

# **TEC Environmental**

۹

a division of Technology, Engineering, & Construction, Inc.

٠

262 Michelle Court Tel: (650) 616-1200 So. San Francisco, CA 94080-6201 Fax: (650) 616-1244

www.tecenvironmental.com Contractor's Lic. #762034

October 6, 2016

Mr. Mark Detterman Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Alameda, California 94502

RECEIVED

By Alameda County Environmental Health 8:51 am, Oct 25, 2016

SUBJECT: DATA GAP INVESTIGATION WORKPLAN AND FOCUSED SITE CONCEPTUAL MODEL

**Oakland Unified School District** SITE: MCCLYMONDS HIGH SCHOOL **2607 MYRTLE STREET** OAKLAND, CA 9494607

Dear Mr. Detterman:

On behalf of the Oakland Unified School District, Technology, Engineering & Construction Inc. is pleased to submit this Data Gap Investigation and Focused Site Conceptual Model Workplan for the above referenced site.

Thank you for your cooperation and assistance on this project. If you have any questions or concerns, please contact the undersigned at (650) 616-1223.

Sincerely, Technology, Engineering & Construction, Inc.

James M. Hanlon, Sr. **Director of Environmental Services** 

Sorbor Twegbe, Oakland Unified School District, 955 High street, Oakland, Ca 94601 cc:



Ms. Karel Detterman, P.G. Alameda County Health Agency Division of Environmental Protection 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502

SUBJECT: PERJURY STATEMENT

SITE: MCCLYMONDS HIGH SCHOOL 2607 MYRTLE STREET OAKLAND, CALIFORNIA 94607 FLC # RO0000292

Dear Ms. Detterman:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Thank you for your cooperation and assistance on this project. If you have any questions, feel free to contact me at (510-535-2723).

Sincerely,

N

Sorbor Tweybe Environmental Health and Safety Manager Oakland Unified School District Responsible Party

Date

# DATA GAP INVESTIGATION WORKPLAN AND FOCUSED SITE CONCEPTUAL MODEL

2607 Myrtle Street Oakland, CA

**PREPARED FOR:** 

**OAKLAND UNIFIED SCHOOL DISTRICT** 

AND

ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

**PREPARED BY:** 

TECHNOLOGY, ENGINEERING & CONSTRUCTION, INC.

> REPORT DATE: OCTOBER 6, 2016



#### TABLE OF CONTENTS

1.0	INT	RODUCTION	1
2.0	EN	/IRONMENTAL BACKGROUND	1
2.1		Site Description	1
2.2		Environmental History	1
3.0	PRE	ELIMINARY SITE CHARACTERIZATION WORKPLAN	2
3.1		Pre-Field Activities	2
3	8.1.1	Permitting	2
3	8.1.2	Health and Safety Plan	2
3	8.1.3	Utility Clearance	2
3.2	S	oil Boring and Monitoring Well Installation Procedures	2
3	8.2.1	Soil Borings	2
3	8.2.2	Monitoring Well Installation	3
3	8.2.3	Monitoring Well Development and Sampling	3
3.3		Well Survey	3
3.4		Decontamination Procedures and Waste Disposal	3
3.5		Regulatory Compliance	
3.6	Re	porting	4
4.0	SCI	HEDULE OF ACTIVITIES	4
5.0	LIM	ITATIONS AND SIGNATURES	5

#### TABLES

1	INITIAL SITE CONCEPTUAL MODEL
•	

2 DATA GAPS AND PROPOSED INVESTIGATION

#### FIGURES

- 1 VICINITY MAP
- 2 WELL LOCATIONS
- 3 SITE MAP WITH PROPOSED FIELD POINT LOCATIONS

#### ATTACHMENTS

- A LOW FLOW PURGING AND SAMPLING PROTOCOL
- **B** ANALYTICAL REPORT ON GROUNDWATER FROM TANK EXCAVATION SITE
- C GEOTRACKER SUBMISSION CONFIRMATION



#### 1.0 INTRODUCTION

On behalf of the Oakland Unified School District, Technology, Engineering & Construction, Inc. (TEC) has prepared this Data Gap Investigation and Focused Site Conceptual Model Workplan for the above referenced site or the property located at 2607 Myrtle Street, Oakland, California (the site). This report has been prepared in response to the Alameda County Health Care Services Agency letter dated May 19, 2016.

