane: 106 %
(S) Toluene-d8: 95.4 %
(S) 4-Bromofluorobenzene: 84.7 %

B2- 25 ft.: All compounds were non-detectable for this sample.
Pentacosane (S): 63.8 %
(S)4 Bromofluorobenzene: 102 %
(S) Dibromofluoromethane: 109 %
(S) Toluene-d8: 94.4 %
(S) 4-Bromofluorobenzene: 84.9 %

B3- 5 ft.:

TPH as Diesel: 2.04 mg/Kg, Pentacosane (S): 70.3 %,
(S) 4-Bromofluorobenzene: 99.2 %
(S) Dibromofluoromethane: 107 %
(S) Toluene-d8: 98.1 %
(S) 4-Bromofluorobenzene: 88.4 %
TCMX (S): 58.5 %
DCBP (S): 64.5 %

Groundwater was not encountered or tested at any borings.

6-2- Soil and Water: Heavy Metals

B3- 5 ft.:
Arsenic: 2.50 mg/Kg
Barium: 150 mg/Kg
Chromium: 56.6 mg/Kg
Cobalt: 14.7 mg/Kg
Copper: 26.0 mg/Kg
Lead: 4.92 mg/Kg
Nickel: 41.3 mg/Kg
Vanadium: 72.1 mg/Kg
Zinc: 52.8 mg/Kg

6-3- Soil Vapor

Soil vapor samples collected from 5. ft. bgs and were analyzed for TPH and benzene by USEPA method TO-15.

SP1-B1

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
Carbon Disulfide	ETO15	1	0.37	1.6	36
Hexane	ETO15	1	0.46	1.8	2.6
tert-Butanol	ETO15	1	0.62	1.5	1.9
Chloroform	ETO15	1	0.97	2.4	3.1
Toluene	ETO15	1	0.75	1.9	5.2
Tetrachloroethylene	ETO15	1	1.5	3.4	26
Ethyl Benzene	ETO15	1	0.63	2.2	2.6
m,p-Xylene	ETO15	1	0.98	2.2	7.5
4-Ethyl Toluene	ETO15	1	0.55	2.5	9.1
1,2,4-Trimethylbenzene	ETO15	1	0.60	2.5	10
Naphthalene	ETO15	1	1.3	2.6	2.6
2-Propanol (Isopropyl Alcohol)	ETO15	6	7.7	74	320

SP2-B2 1909158-002

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
2-Propanol (Isopropyl Alcohol)	ETO15	1	1.3	12	24

SP3-B3 1909158-003

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
2-Propanol (Isopropyl Alcohol)	ETO15	1	1.3	12	26
Acetone	ETO15	1	0.40	12	13
Hexane	ETO15	1	0.46	1.8	1.9

Environmental Screening Results

The soil analytical results for organics meet the RWQCB (February 2016) ESLs for a residential land use (the most conservative scenario) for soil and heavy metal concentrations does not exceed TTLC values.

However, Arsenic in the soil sample is higher than 6.7×10^{-2} mg/Kg of Tier 1 screening level. For the case of Chromium since the concentration was 50 mg/Kg, per code recommendation a WET extraction test has been conducted. No Chromium was detected (STLC) as indicated in page (17 of 33) of Exhibit III.

Based on these national studies and the regional data presented (Reference 2), it is apparent that arsenic concentrations across much of the United States are elevated with respect to residential RBSLs. Several states have recognized the importance of background with regards to remediation involving arsenic in soil:

California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) has set an arsenic background concentration of 6 mg/kg to be used at Los Angeles Unified District school sites (CalEPA, 2005).

6-4- Recommendations

There are no drinking water supply wells on the subject property and vicinity, and the *subject property* is in the service area of the municipal potable water supply system.

Although the recent investigation results indicate no-risk or insignificant levels of TPH (Gasoline), TPH (Diesel), TPH (Motor Oils), MTBE, BETEX, Organochlorine Pesticides and heavy metals in the soil, above the regulatory values, AEC recommends the following in the event the *subject property* is to be redeveloped:

• A routine health and safety plan to ensure the safety and protection of the public and construction workers during construction.

• Installation of a vapor barrier beneath the concrete foundation slab of the proposed building at the site to mitigate potential odor risks associated with concentration of vapors (such as propanol).

The soil of the site may be hauled to any landfill.

7- LIMITATIONS

This Report was prepared pursuant to an Agreement dated 8 August 2019 between Alan Enterprise LLC. and AEC. All uses of this Report are subject to, and deemed acceptance of, the conditions and restrictions contained in the Agreement. The observations and conclusions described in this Report are based solely on the Scope of Services provided pursuant to the Agreement. AEC has not performed any additional observations, investigations, studies or other testing not specified in the Agreement and the Report. AEC shall not be liable for the existence of any condition the discovery of which would have required the performance of services not authorized under the Agreement.

This Report is prepared for the exclusive use of Alan Enterprise LLC. and its sub-contractors in connection with the design and construction of the development. There are no intended beneficiaries other than Alan Enterprise LLC. and its sub-contractors. AEC shall owe no duty, whatsoever, to any other person or entity on account of the Agreement or the Report. Use of this Report by any person or entity other than Alan Enterprise LLC. and its sub-contractors for any purpose whatsoever is expressly forbidden unless such other person or entity obtains written authorization from Alan Enterprise LLC. and AEC. Use of this Report by such other person or entity without the written authorization of Alan Enterprise LLC. and AEC shall be at such other person's or entities sole risk, and shall be without legal exposure or liability to AEC.

Use of this Report by any person or entity, including by Alan Enterprise LLC. and its sub-contractors, for a purpose other than for the design and construction of the proposed development is expressly prohibited unless such person or entity obtains written authorization from AEC indicating

that the Report is adequate for such other use. Use of this Report by any person or entity for such other purpose without written authorization by AEC shall be at such person's or entities sole risk and shall be without legal exposure or liability to AEC.

This report reflects site conditions observed and described by records available to AEC as of the date of report preparation. The passage of time may result in significant changes in site conditions, technology, or economic conditions which could alter the findings and/or recommendations of the report. Accordingly, Alan Enterprise LLC. and any other party to whom the report is provided recognize and agree that AEC shall bear no liability for deviations from observed conditions or available records after the time of report preparation.

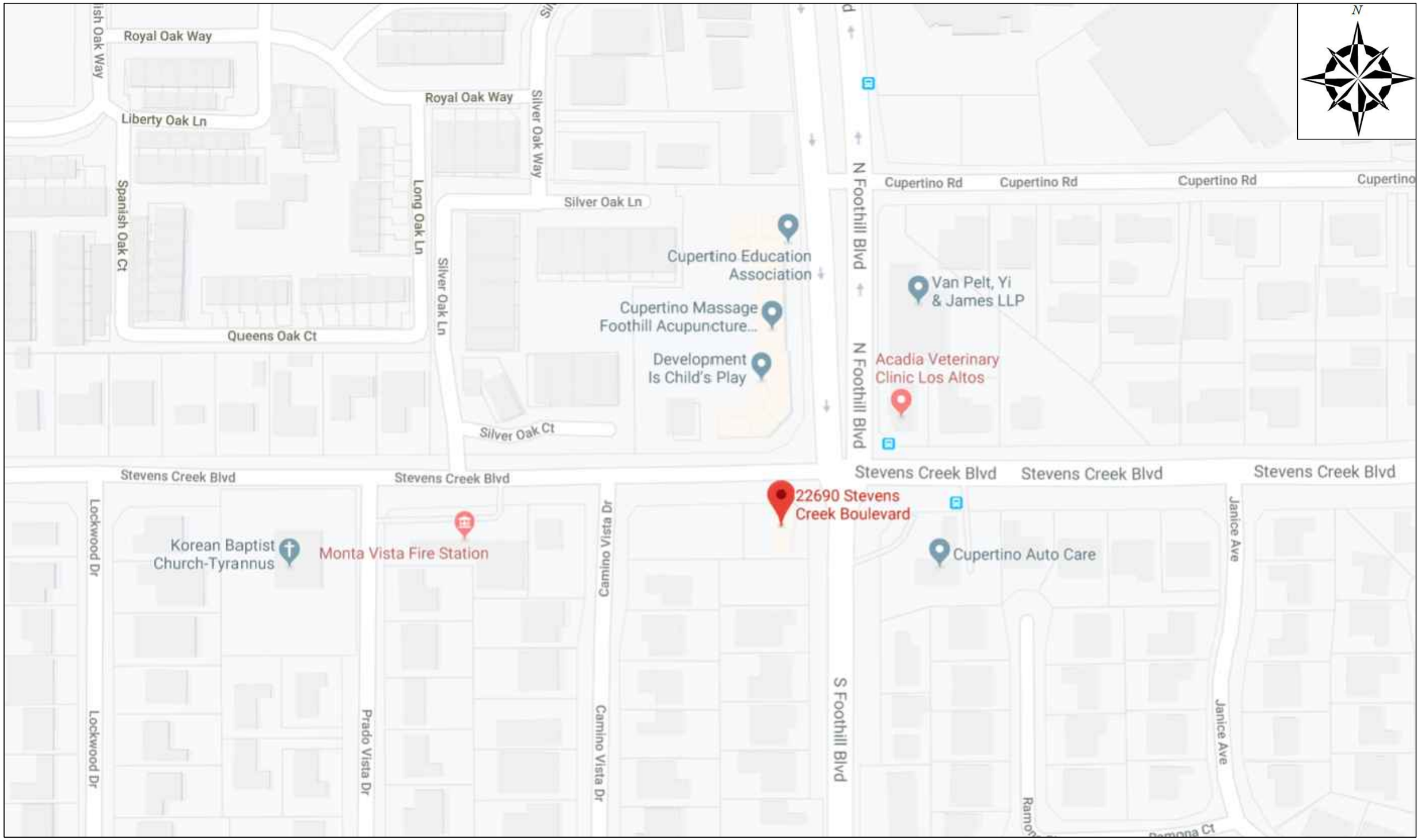
Use of this Report by any person or entity in violation of the restrictions expressed in this Report shall be deemed and accepted by the user as conclusive evidence that such use and the reliance placed on this Report, or any portions thereof, is unreasonable, and that the user accepts full and exclusive responsibility and liability for any losses, damages or other liability which may result.

8- REFERENCES

1- Phase I Environmental Site Assessment Report for 22690 Stevens Creek Boulevard, Cupertino, California 95014 (Three parcels with APNs 342-14-04, 342-14-05, and 342-14-66), AEC Project No. 3940, July 29, 2019.

2- Background Versus Risk-Based Screening Levels -An Examination Of Arsenic Background Soil Concentrations In Seven States, Kelly A.S. Vosnakis, Elizabeth Perry, Karen Madsen, Lisa J.N. Bradley, AECOM, Proceedings of the Annual International Conference on Soils, Sediments, Water and Energy, Volume 14, Article 10, January 2010.

Exhibit I



ACHIEVEMENT ENGINEERING CORP.	Project Number: 3974	Project Title: Ali Mozafari - Phase II - Exhibit III
	Vicinity Map	

REVISIONS

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M 01

ACHIEVEMENT ENGINEERING CORP.	Project Number: 3974	Project Title: Ali Mozafari - Phase II - Exhibit III
	Boring Location	

REVISIONS

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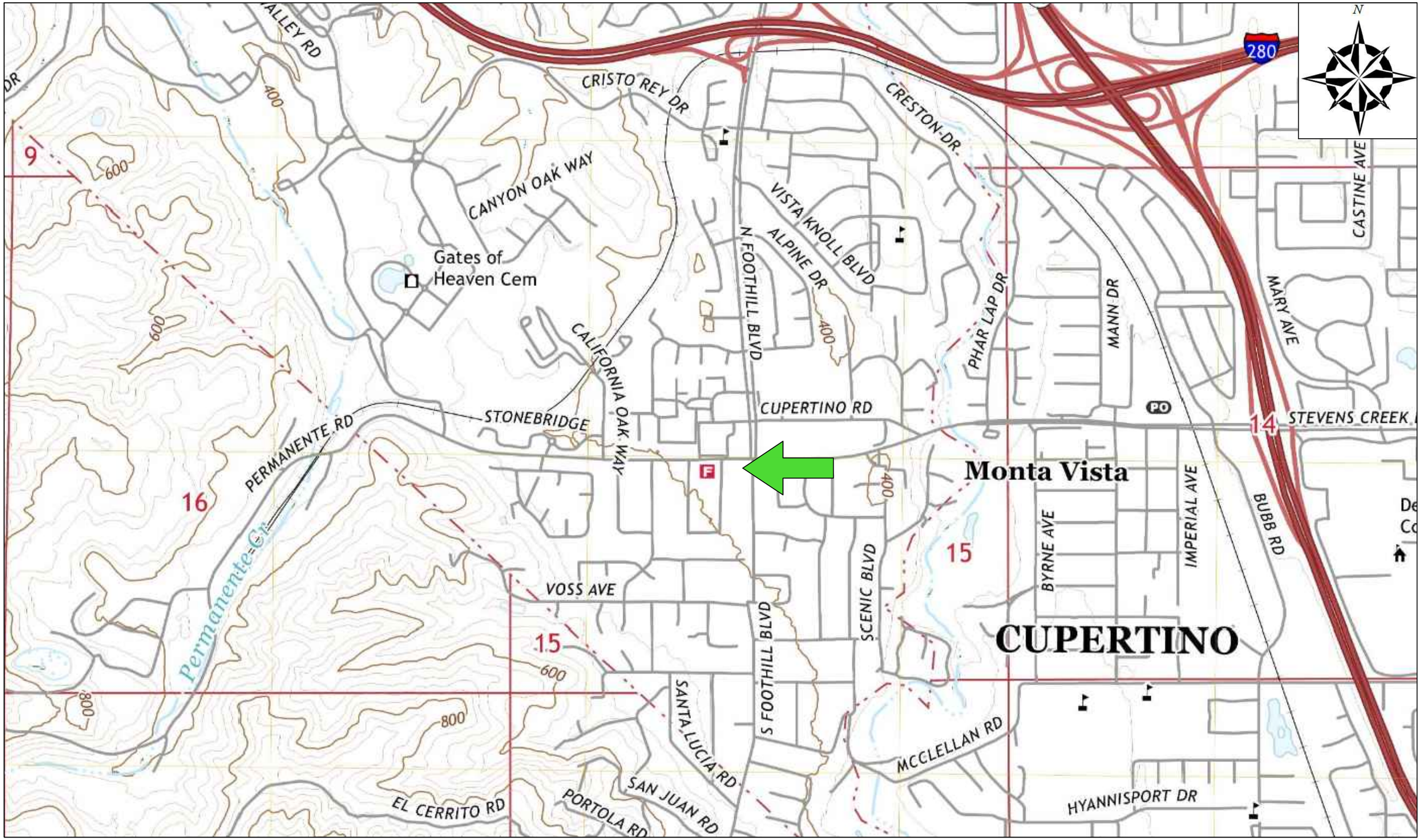
M 02



ACHIEVEMENT ENGINEERING CORP.	Project Number: 3974	Project Title: Ali Mozafari - Phase II - Exhibit III
	Site Location on Cupertino quadrangle 7.5' Series Topographic Map by USGS	