Presented below is a summary of the site environmental background, and a workplan to characterize the extent of petroleum hydrocarbon impact to soil and groundwater due to a leaking underground storage tank (UST). A vicinity map and site map are provided as Figures 1 and 2, respectively. The Initial Site Conceptual Model is presented as Table 1 and Data Gaps and Proposed Investigation as Table 2.

#### 2.0 ENVIRONMENTAL BACKGROUND

#### 2.1 Site Description

The site is a high school located in a residential area in Oakland, California. One heating oil underground storage tank (UST) was located in an outdoor area of the site as shown on the site map (Figure 2). The tank was formerly used as part of the swimming pool heating system.

The site is located approximately 1.2 miles east of the San Francisco Bay. The elevation of the site is approximately sixteen feet above sea level.

Based on the location groundwater is expected to flow to the west toward San Francisco Bay. The proposed wells will be used to confirm the groundwater flow direction.

#### 2.2 Environmental History

Following is a summary of recent environmental and tank-related activities conducted at the site.

- **December, 1996** A 4,000 gallon heating oil tank was removed. During the removal, free product was found floating in the excavation. A total of approximately 21,000 gallons of product and groundwater was removed over the course of five pumping events before the excavation was closed. Prior to back filling, a ten-foot long slotted pipe was placed in the excavation and capped with a well box at grade.
- June 26, 1997 ACC Environmental Consultants utilized an interface probe to confirm that no free product was present within the observation well. The well contained only 1-to 2-feet of water. One grab groundwater sample was collected utilizing a bailer and contained 130,000 micrograms per liter (µg/L) TPHd, 3.3 µg/L benzene, 4.7 µg/L toluene, 9.6 µg/L ethylbenzene and 40 µg/L xylenes.
- August 10, 2016 TEC Accutite located the well box placed in December 1996 on site. The pipe showed a depth of about 7 feet. No free product was present. One grab groundwater sample was extracted. It was tested for TPHd, TPHg, naphthalene, and BTEX. The results showed TPHd of 5.19 mg and 0.098 mg/l for TPHg. The results were below detection level for all BTEX and Naphthalene.



#### 3.0 PRELIMINARY SITE CHARACTERIZATION WORKPLAN

In order to characterize the extent of petroleum hydrocarbon contamination to soil and groundwater, TEC proposes to install three groundwater monitoring wells (MW-1 through MW-3).

Proposed well MW-1 will be located in the former tank pit area. Proposed wells MW-2 and MW-3 will be installed to monitor the areas located in the presumed hydraulic cross- and down-gradient directions, respectively. Outlined below are the proposed activities and procedures.

#### 3.1 Pre-Field Activities

#### 3.1.1 Permitting

TEC will obtain a drilling permit from Alameda County to install the proposed monitoring wells and will notify the inspector at least 72 hours prior to field activities.

#### 3.1.2 Health and Safety Plan

As required by the Occupational Health and Safety Administration (OSHA) and by the California OSHA, TEC will update the existing site-specific Health and Safety Plan prior to the start of fieldwork. The plan will be reviewed and signed by field personnel and contractors before beginning field operations, and will be in the possession of TEC personnel while conducting activities at the site.

#### 3.1.3 Utility Clearance

The proposed drilling locations will be marked with white paint and Underground Service Alert (USA) will be contacted at least 48 hours prior to conducting fieldwork to identify underground utilities. In addition, TEC will contract an underground utility locator to identify any subsurface conduits that may interfere with proposed drilling locations. Proposed well locations may be adjusted slightly to provide a safe distance from any identified utilities.

#### 3.2 Soil Boring and Monitoring Well Installation Procedures

#### 3.2.1 Soil Borings

TEC will supervise a C-57 licensed subcontractor to install the proposed field points using a limitedaccess hollow-stem auger / direct push technology (DPT) combination drill rig.