REVISIONS

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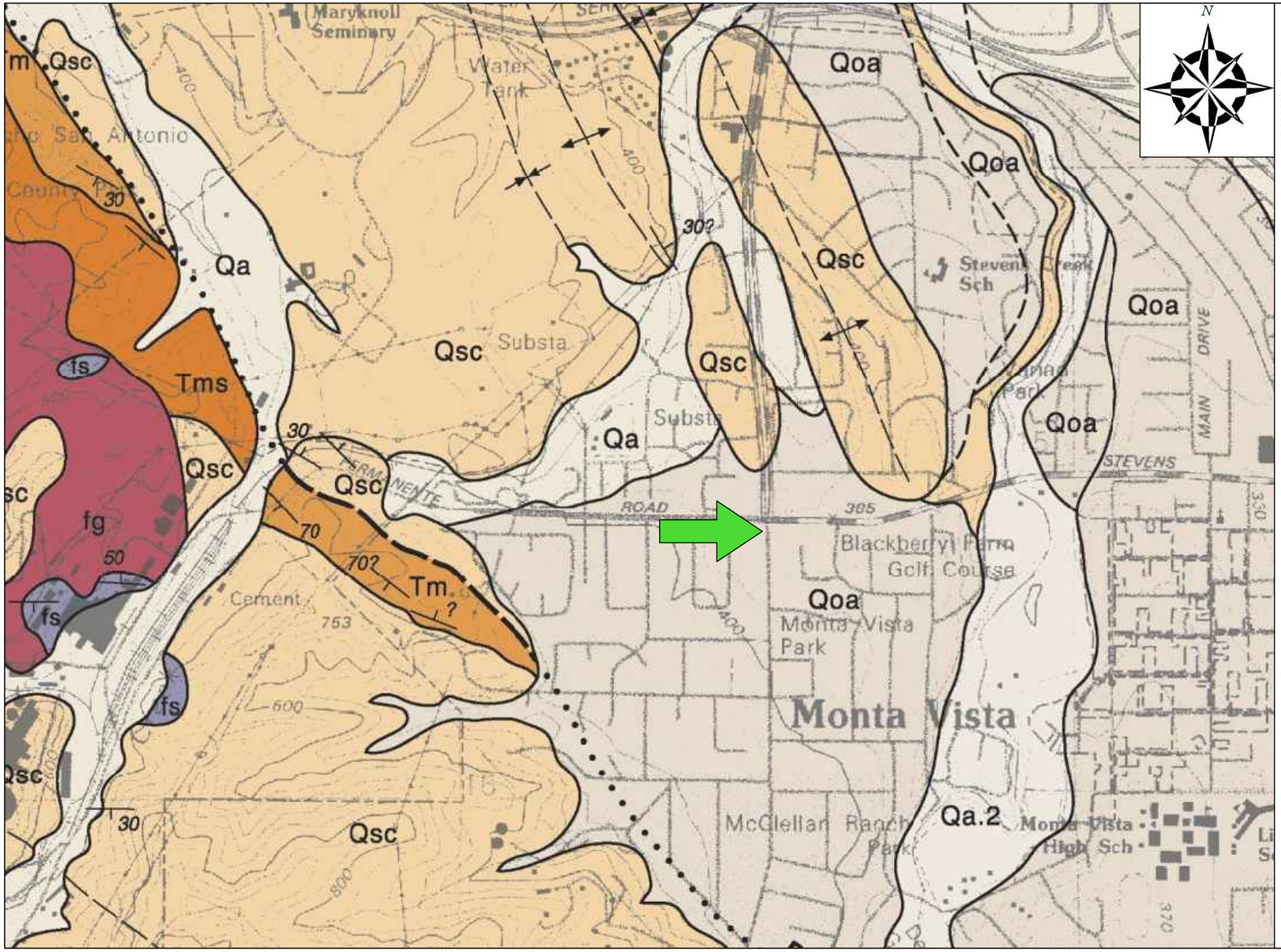
M 03



N

LEGEND

af / Og / Qa / Qa.1 / Qa.2 / Qya / Qac

SURFICIAL SEDIMENTS

Qa *Alluvial gravel, sand, silt, and clay; represents undifferentiated stream alluvium in drainages and younger alluvial fan deposits at base of slopes and on fan areas*
Qg *Alluvial gravel, sand, silt, and clay; represents undifferentiated stream alluvium in drainages*
af *Artificial fill*
Qa.1 *Alluvial sand, fine-grained, silt, and gravel; where differentiated represents alluvial fan deposits at base of slopes and upper fan areas; mapped as part of undivided* **Qa** *where not differentiated*
Qa.2 *Alluvial gravel, sand, silt, and clay; represents younger stream alluvium in fan deposits; mapped as part of undivided* **Qa** *where not differentiated*
Qya *Alluvial sand, fine-grained, silt, and clay; where differentiated represents distal alluvial fan deposits at outer edge of fan areas; mapped as part of undivided* **Qa** *where not differentiated*
Qac *Silty clay and organic clay, fossiliferous; represents intra-fan areas; mapped as part of undivided* **Qa** *where not differentiated*

Qls

LANDSLIDE DEBRIS

Qls *Landslide rubble*

Qoa/Qt

OLDER SURFICIAL SEDIMENTS
Age, late Pleistocene
Qoa/Qt *Older alluvial terrace gravel, sand, and clay, undeformed*

FORMATIONS NORTHEAST OF SAN ANDREAS FAULT

Qsl / Qsc / QTs

SANTA CLARA FORMATION/NONMARINE SEDIMENTARY ROCKS
Terrestrial clastic, weakly indurated; age, Pleistocene to late Pliocene
Qsc/QTs *Gray to red-brown gravel/conglomerate, sandstone, and mudstone; gray to buff claystone and siltstone; cobble, pebble and boulder conglomerate of chert, greenstone, graywacke, schist, serpentinite, and limestone (***Qsl***) in a sandy matrix*

UNCONFORMITY

Tm

MONTEREY FORMATION
Marine clastic, lithified; age, early to middle Miocene
Tm *Siliceous shale, grayish brown to black, weathers pale orange to white, occurs with chert, diatomaceous mudstone, minor siltstone, sandstone, hard to platy semi-siliceous shale, and conglomerate; rhythmically bedded; contains thin hard calcareous beds*

Tms

MATADERO SANDSTONE
Marine clastic, lithified; age, early and middle Miocene
Tms *Sandstone, light gray, massive to poorly bedded, soft, mostly fine grained, in places contains*

UNCONFORMITY

Ksh

UNNAMED SEDIMENTARY ROCKS
Marine clastic; age, Cretaceous
Ksh *Hard sandstone and shale, often thinly and rhythmically bedded*

UNCONFORMITY

sp

SERPENTINITE
May be part of Coast Range Ophiolite Complex; occurs as small elongate masses, apparently intrusive into Franciscan Assemblage; age, late Jurassic and Cretaceous?
sp *Serpentinite, hydrothermally metamorphosed from ultramafic igneous rocks such as dunite; blue-green gray, amorphous, hydrous magnesium silicate with specks of magnetite, massive, much fractured and slickensided*

db

DIABASE
Mafic igneous complex; forms sills in Franciscan Assemblage; age, presumably Cretaceous
db *Diabase and gabbro, undivided, dark gray, massive, fine to coarse-grained*

fg / fs / fc / fl

FRANCISCAN ASSEMBLAGE
Submetamorphosed eugeosynclinal marine clastic sedimentary and mafic igneous rocks, lithified; age, late Jurassic and possibly Cretaceous
fg *Greenstone (metabasalt), black, weathered dark brown, massive, amorphous, locally brecciated, interstratified or intertongued with* **fs**
fs *Graywacke sandstone, or metagraywacke, gray, weathered brownish gray, hard, coherent but fractured, fine-grained, massive to bedded, locally includes thin layers of gray siltstone; includes melange where locally sheared with dark gray claystone*
fc *Chert or metachert, varicolored, thin bedded, contorted, locally jasperized*
fl *Limestone, blue-gray to white, hard, massive to bedded, very fine grained, occurs as lenses within* **fs**

FORMATIONS SOUTHWEST OF SAN ANDREAS FAULT

Tb

BASALT
Mafic intrusive; forms isolated flows and/or sills; age, Miocene?
Tb *Basalt and diabase, black, massive, rarely vesicular, fine to medium grained*

Tl

LAMBERT SHALE
Marine clastic, lithified; age, early Miocene
Tl *Shale and siltstone, semi-siliceous, gray, thin to medium bedded, contains phosphate laminae and lenses in lower part*

Tvq

VAQUEROS FORMATION
Marine clastic, lithified; age, early Miocene to Oligocene
Tvq *Sandstone, light gray, fine to medium grained, locally pebbly, massive to bedded, contains concretions up to 1 foot diameter; locally fossiliferous*

Holocene			QUATERNARY	CENOZOIC
Pleistocene				
Pliocene			TERTIARY	
Miocene				
Upper		CRETACEOUS		MESOZOIC
		JURASSIC AND CRETACEOUS		
Miocene			TERTIARY	CENOZOIC
Oligocene				

ACHIEVEMENT ENGINEERING CORP.

Project Number:	Project Title:
3974	Ali Mozafari - Phase II - Exhibit III

Site Location on Cupertino and San Jose West quadrangles
7.5' Series Geologic Map by T. W. Dibblee and J.A. Minch 2007

REVISIONS

	MM/DD/YY	REMARKS
0	09/26/19	...
1	__/__/__	...
2	__/__/__	...
3	__/__/__	...
4	__/__/__	

M 04

Exhibit II

		Concentration in soil samples												
Boring	Sample Depth (ft)	TPH gasoline (mg/Kg)	TPH Diesel (mg/Kg)	TPH motor oil (mg/Kg)	MTBE (mg/Kg)	Benzene (mg/Kg)	OCPs (mg/Kg)	Aresenic (mg/Kg)	Barium (mg/Kg)	Chromium (mg/Kg)	Cobalt (mg/Kg)	Copper (mg/Kg)	Lead (mg/Kg)	Nickel (mg/Kg)
B-1	35.0	ND	16.2	141	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B-1	25.0	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B-2	25.0	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B-3	10.0	ND	2.04	ND	ND	ND	ND	2.5	150	56.6	14.7	26	4.92	41.3
Tier 1 ESL (Soil) mg/Kg		100	230	5100	2.3 *10^-2	4.4 *10^-2	*	6.7 *10^-2	3000	0.3	230	3100	80	86
TTLC (mg/Kg)								500.0	10000.0	500.0	8000.0	2500.0	1000.0	2000.0

		Concentrations in the vapor samples												
Boring	Sample Depth (ft)	Carbon Disulfide ug/m3	Hexane ug/m3	tert-Butanol ug/m3	Chloroform ug/m3	Toluene ug/m3	Tetrachloroethylene ug/m3	Ethyl Benzene ug/m3	m,p-Xylene ug/m3	4-Ethyl Toluene ug/m3	1,2,4-Trimethyl benzene ug/m3	Naphthalene ug/m3	2-Propanol (Isopropyl Alcohol) ug/m3	Aceton ug/m3
B-1	5.0	36	2.6	1.9	3.1	5.2	26	2.6	7.5	9.1	10	2.6	320	
B-2	5.0	ND	ND	ND	ND								24	
B-3	5.0	ND	1.9	ND	ND								26	13
Tier 1 ESL (Vapor) ug/m3		*	*	*	61	1.6 *10^5	240	560	5.2*10^4	*	*	41	*	1.5*10^7

Exhibit III

Arsh Firouzjaei
Achievement Engineering Corp
2455 Autumnvale Dr.
San Jose, California 95131
Tel: 408 217 9174
Fax: 408 217 9632
Email: arash@achieveng.com

RE: Alan Enterprise

Work Order No.: 1909078 Rev: 1

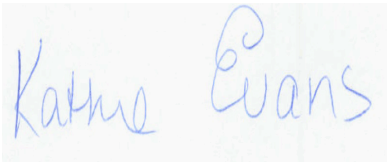
Dear Arash Firouzjaei:

Torrent Laboratory, Inc. received 9 sample(s) on September 11, 2019 for the analyses presented in the following Report.

As requested on the Chain of Custody, five samples were placed on hold.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.



Kathie Evans
Project Manager

September 18, 2019
Date

Date: 9/18/2019

Client: Achievement Engineering Corp

Project: Alan Enterprise

Work Order: 1909078

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.

REVISIONS

Report revised to include STLC data.

STLC

Note: Extraction of 50 g sample / 500g 0.2M Sodium Citrate Solution was performed according to wet extraction procedure (WET) which was rotated in a rotary shaker for 48 hours (+/- 4 hours).

Date Prepared: 10/8/19 at 5:15 PM to 10/10/19 at 1:50 PM

Rev. 1 (10/16/19)

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date Received: 09/11/19
Date Reported: 09/18/19

B1-25' 1909078-003

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Diesel	SW8015B	4	3.4	8.0	16.2	mg/Kg
TPH as Motor Oil	SW8015B	4	13	40	141	mg/Kg

B1-35' 1909078-004

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit

All compounds were non-detectable for this sample.

B2-25' 1909078-007

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit

All compounds were non-detectable for this sample.

B3-5' 1909078-008

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Arsenic	SW6010B	1	0.15	1.30	2.50	mg/Kg
Barium	SW6010B	1	0.055	5.00	150	mg/Kg
Chromium	SW6010B	1	0.075	5.00	56.6	mg/Kg
Cobalt	SW6010B	1	0.070	5.00	14.7	mg/Kg
Copper	SW6010B	1	0.20	5.00	26.0	mg/Kg
Lead	SW6010B	1	0.10	3.00	4.92	mg/Kg
Nickel	SW6010B	1	0.50	5.00	41.3	mg/Kg
Vanadium	SW6010B	1	0.10	5.00	72.1	mg/Kg
Zinc	SW6010B	1	0.30	5.00	52.8	mg/Kg
TPH as Diesel	SW8015B	1	0.85	2.0	2.04	mg/Kg

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B1-25'	**Lab Sample ID:**	1909078-003A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 11:58		
SDG:			

Prep Method:	3546_TPH	**Prep Batch Date/Time:**	9/13/19 12:50:00PM
Prep Batch ID:	1116592	**Prep Analyst:**	EDORR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	4	3.4	8.0	**16.2**	x	mg/Kg	09/16/19	15:54	MK	442459
TPH as Motor Oil	SW8015B	4	13	40	**141**		mg/Kg	09/16/19	15:54	MK	442459
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		**72.6**		%	09/16/19	15:54	MK	442459

NOTE: x-not typical of Diesel ref. std: peaks within Diesel range quantified as diesel

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B1-25'	**Lab Sample ID:**	1909078-003A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 11:58		
SDG:			

Prep Method:	5035GRO	**Prep Batch Date/Time:**	9/16/19	9:43:00AM
Prep Batch ID:	1116690	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	43	100	ND		ug/Kg	09/16/19	17:03	BP	442441
(S) 4-Bromofluorobenzene	8260TPH		43.9 - 127		**104**		%	09/16/19	17:03	BP	442441

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B1-25'	**Lab Sample ID:**	1909078-003A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 11:58		
SDG:			