Soil borings and monitoring well pilot borings will be sampled using the DPT rig. Each boring will be advanced using DPT rods lined with acetate (or similar) liners. Soil cores will be collected continuously and logged in accordance with the Unified Soil Classification System; any staining or odors will be noted on the boring log.

Soil samples will be cut from the recovered soil cores at approximately 2 to 4 foot intervals in the unsaturated zone and from within the capillary fringe. Samples will be covered with Teflon liners, capped, properly labeled and placed in an ice chest with adequate ice for delivery to a California state-certified laboratory; samples will be transported to the lab under chain-of-custody protocol. A split of each soil sample will be collected and placed in a resealable plastic bag, which will be sealed with headspace. After the sample split has been allowed to volatilize for a minimum of 15 minutes, ionizable gases will be measured in the headspace of the bag using a properly calibrated photo-ionization detector.



Alternatively, a small diameter hole will be drilled in the acetate liner and PID inserted to measure VOCs directly at 2- to 4-foot intervals (or closer based on observed measurements). A minimum of one sample per boring will be submitted to a California State-certified laboratory to be analyzed for TPHd, BTEX compounds, MtBE and naphthalene by EPA Method 8260B.

#### 3.2.2 Monitoring Well Installation

Once the presence of free water is confirmed, pilot borings for proposed wells MW-1 though MW-3 will be drilled to the appropriate depth with 8- or 10-inch diameter flighted augers. The wells will be screened as appropriate based on observed lithology and measured static water in upon boring completion. The screened interval will extend from the bottom of the borehole to at least 2- or 3-feet above the observed water table and will be no longer than 15 feet in length.

Proposed wells will be constructed with 4-inch diameter casings. The casing will be of 0.010-inch slotted and blank Schedule 40 PVC. Clean #2/12 sand will be placed from the bottom of the screened interval to approximately 2 ft above the screened interval. A nominal 1- to 2-ft thick hydrated bentonite seal will be placed above the filter pack. Remaining annular space will be filled with neat cement grout and a traffic-rated flush-mount well box will be set in concrete at the surface.

#### 3.2.3 Monitoring Well Development and Sampling

Newly installed monitoring wells will be developed approximately 72 hours after installation using a combination of surge and purge procedures. The well will be surged using a 4-inch diameter surge block for a minimum of 15 minutes. After surging, a properly decontaminated steel bailer will be used to remove the majority of fine-grained material from the well, followed by purging with a pump or bailer. A minimum of 10 well casing-water volumes will be removed from each well. Groundwater parameters including temperature, conductivity, pH and turbidity will be monitored and recorded during well development.

Groundwater samples will be collected a minimum of 48 hours after well development. Groundwater samples will be collected using standard low-flow purging and sampling procedures (Attachment A) and submitted to a California state-certified laboratory to be analyzed for TPHd, BTEX compounds, MtBE and naphthalene by EPA Method 8260B.

#### 3.3 Well Survey

Monitoring wells will be surveyed by a State of California licensed surveyor. The survey data will include horizontal and vertical position relative to North American Datum of 1983 (NAD83) and National Geodetic Vertical Datum of 1988 (NGVD88).

#### 3.4 Decontamination Procedures and Waste Disposal

All down-hole equipment including rods, augers, steel bailers and sampling equipment will be thoroughly decontaminated between borings using an Alconox solution and triple-rinsed with clean tap water.

Decontamination water, purge water and soil cuttings generated during field activities will be contained in 55 gallon DOT-rated drums, labeled, and temporarily stored onsite pending characterization, profiling and transportation to an approved disposal or recycling facility.



#### 3.5 Regulatory Compliance

Well completion reports will be filed with the Department of Water Resources within 60 days of monitoring well installation.

#### 3.6 Reporting

TEC will prepare a detailed report summarizing field activities, laboratory analytical results, and conclusions of the subsurface and groundwater monitoring investigations. The report will include an updated site conceptual model. A copy of the report will be submitted electronically to GeoTracker and hard copies will be submitted the client. GeoTracker submission confirmations for this workplan are presented in Attachment B.