Prep Method:	5035	**Prep Batch Date/Time:**	9/16/19 9:43:00AM
Prep Batch ID:	1116658	**Prep Analyst:**	BPATEL

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	2.3	10	ND		ug/Kg	09/16/19	17:03	BP	442441
Benzene	SW8260B	1	2.2	10	ND		ug/Kg	09/16/19	17:03	BP	442441
Toluene	SW8260B	1	1.8	10	ND		ug/Kg	09/16/19	17:03	BP	442441
Ethylbenzene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	17:03	BP	442441
m,p-Xylene	SW8260B	1	3.2	10	ND		ug/Kg	09/16/19	17:03	BP	442441
o-Xylene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	17:03	BP	442441
(S) Dibromofluoromethane	SW8260B		59.8 - 148		**106**		%	09/16/19	17:03	BP	442441
(S) Toluene-d8	SW8260B		55.2 - 133		**94.7**		%	09/16/19	17:03	BP	442441
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		**84.6**		%	09/16/19	17:03	BP	442441

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B1-35'	**Lab Sample ID:**	1909078-004A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 12:10		
SDG:			

Prep Method:	3546_TPH	**Prep Batch Date/Time:**	9/13/19	12:50:00PM
Prep Batch ID:	1116592	**Prep Analyst:**	EDORR	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	ND		mg/Kg	09/14/19	13:56	MK	442459
TPH as Motor Oil	SW8015B	1	3.2	10	ND		mg/Kg	09/14/19	13:56	MK	442459
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		**67.1**		%	09/14/19	13:56	MK	442459

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B1-35'	**Lab Sample ID:**	1909078-004A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 12:10		
SDG:			

Prep Method:	5035GRO	**Prep Batch Date/Time:**	9/16/19	9:43:00AM
Prep Batch ID:	1116690	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	43	100	ND		ug/Kg	09/16/19	17:32	BP	442441
(S) 4-Bromofluorobenzene	8260TPH		43.9 - 127		**107**		%	09/16/19	17:32	BP	442441

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B1-35'	**Lab Sample ID:**	1909078-004A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 12:10		
SDG:			

Prep Method:	5035	**Prep Batch Date/Time:**	9/16/19 9:43:00AM
Prep Batch ID:	1116658	**Prep Analyst:**	BPATEL

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	2.3	10	ND		ug/Kg	09/16/19	17:32	BP	442441
Benzene	SW8260B	1	2.2	10	ND		ug/Kg	09/16/19	17:32	BP	442441
Toluene	SW8260B	1	1.8	10	ND		ug/Kg	09/16/19	17:32	BP	442441
Ethylbenzene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	17:32	BP	442441
m,p-Xylene	SW8260B	1	3.2	10	ND		ug/Kg	09/16/19	17:32	BP	442441
o-Xylene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	17:32	BP	442441
(S) Dibromofluoromethane	SW8260B		59.8 - 148		**106**		%	09/16/19	17:32	BP	442441
(S) Toluene-d8	SW8260B		55.2 - 133		**95.4**		%	09/16/19	17:32	BP	442441
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		**84.7**		%	09/16/19	17:32	BP	442441

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B2-25'	**Lab Sample ID:**	1909078-007A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 12:30		
SDG:			

Prep Method:	3546_TPH	**Prep Batch Date/Time:**	9/13/19	12:50:00PM
Prep Batch ID:	1116592	**Prep Analyst:**	EDORR	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	ND		mg/Kg	09/14/19	14:20	MK	442459
TPH as Motor Oil	SW8015B	1	3.2	10	ND		mg/Kg	09/14/19	14:20	MK	442459
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		**63.8**		%	09/14/19	14:20	MK	442459

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B2-25'	**Lab Sample ID:**	1909078-007A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 12:30		
SDG:			

Prep Method:	5035GRO	**Prep Batch Date/Time:**	9/16/19	9:43:00AM
Prep Batch ID:	1116690	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	43	100	ND		ug/Kg	09/16/19	18:00	BP	442441
(S) 4-Bromofluorobenzene	8260TPH		43.9 - 127		**102**		%	09/16/19	18:00	BP	442441

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B2-25'	**Lab Sample ID:**	1909078-007A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 12:30		
SDG:			

Prep Method:	5035	**Prep Batch Date/Time:**	9/16/19 9:43:00AM
Prep Batch ID:	1116658	**Prep Analyst:**	BPATEL

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	2.3	10	ND		ug/Kg	09/16/19	18:00	BP	442441
Benzene	SW8260B	1	2.2	10	ND		ug/Kg	09/16/19	18:00	BP	442441
Toluene	SW8260B	1	1.8	10	ND		ug/Kg	09/16/19	18:00	BP	442441
Ethylbenzene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	18:00	BP	442441
m,p-Xylene	SW8260B	1	3.2	10	ND		ug/Kg	09/16/19	18:00	BP	442441
o-Xylene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	18:00	BP	442441
(S) Dibromofluoromethane	SW8260B		59.8 - 148		**109**		%	09/16/19	18:00	BP	442441
(S) Toluene-d8	SW8260B		55.2 - 133		**94.4**		%	09/16/19	18:00	BP	442441
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		**84.9**		%	09/16/19	18:00	BP	442441

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	7471BP	**Prep Batch Date/Time:**	9/16/19	4:15:00PM
Prep Batch ID:	1116656	**Prep Analyst:**	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	SW7471B	1	0.083	0.50	ND		mg/Kg	09/17/19	10:53	BJAY	442463

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	3050B	**Prep Batch Date/Time:**	9/16/19	4:15:00PM
Prep Batch ID:	1116655	**Prep Analyst:**	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	SW6010B	1	0.050	5.00	ND		mg/Kg	09/17/19	13:25	PPATEL	442461
Arsenic	SW6010B	1	0.15	1.30	**2.50**		mg/Kg	09/17/19	13:25	PPATEL	442461
Barium	SW6010B	1	0.055	5.00	**150**		mg/Kg	09/17/19	13:25	PPATEL	442461
Beryllium	SW6010B	1	0.055	5.00	ND		mg/Kg	09/17/19	13:25	PPATEL	442461
Cadmium	SW6010B	1	0.10	5.00	ND		mg/Kg	09/17/19	13:25	PPATEL	442461
Chromium	SW6010B	1	0.075	5.00	**56.6**		mg/Kg	09/17/19	13:25	PPATEL	442461
Cobalt	SW6010B	1	0.070	5.00	**14.7**		mg/Kg	09/17/19	13:25	PPATEL	442461
Copper	SW6010B	1	0.20	5.00	**26.0**		mg/Kg	09/17/19	13:25	PPATEL	442461
Lead	SW6010B	1	0.10	3.00	**4.92**		mg/Kg	09/17/19	13:25	PPATEL	442461
Molybdenum	SW6010B	1	0.050	5.00	ND		mg/Kg	09/17/19	13:25	PPATEL	442461
Nickel	SW6010B	1	0.50	5.00	**41.3**		mg/Kg	09/17/19	13:25	PPATEL	442461
Silver	SW6010B	1	0.15	5.00	ND		mg/Kg	09/17/19	13:25	PPATEL	442461
Vanadium	SW6010B	1	0.10	5.00	**72.1**		mg/Kg	09/17/19	13:25	PPATEL	442461

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	3050B	**Prep Batch Date/Time:**	9/16/19	4:15:00PM
Prep Batch ID:	1116655	**Prep Analyst:**	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Selenium	SW6010B	1	0.22	5.00	ND		mg/Kg	09/17/19	16:09	PPATEL	442473
Zinc	SW6010B	1	0.30	5.00	**52.8**		mg/Kg	09/17/19	16:09	PPATEL	442473