#### 4.0 SCHEDULE OF ACTIVITIES

TEC will begin permitting after receiving written approval of this workplan from Alameda County and the client. Upon receiving the required permit, TEC will implement the workplan within 60 days and will prepare a Preliminary Site Assessment Report within 60 days of the completion of field activities. The implementation of the plan will be timed to correspond to the Christmas school holiday period as this is an active school site. The report and all supporting documents will be submitted electronically to GeoTracker and hard copies will be submitted to the client. GeoTracker submission confirmations for this workplan are presented in Attachment C.



#### 5.0 LIMITATIONS AND SIGNATURES

Our services consist of professional opinions, conclusions, and recommendations made today in accordance with generally accepted engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied. TEC's liability is limited to the dollar amount of the work performed.

TEC would like to thank you in advance for your assistance and prompt attention to this matter. Please feel free to contact Jim Hanlon at (650) 616-1223 if you have any questions or comments.

#### Technology, Engineering, and Construction, Inc.

James M. Hanlon, Sr. PE Professional Engineer

No. 5860

Ross Tinline, PG Professional Geologist





TABLES



# Table 1Initial Site Conceptual Model

CSM Element	CSM Sub- element	Description	Data Gap	How to Address
Geology and Hydrogeology	Regional	The Site is located within the Oakland Sub-Area of the East Bay Plain Groundwater Basin. A sequence of alluvial fans ranging in thickness from 300 to 700 feet deep overlying bedrock. Overall, sustainable yields are low due in part to low recharge potential. Groundwater level contours generally flow from east to west or from the Hayward Fault to the San Francisco Bay and generally correlate to topography. Flow direction and velocity are also influenced by buried stream channels that typically are oriented in an east to west direction. Groundwater has been measured at nearby sites between 7 and 12 feet bgs and generally flows westerly at a low gradient.	none	NA
	Site	No investigation has been done at this time. A slotted pipe installed in the excavation before backfilling in 1996 was located and a sample collected. The sample showed no free product and rleatively low levels of hydrocarbons. See below.	Soil data and depth to water are unknown.	Soils will be classified during initial borings. Depth to water will be measured in each boring.
Surface Water Bodies		The closest water body is the San Francisco Bay located appximately 1.2 miles to the west-northwest	none	NA
Nearby Wells		Several deep wells have been identified in the area of the source. Delineation of the plume will demonstrate if any of these are potentially affected. See attached figures and table.	Plume delineation	Initial wells will detemine groundwater flow diection. More wells will be added as needed to define the plume.

Release History		December 23, 1996. The tank was made of fiberglass, single-	A pipe istalled in the tank excavation before backfilling has been located so the origin of the site is known.	
Plume		No investigation has been done at this time.	The existance and size of a plume is unknown at this time.	Intial investigation with borings will determine if a plume exists and give some expectation of the size. Further investigation will be based on this data, as indicated.
COC - TPHd	soil			
	groundwater	5.19 mg/l		
COC - Benzene	soil vapor	-		
	soil			
	groundwater	ND		
COC - MTbE	soil			
	groundwater	NA		
COC - Napthalene	soil			
	groundwater	ND		
Structures		The site is at approximately the center of a school campus that covers three city blocks. North is a swimming pool, east is a building, south are tennis courts, and west is a football field. The area surrounding the campus is residential.	These stuctures could limit the ability to investigate the size of the plume.	Because this is a diesel plume, it should be limited in size. The most likely direction of groundwater flow is to the west, toward the football field
Historic		Based on the tank removal report the physical plant has not	Nothing in the history indicates	
operations			that additional COC should be suspected.	

Adjacent cleanup sites	The only active site in the area is in the apparent downgradient direction.	
Land use	This site is entirely surrounded by residential property. It is likely that any alternative use in the future would be residential as well.	Residential standards will be apppied when determining cleanup levels.

## SCM Table 2

## Data Gap Identification Summary and Proposed Investigation

Item	DataGap Item #	Proposed Investigation	Rational	Analyses
а.	Release within a public water system	NA	Meets criteria.	
b.	Release consists only of petroleum	NA	Meets criteria.	
C.	Release has stopped.	NA	Tank removed in 1996.	
d.	Free porduct removed to the maximum extent possible.	Initial borings will determine the presence of free product, if so.	Free product, if present, will be in the original tank location.	Visual
e.	Conceptual Site Model completed.	As described herein.		
f.	Secondary source is removed to the extent practicable	Initial borings will detect residual product in soil.	Meet criteria.	TPHd
g.	Test for MTBE	Soil samples from initial borings will be analyzed. MTBE is not expected as this tank contaained fuel oil.	Meet criteria.	MTBE
h.	No nuisance exists	None	Site in use without complaint.	

		Media-Specific Criteria		
1	Groundwater	Initial borings will determine the level of contamination. Further borings will determine the size of the plume.	Initial borings will be to groundwater. Results of initial borings will guide the size of step- outs.	TPHd, MTBE, napthalene
2	Indoor air	Initial borings will gather information necessary to determine compliance with the applicable criteria.	Samples will be taken at discrete intervals corresponding to criteria.	TPHd, benzene
3	Direct Contact / Outdoor Air	Initial borings will gather information necessary to determine compliance with the applicable criteria.	Samples will be taken at discrete intervals corresponding to criteria.	TPHd, benzene
		Case Closure		
a.	Notification requirements	Notifications are performed by the Local Oversight Program.		
b.	Monitoring Well Destruction	Monitoring wells will be destroyed in accordance with State criteria following notice of closure.		
C.	Waste removal	All wastes not previously removed, will be disposed of properly upon completion of the Well Destruction.		

FIGURES



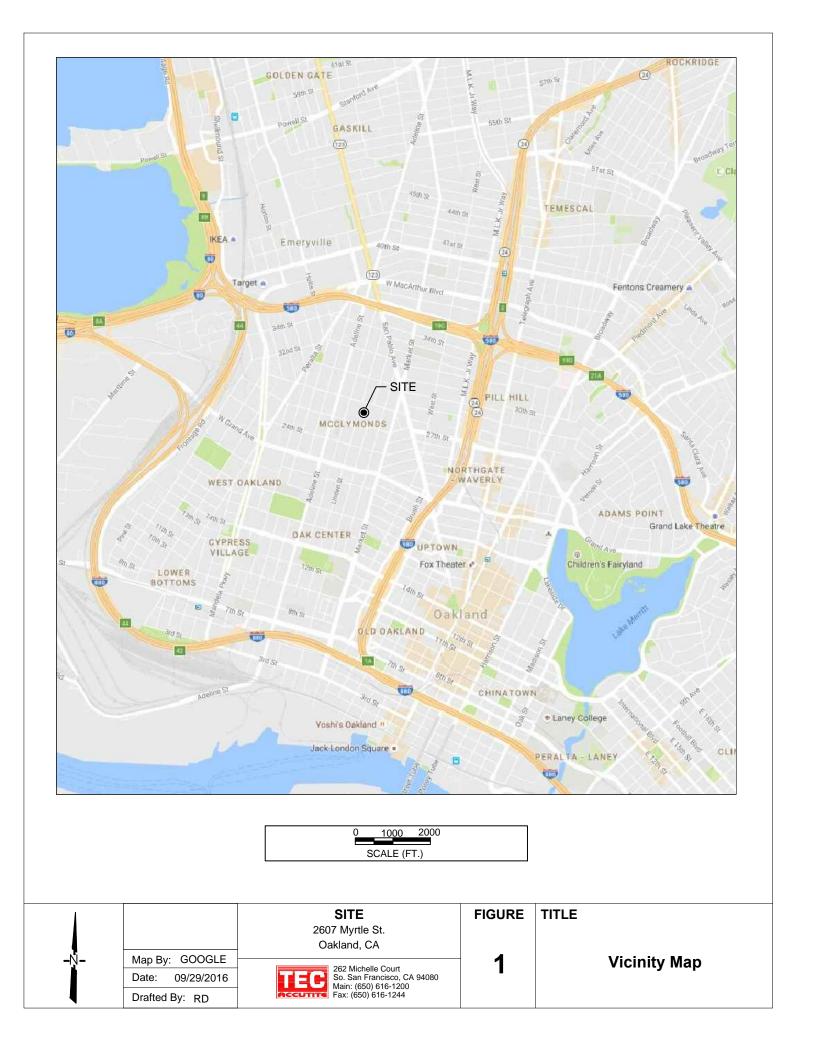




Figure ID	Well Owner	Address	City	Distance	Direction	Depth	Use	Date Installed
1	Pacific Gas & Electric	26th & Linden	Oakland	100	S	120	Cathodic	7/19/1984
2	Holly Meat	2736 Magnolia	Oakland	1100	WNW	135	Abandoned	12/12/1984
3	Ned Clyde Construction	2311 Adeline	Oakland	1400	SW	65	Monitoring	3/8/1991
4	Chae M.& Jung H. Chung	2926/2942 San Pablo	Oakland	1380	E	120	Industrial	12/19/2012
5	Oakland Towel Co.	990 28th St.	Oakland	300	Ν	146	Abandoned	1927
6	Lane Metal Finishing	887 30th St.	Oakland	1400	NE	125	Industrial	1935



# ATTACHMENT A

STANDARD OPERATING PROCEDURE FOR LOW-FLOW GROUNDWATER SAMPLING



#### STANDARD OPERATING PROCEDURE FOR LOW FLOW PURGING AND SAMPLING OF GROUNDWATER MONITORING WELLS

This procedure is designed for taking representative groundwater samples from monitoring wells. The groundwater samples will be collected using low flow (minimal drawdown) purging and sampling methods as discussed in U.S. EPA, Ground Water Issue, Publication Number EPN540IS-951504, April 1996 by Puls, R.W. and M.J. Barcelona - "Low-Flow (Minimal Drawdown) Ground-water Sampling Procedures". This procedure is also similar to the ASTM D 6771-02 "Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigation". This practice does not address sampling of wells containing either light or dense non-aqueous-phase liquids (LNAPLs or DNAPLs); wells with LNAPL or DNAPL will not be sampled by the low flow purging and sampling method.