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	3050B	**Prep Batch Date/Time:**	9/16/19	4:15:00PM
Prep Batch ID:	1116655	**Prep Analyst:**	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
The results shown below are reported using their MDL.											
Thallium	SW6010B	10	5.5	50.0	ND		mg/Kg	09/17/19	13:32	PPATEL	442461

NOTE: Diluted due to suppression of the spectral signal in undiluted run

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	WET/3010B	**Prep Batch Date/Time:**	10/10/19	3:50:00PM
Prep Batch ID:	1117290	**Prep Analyst:**	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chromium (STLC)	SW6010B	1	0.010	0.20	ND		mg/L	10/10/19	20:00	PPATEL	443035

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	3546_OCP	**Prep Batch Date/Time:**	9/12/19 2:43:00PM
Prep Batch ID:	1116553	**Prep Analyst:**	EDORR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
alpha-BHC	SW8081B	1	0.13	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
gamma-BHC (Lindane)	SW8081B	1	0.16	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
beta-BHC	SW8081B	1	0.32	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
delta-BHC	SW8081B	1	0.16	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Heptachlor	SW8081B	1	0.11	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Aldrin	SW8081B	1	0.20	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Heptachlor Epoxide	SW8081B	1	0.078	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
gamma-Chlordane	SW8081B	1	0.16	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
alpha-Chlordane	SW8081B	1	0.17	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
4,4'-DDE	SW8081B	1	0.19	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Endosulfan I	SW8081B	1	0.18	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Dieldrin	SW8081B	1	0.15	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Endrin	SW8081B	1	0.19	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
4,4'-DDD	SW8081B	1	0.57	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Endosulfan II	SW8081B	1	0.58	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
4,4'-DDT	SW8081B	1	0.13	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Endrin Aldehyde	SW8081B	1	0.15	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Methoxychlor	SW8081B	1	0.20	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Endosulfan Sulfate	SW8081B	1	0.12	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Endrin Ketone	SW8081B	1	0.094	2.0	ND		ug/Kg	09/13/19	15:25	LA	442401
Chlordane	SW8081B	1	2.1	20	ND		ug/Kg	09/13/19	15:25	LA	442401
Toxaphene	SW8081B	1	8.5	50	ND		ug/Kg	09/13/19	15:25	LA	442401
			Acceptance Limits								
TCMX (S)	SW8081B		48 - 125		**58.5**		%	09/13/19	15:25	LA	442401
DCBP (S)	SW8081B		38 - 135		**64.5**		%	09/13/19	15:25	LA	442401

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	3546_TPH	**Prep Batch Date/Time:**	9/13/19	12:50:00PM
Prep Batch ID:	1116592	**Prep Analyst:**	EDORR	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	**2.04**	x	mg/Kg	09/17/19	14:48	MK	442459
TPH as Motor Oil	SW8015B	1	3.2	10	ND		mg/Kg	09/17/19	14:48	MK	442459
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		**70.3**		%	09/17/19	14:48	MK	442459

NOTE: x-not typical of Diesel ref. std: peaks within Diesel range quantified as diesel

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	5035GRO	**Prep Batch Date/Time:**	9/16/19	9:43:00AM
Prep Batch ID:	1116690	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	43	100	ND		ug/Kg	09/16/19	18:30	BP	442441
(S) 4-Bromofluorobenzene	8260TPH		43.9 - 127		**99.2**		%	09/16/19	18:30	BP	442441

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Arash Firouzjaei
Achievement Engineering Corp

Date/Time Received: 09/11/19, 1:10 pm
Date Reported: 09/18/19

Client Sample ID:	B3-5'	**Lab Sample ID:**	1909078-008A
Project Name/Location:	Alan Enterprise	**Sample Matrix:**	Soil
Project Number:	3974		
Date/Time Sampled:	09/10/19 / 14:00		
SDG:			

Prep Method:	5035	**Prep Batch Date/Time:**	9/16/19	9:43:00AM
Prep Batch ID:	1116658	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	2.3	10	ND		ug/Kg	09/16/19	18:30	BP	442441
Benzene	SW8260B	1	2.2	10	ND		ug/Kg	09/16/19	18:30	BP	442441
Toluene	SW8260B	1	1.8	10	ND		ug/Kg	09/16/19	18:30	BP	442441
Ethylbenzene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	18:30	BP	442441
m,p-Xylene	SW8260B	1	3.2	10	ND		ug/Kg	09/16/19	18:30	BP	442441
o-Xylene	SW8260B	1	1.7	10	ND		ug/Kg	09/16/19	18:30	BP	442441
(S) Dibromofluoromethane	SW8260B		59.8 - 148		**107**		%	09/16/19	18:30	BP	442441
(S) Toluene-d8	SW8260B		55.2 - 133		**98.1**		%	09/16/19	18:30	BP	442441
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		**88.4**		%	09/16/19	18:30	BP	442441

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1909078	**Prep Method:**	3546_OCP	**Prep Date:**	09/12/19	**Prep Batch:**	1116553
Matrix:	Soil	**Analytical Method:**	SW8081B	**Analyzed Date:**	9/13/2019	**Analytical Batch:**	442401
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
alpha-BHC	0.13	2.0	ND	
gamma-BHC (Lindane)	0.16	2.0	ND	
beta-BHC	0.32	2.0	ND	
delta-BHC	0.16	2.0	ND	
Heptachlor	0.11	2.0	ND	
Aldrin	0.20	2.0	ND	
Heptachlor Epoxide	0.078	2.0	ND	
gamma-Chlordane	0.16	2.0	ND	
alpha-Chlordane	0.17	2.0	ND	
4,4'-DDE	0.19	2.0	ND	
Endosulfan I	0.18	2.0	ND	
Dieldrin	0.15	2.0	ND	
Endrin	0.19	2.0	ND	
4,4'-DDD	0.57	2.0	ND	
Endosulfan II	0.58	2.0	ND	
4,4'-DDT	0.13	2.0	ND	
Endrin Aldehyde	0.15	2.0	ND	
Methoxychlor	0.20	2.0	ND	
Endosulfan Sulfate	0.12	2.0	ND	
Endrin Ketone	0.094	2.0	ND	
Chlordane	2.1	20	ND	
Toxaphene	8.5	50	ND	
TCMX (S)			89.1	
DCBP (S)			100	

Work Order:	1909078	**Prep Method:**	3546_TPH	**Prep Date:**	09/13/19	**Prep Batch:**	1116592
Matrix:	Soil	**Analytical Method:**	SW8015B	**Analyzed Date:**	9/14/2019	**Analytical Batch:**	442459
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Diesel	0.85	2.0	0.941	
TPH as Motor Oil	3.2	10	ND	
Pentacosane (S)			89.2	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1909078	**Prep Method:**	3050B	**Prep Date:**	09/16/19	**Prep Batch:**	1116655
Matrix:	Soil	**Analytical Method:**	SW6010B	**Analyzed Date:**	9/17/2019	**Analytical Batch:**	442461
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Antimony	0.050	5.00	ND	
Arsenic	0.15	1.30	ND	
Barium	0.055	5.00	0.055	
Beryllium	0.055	5.00	ND	
Cadmium	0.10	5.00	ND	
Chromium	0.075	5.00	ND	
Cobalt	0.070	5.00	ND	
Copper	0.20	5.00	0.99	
Lead	0.10	1.30	ND	
Molybdenum	0.050	5.00	0.050	
Nickel	0.50	5.00	ND	
Silver	0.15	5.00	ND	
Thallium	0.55	5.00	ND	
Vanadium	0.10	5.00	ND	