#### **OBJECTIVE**

The objective is to purge and sample the well so that the water that discharged from the pump, and subsequently collected, is representative of the formation water from an aquifer or shallow water bearing zone of interest.

#### WELL PREPARATION

Monitoring wells will be purged with an electronically controlled submersible bladder pump. The pump will be slowly lowered to the middle of, or slightly above, the screened interval. The submersible pump will be decontaminated before each use in each well with phosphate-free detergent, rinsing with potable water and rinsing with deionized water.

#### **INITIAL PUMP FLOW TEST PROCEDURES**

If possible, the optimum flow rate for each well will be established during well development or redevelopment or in advance of the actual purging and sampling event. The monitoring well will be gauged for depth to water prior to the installation of the bladder pump and before pumping of any water from the well. The measurement will be documented on a groundwater monitoring field data sheet. After pump installation, and confirmation that the static water level has returned to its original level (as determined prior to pump installation), the bladder pump will be started at a discharge rate between 0.1 to 0.5 liters per minute without any in-line flow cell connected. The water level in the well casing will be monitored continuously for any change from the original measurement. If significant drawdown is observed, the pump's flow rate will be incrementally reduced until the static water level drawdown ceases and stabilizes. Total drawdown from the initial (static) water level should not exceed 0.3 feet. Once the specific well's optimum flow rate, without an in-line flow cell connected, has been determined and documented, the in-line flow cell system will be connected to the well discharge. Control settings may require adjustment to achieve the well's optimum flow rate with the in-line flow cell connected. (Due to the system's back-pressure, the flow rate may decrease by 10-20%). All control settings shall be documented on the field data sheet as specific to that particular well's ID and will be utilized for its subsequent purging and sampling events.

#### PURGE AND SAMPLING EVENTS

Prior to the initiation of the bladder pump, the static water level will be measured, documented, and the bladder pump will be initiated, as described above. When the optimum pump flow rate has been established, the static water level drawdown has stabilized within the required range, and at least one

pump system volume (Flow cell volume + bladder volume + discharge tubing volume) has been purged, field measurements will be recorded for pH, temperature (T), conductivity (Ec), oxygen reduction potential (ORP), and dissolved oxygen (DO) using the in-line flow cell. All water chemistry field measurements will be documented on the gauging sheet. Measurements will be taken every three to five minutes until stabilization has been achieved. Stabilization is achieved after all parameters have stabilized for three consecutive readings. In lieu of measuring all five parameters, a minimum subset would include temperature, pH, conductivity and turbidity or dissolved oxygen. Three consecutive measurements indicating stability should be within:

- Temperature  $\pm$  3% of reading (minimum of  $\pm$  0.2 C) (with a maximum of  $\pm$  10%)
- pH ± 0.1 pH units, minimum
- Conductivity ± 3%
- Dissolved Oxygen (DO) ± 0.2 mg/L or ± 10% of reading whichever is greater
- Redox (ORP) ± 20 mv

#### Equipment List:

The following equipment is needed to conduct low flow purging and sampling:

- Bladder pump temporarily or permanently installed within the well's screened interval
- Pump controller and air source
- In-line flow cell and meter(s) with connection fittings and tubing to measure water quality
- Water Level Probe or installed dedicated water level measurement system
- Sample containers appropriate for the analytical requirements prepared by the laboratory
- Field Measurement documentation forms
- Graduated cylinder or measuring cup
- 5 gallon bucket(s) for containerizing purge water
- Labeled 55 gallon drum(s) for storing purge water
- Stopwatch
- Sufficient cleaning and decontamination supplies

#### PROCEDURE

- 1. Regularly calibrate all field instruments per the instrument manufacturer's instructions. Record calibration data on the proper field instruments calibration documentation form.
- Proceed to the first well scheduled to be sampled (typically the least contaminated). Make notes in the field log book describing the well condition and activity in the vicinity of the well. Decontaminate the portable water gauging probe, if necessary, by washing with phosphatefree detergent, rinsing with potable water and rinsing with deionized water.
- 3. Open the well boxes and remove the locking caps. Allow the liquid levels within the wells to equilibrate with ambient barometric conditions.
- 4. Measure the depth to water from the surveyed reference mark on the wellhead and record the measurement on the field datasheet. Lock the water level meter in place so that the level can be monitored during purging and sampling. When placing the probe in the well, take precautions to not disturb or agitate the water.
- 5. Connect the compressed air source's airline to the pump controller's "AIR IN" connection (If utilizing a gas-engine operated compressor, locate the compressor at least 25 feet, down wind from the wellhead), and connect the pump controller "AIR OUT air-line to the bladder pump's air supply fitting at the wellhead.
- 6. Connect the pump discharge line to the in-line flow cell's "IN" fitting.
- 7. Connect the flow cell's "OUT" line and secure to drain the purge water into the purge water collection container.
- 8. Lower the bladder pump into the well to the middle of, or slightly above, the screened interval. When placing the pump in the well, take precautions to not disturb or agitate the water. Lock the pump in place.

- 9. Start the air supply to the pump. Set the pump controller settings to equal or less than the documented settings for the specific well. Modify the settings, as necessary to achieve the well's optimum flow rate. Connect the well discharge to the in-line flow cell and modify the flow rate as necessary.
- 10. Monitor the water level and confirm that the water level drawdown has stabilized within the well's allowable limits. Measure and record the depth to the pump intake, depth to groundwater when purging is terminated, and the depth to groundwater when the sample is collected.
- 11. After a single pump-system's volume (flow cell volume + bladder volume + discharge tubing volume) has been adequately purged, read and record water quality field measurements every three to five minutes.
- 12. Once three successive readings are taken within the limits listed above, disconnect the flow cell, and its tubing, from the pump discharge line before collecting samples. Decrease the pump rate to 100 milliliters per minute or less by lowering the controller's air pressure setting prior to collecting samples for volatiles. Place the samples in a cooler with sufficient ice.
- 13. Once samples for volatiles have been collected, re-establish pump flow rate to the optimal purge flow rate and collect remaining samples, if necessary.
- 14. When all sample containers have been filled, make a final measurement of the well's static water level and record the measurement on the field datasheet.
- 15. Measure and record total purge volume collected. Consolidate generated purge water.
- 16. Remove and decontaminate the Portable Water Level Probe with phosphate-free detergent, rinsing with potable water and rinsing with deionized water.
- 17. Disconnect the controller air supply to the pump.
- 18. Secure the pump's discharge adapter in the wellhead, if appropriate.
- 19. Secure the wellhead cover and secure with its lock, if appropriate. Move equipment to next well to be sampled.
- 20. At the end of the sampling event, clean and decontaminate the in-line flow cell and other equipment with phosphate-free detergent, rinsing with potable water and rinsing with deionized water.