Work Order:	1909078	**Prep Method:**	7471BP	**Prep Date:**	09/16/19	**Prep Batch:**	1116656
Matrix:	Soil	**Analytical Method:**	SW7471B	**Analyzed Date:**	9/17/2019	**Analytical Batch:**	442463
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Mercury	0.083	0.50	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1909078	**Prep Method:**	5035	**Prep Date:**	09/16/19	**Prep Batch:**	1116658
Matrix:	Soil	**Analytical Method:**	SW8260B	**Analyzed Date:**	9/16/2019	**Analytical Batch:**	442441
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	1.2	10	ND		
Chloromethane	1.8	10	ND		
Vinyl Chloride	2.0	10	ND		
Bromomethane	2.7	10	ND		
Chloroethane	3.0	10	ND		
Trichlorofluoromethane	2.1	10	ND		
1,1-Dichloroethene	2.0	10	ND		
Freon 113	1.9	10	ND		
Methylene Chloride	7.1	10	ND		
trans-1,2-Dichloroethene	2.1	10	ND		
MTBE	2.3	10	ND		
TBA	12	50	ND		
Diisopropyl ether	2.3	10	ND		
1,1-Dichloroethane	2.2	10	ND		
Ethyl tert-Butyl ether	2.3	10	ND		
cis-1,2-Dichloroethene	2.2	10	ND		
2,2-Dichloropropane	1.9	10	ND		
Bromochloromethane	2.3	10	ND		
Chloroform	2.4	10	ND		
Carbon Tetrachloride	2.1	10	ND		
1,1,1-Trichloroethane	2.1	10	ND		
1,1-Dichloropropene	2.0	10	ND		
Benzene	2.2	10	ND		
TAME	2.3	10	ND		
1,2-Dichloroethane	2.3	10	ND		
Trichloroethylene	1.8	10	ND		
Dibromomethane	1.8	10	ND		
1,2-Dichloropropane	1.9	10	ND		
Bromodichloromethane	2.0	10	ND		
cis-1,3-Dichloropropene	1.6	10	ND		
Toluene	1.8	10	ND		
Tetrachloroethylene	1.7	10	ND		
trans-1,3-Dichloropropene	1.6	10	ND		
1,1,2-Trichloroethane	1.8	10	ND		
Dibromochloromethane	1.9	10	ND		
1,3-Dichloropropane	1.8	10	ND		
1,2-Dibromoethane	1.8	10	ND		
Chlorobenzene	1.8	10	ND		
Ethylbenzene	1.7	10	ND		
1,1,1,2-Tetrachloroethane	1.9	10	ND		
m,p-Xylene	3.2	10	ND		

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1909078	**Prep Method:**	5035	**Prep Date:**	09/16/19	**Prep Batch:**	1116658
Matrix:	Soil	**Analytical Method:**	SW8260B	**Analyzed Date:**	9/16/2019	**Analytical Batch:**	442441
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
o-Xylene	1.7	10	ND	
Styrene	1.6	10	ND	
Bromoform	1.7	10	ND	
Isopropyl Benzene	1.6	10	ND	
n-Propylbenzene	1.6	10	ND	
Bromobenzene	1.8	10	ND	
1,1,2,2-Tetrachloroethane	1.9	10	ND	
2-Chlorotoluene	1.8	10	ND	
1,3,5-Trimethylbenzene	1.6	10	ND	
1,2,3-Trichloropropane	1.9	10	ND	
4-Chlorotoluene	1.6	10	ND	
tert-Butylbenzene	1.6	10	ND	
1,2,4-Trimethylbenzene	1.4	10	ND	
sec-Butyl Benzene	1.6	10	ND	
p-Isopropyltoluene	1.5	10	ND	
1,3-Dichlorobenzene	1.7	10	ND	
1,4-Dichlorobenzene	1.7	10	ND	
n-Butylbenzene	1.5	10	ND	
1,2-Dichlorobenzene	1.8	10	ND	
1,2-Dibromo-3-Chloropropane	1.8	10	3.7	
Hexachlorobutadiene	1.4	10	2.8	
1,2,4-Trichlorobenzene	1.5	10	ND	
Naphthalene	1.7	10	4.0	
1,2,3-Trichlorobenzene	1.7	10	ND	
2-Butanone	2.3	10	2.9	
4-Methyl-2-Pentanone	2.0	10	ND	
(S) Dibromofluoromethane			101	
(S) Toluene-d8			93.8	
(S) 4-Bromofluorobenzene			82.8	

Work Order:	1909078	**Prep Method:**	5035GRO	**Prep Date:**	09/16/19	**Prep Batch:**	1116690
Matrix:	Soil	**Analytical Method:**	SW8260B	**Analyzed Date:**	9/16/2019	**Analytical Batch:**	442441
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	0.043	0.10	0.089	
(S) 4-Bromofluorobenzene			112	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1909078	**Prep Method:**	WET/3010B	**Prep Date:**	10/10/19	**Prep Batch:**	1117290
Matrix:	Soil	**Analytical Method:**	SW6010B	**Analyzed Date:**	10/10/2019	**Analytical Batch:**	443035
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Chromium (STLC)	0.010	0.20	0.033		
Lead (STLC)	0.050	0.20	0.054		
Nickel (STLC)	0.010	0.20	ND		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1909078	**Prep Method:**	3546_OCP	**Prep Date:**	09/12/19	**Prep Batch:**	1116553
Matrix:	Soil	**Analytical Method:**	SW8081B	**Analyzed Date:**	9/13/2019	**Analytical Batch:**	442401
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
gamma-BHC (Lindane)	0.16	2.0	ND	40	94.1	93.7	0.532	25 - 135	30	
Heptachlor	0.11	2.0	ND	40	99.4	97.8	1.77	40 - 130	30	
Aldrin	0.20	2.0	ND	40	94.2	93.1	1.07	25 - 140	30	
Dieldrin	0.15	2.0	ND	40	93.0	91.7	1.35	60 - 130	30	
Endrin	0.19	2.0	ND	40	98.6	95.7	3.08	55 - 135	30	
4,4'-DDT	0.13	2.0	ND	40	102	101	1.72	45 - 140	30	
TCMX (S)				100	94.2	88.5		48 - 125		
DCBP (S)				100	108	98.5		38 - 135		

Work Order:	1909078	**Prep Method:**	3546_TPH	**Prep Date:**	09/13/19	**Prep Batch:**	1116592
Matrix:	Soil	**Analytical Method:**	SW8015B	**Analyzed Date:**	9/14/2019	**Analytical Batch:**	442459
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.85	2.0	0.941	25.0	75.0	70.0	7.16	52 - 115	30	
Pentacosane (S)				200	81.1	77.2		59 - 129		

Work Order:	1909078	**Prep Method:**	3050B	**Prep Date:**	09/16/19	**Prep Batch:**	1116655
Matrix:	Soil	**Analytical Method:**	SW6010B	**Analyzed Date:**	9/17/2019	**Analytical Batch:**	442461
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.050	5.00	ND	50	87.8	91.4	4.02	80 - 120	30	
Arsenic	0.15	1.30	ND	50	88.3	93.3	5.51	80 - 120	30	
Barium	0.055	5.00	0.055	50	94.1	99.1	4.97	80 - 120	30	
Beryllium	0.055	5.00	ND	50	90.8	93.6	3.04	80 - 120	30	
Cadmium	0.10	5.00	ND	50	90.4	94.6	4.54	80 - 120	30	
Chromium	0.075	5.00	ND	50	92.4	97.2	5.06	80 - 120	30	
Cobalt	0.070	5.00	ND	50	88.6	92.1	3.98	80 - 120	30	
Copper	0.20	5.00	0.99	50	100	105	4.10	80 - 120	30	
Lead	0.10	3.00	ND	50	87.9	92.9	5.54	80 - 120	30	
Molybdenum	0.050	5.00	0.050	50	94.7	98.5	3.93	80 - 120	30	
Nickel	0.50	5.00	ND	50	87.9	91.6	4.01	80 - 120	30	
Silver	0.15	5.00	ND	50	91.7	94.1	2.37	80 - 120	30	
Thallium	0.20	5.00	ND	50	92.2	97.6	5.69	80 - 120	30	
Vanadium	0.10	5.00	ND	50	96.2	101	4.67	80 - 120	30	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1909078	**Prep Method:**	7471BP	**Prep Date:**	09/16/19	**Prep Batch:**	1116656
Matrix:	Soil	**Analytical Method:**	SW7471B	**Analyzed Date:**	9/17/2019	**Analytical Batch:**	442463
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.047	0.50	ND	1.25	86.4	80.7	6.70	80 - 120	30	

Work Order:	1909078	**Prep Method:**	5035	**Prep Date:**	09/16/19	**Prep Batch:**	1116658
Matrix:	Soil	**Analytical Method:**	SW8260B	**Analyzed Date:**	9/16/2019	**Analytical Batch:**	442441
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	2.0	10	ND	50.0	81.5	81.5	0.000	53.7 - 139	30	
Benzene	2.2	10	ND	50.0	98.9	98.7	0.202	66.5 - 135	30	
Trichloroethylene	1.8	10	ND	50.0	104	103	1.16	57.5 - 150	30	
Toluene	1.8	10	ND	50.0	101	103	1.96	56.8 - 134	30	
Chlorobenzene	1.8	10	ND	50.0	101	103	1.18	57.4 - 134	30	
(S) Dibromofluoromethane				50.0	108	105		59.8 - 148		
(S) Toluene-d8				50.0	100	99.0		55.2 - 133		
(S) 4-Bromofluorobenzene				50.0	96.7	95.7		55.8 - 141		

Work Order:	1909078	**Prep Method:**	5035GRO	**Prep Date:**	09/16/19	**Prep Batch:**	1116690
Matrix:	Soil	**Analytical Method:**	SW8260B	**Analyzed Date:**	9/16/2019	**Analytical Batch:**	442441
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	0.043	0.10	0.089	1	106	118	10.7	48.2 - 132	30	
(S) 4-Bromofluorobenzene				50	125	104		43.9 - 127		

Work Order:	1909078	**Prep Method:**	WET/3010B	**Prep Date:**	10/10/19	**Prep Batch:**	1117290
Matrix:	Soil	**Analytical Method:**	SW6010B	**Analyzed Date:**	10/10/2019	**Analytical Batch:**	443035
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Chromium (STLC)	0.010	0.20	0.033	10	88.5	88.8	0.338	80 - 120	20	
Lead (STLC)	0.050	0.20	0.054	10	95.7	96.1	0.417	80 - 120	20	
Nickel (STLC)	0.010	0.20	ND	10	83.3	83.5	0.240	80 - 120	20	

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MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1909078	**Prep Method:**	3546_TPH	**Prep Date:**	09/13/19	**Prep Batch:**	1116592
Matrix:	**Soil**	**Analytical Method:**	SW8015B	**Analyzed Date:**	9/17/2019	**Analytical Batch:**	442459
Spiked Sample:	1909078-008A						
Units:	mg/Kg						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.850	2.00	ND	25.0	71.3	75.4	9.32	52 - 115	30	
Pentacosane (S)				200	86.0	84.5		59 - 129		

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg/m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Achievement Engineering Corp

Project Name: Alan Enterprise

Work Order No.: 1909078

Date and Time Received: 9/11/2019 1:10:00PM

Received By: Helena Ueng

Physically Logged By: Helena Ueng

Checklist Completed By: Helena Ueng

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes
Container/Temp Blank temperature in compliance?	Temperature: 13.0 °C
Water-VOA vials have zero headspace?	No VOA vials submitted
Water-pH acceptable upon receipt?	N/A

pH Checked by: N/A

pH Adjusted by: N/A

Comments:

Samples transported on ice

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Login Summary Report

Client ID: TL6309 Achievement Engineering Corp
Project Name: Alan Enterprise
Project # : 3974
Report Due Date: 9/18/2019

QC Level: II
TAT Requested: 5+ day:5
Date Received: 9/11/2019
Time Received: 1:10 pm

Comments:

Work Order # : ***1909078***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
1909078-001A	B1-5'	09/10/19 10:38	Soil	03/08/20			Hold Samples	
1909078-002A	B1-15'	09/10/19 11:14	Soil	03/08/20			Hold Samples	
1909078-003A	B1-25'	09/10/19 11:58	Soil	03/08/20			TPHDO_S_8015(Mod) VOC_S_MBTEX VOC_S_GRO	
1909078-004A	B1-35'	09/10/19 12:10	Soil	03/08/20			TPHDO_S_8015(Mod) VOC_S_MBTEX VOC_S_GRO	
1909078-005A	B2-5'	09/10/19 11:30	Soil	03/08/20			Hold Samples	
1909078-006A	B2-15'	09/10/19 13:00	Soil	03/08/20			Hold Samples	
1909078-007A	B2-25'	09/10/19 12:30	Soil	03/08/20			TPHDO_S_8015(Mod) VOC_S_MBTEX VOC_S_GRO	
1909078-008A	B3-5'	09/10/19 14:00	Soil	03/08/20			TPHDO_S_8015(Mod) Met_S_CAM17STLC Pest_S_8081OCP Met_S_6010B CAM17 Hg_S_7471B VOC_S_MBTEX VOC_S_GRO	
1909078-009A	B3-10'	09/10/19 15:00	Soil	03/08/20			Hold Samples	

Torrent LABORATORY, INC.

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Phone: 408.263.5258
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www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 1909078

Company Name: Achievement Engineering ☐ Env. ☐ Special		Project #: 3974	PO #:
Address: 2455 Autumnvale Drive, unit E, San Jose		Project Name: Alan Enterprise	
City: San Jose	State: CA Zip Code: 95131	Comments:	
Telephone: 408 217 9714	Cell:	SAMPLER:	Quote #:
REPORT TO: Arash, Nami (Amin)	BILL TO:	EMAIL: nami@achieveng.com Arash@achieveng.com	

TURNAROUND TIME: ☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day ☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day ☒ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE: ☐ Storm Water ☐ Air ☐ Waste Water ☐ Wipe ☐ Ground Water ☐ Other ☐ Soil ☐ Product / Bulk

REPORT FORMAT: ☐ Level II - Std. ☐ Excel - EDD ☐ EDF ☐ Std.-EDD ☐ QC Level III ☐ QC Level IV

ANALYSIS REQUESTED

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	BTEX, MTBE (8260B)	TPH-g	TPH-d/mo	OCP's	Heavy metals (CAM 17)	REMARKS
001A		B1-5'	9/10/19 1038	soil	1	glass						HOLD
002A		B1-15'	1114		1							HOLD
003A		B1-25'	1158		1		X	X	X			
004A		B1-35'	12:10		1		X	X	X			
005A		B2-5'	1130		1							HOLD
006A		B2-15'	1300		1							HOLD
007A		B2-25'	1230		1		X	X	X			
008A		B3-5'	1400		1		X	X	X	X	X	
009A		B3-10'	1502		1							HOLD

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		Nami	09/11/19	1:10		Helenallen	9/11/19	1310
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Were Samples Received in Good Condition? ☒ Yes ☐ NO Samples on Ice? ☒ Yes ☐ NO Method of Shipment D/O Sample seals intact? ☐ Yes ☐ NO ☒ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Log In By: _____ Date: _____ Labeled By: _____ Date: _____ Temp 13 °C #2 samples transported on ice Page ___ of ___ Rev. 4