# ATTACHMENT B

ANALYTICAL REPORT OF GRAB GROUNDWATER SAMPLE





Arnulfo Cardona Tec Accutite 262 Michelle Ct South San Francisco, California 94080 Tel: (650) 616-1200 Fax: (650) 616-1244 Email: tecaccutite@gmail.com

RE: 2607 Myrtle, Oakland

Work Order No.: 1608099

Dear Jim Hanlon:

Torrent Laboratory, Inc. received 1 sample(s) on August 11, 2016 for the analyses presented in the following Report.

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.

Patti L Sandrock QA Officer

August 18, 2016

Date



Date: 8/18/2016

Client: Tec Accutite Project: 2607 Myrtle, Oakland Work Order: 1608099

#### CASE 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.



## Sample Result Summary

Report prepared for:	Jim Hanlon				Date	Received: 0	8/11/16
	Tec Accutite				Date	Reported: 0	8/18/16
Well 00						160	08099-001
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)		8260TPH	1	29	50	98.1	ug/L
TPH as Diesel		SW8015E	5	0.19	0.50	5.19	mg/L



#### SAMPLE RESULTS

Report prepared for:	Jim Hanlon Tec Accutite						Date/Time	e Received Date		1/16, 12: r <b>ted:</b> 08	•
Client Sample ID:	Well 00				Lab Samp	le ID:	16080	99-001A			
Project Name/Location:	2607 Myrtl	e, Oakla	nd		Sample M	atrix:	Water				
Project Number:	F1-150810	)									
Date/Time Sampled:	08/10/16 /	7:55									
SDG:											
Tag Number:	2607 Myrtl	e St									
Prep Method: 5030VOC					Prep Batch	n Date/Tii	<b>me:</b> 8/15	/16 9	9:01:00	AM	
Prep Batch ID: 1707					Prep Analy	/st:	BPA	TEL			
Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	Ву	Analytical Batch
The results shown below	are reported usi	ng thei	r MDL.						<u> </u>		
Benzene	SW8260B	4.2	0.66	2.1	ND		ug/L	08/15/16	20:42	BP	419286
Toluene	SW8260B	4.2	0.60	2.1	ND		ug/L	08/15/16	20:42	BP	419286
Ethyl Benzene	SW8260B	4.2	0.82	2.1	ND		ug/L	08/15/16	20:42	BP	419286
n,p-Xylene	SW8260B	4.2	1.7	4.2	ND		ug/L	08/15/16	20:42	BP	419286
o-Xylene	SW8260B	4.2	0.65	2.1	ND		ug/L	08/15/16	20:42	BP	419286
Naphthalene	SW8260B	4.2	5.1	8.4	ND		ug/L	08/15/16	20:42	BP	419286
S) Dibromofluoromethane	SW8260B		61.2 - 1	31	130		%	08/15/16	20:42	BP	419286
S) Toluene-d8	SW8260B		75.1 - 12	27	92.1		%	08/15/16	20:42	BP	419286
S) 4-Bromofluorobenzene	SW8260B		64.1 - 12	20	96.9		%	08/15/16	20:42	BP	419286
<b>IOTE:</b> The reporting limits	were raised due to th	ne high c	concentrati	on of non-t	arget heavy end	compour	nds.				
Prep Method: 5030GRO					Prep Batch	n Date/Tii	me: 8/12	/16 9	9:32:00	PM	
Prep Batch ID: 1689					Prep Analy	/st:	BPA	TEL			
Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	Ву	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50	98.1	x	ug/L	08/12/16	14:03	torrent	419254
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 1	25	84.9		ug/L	08/12/16	14:03	torrent	419254

NOTE: x – Does not match pattern of reference Gasoline standard. Reported value is the result of contribution from hydrocarbons heavier than requested fuel into range of C5-C12 quantified as gasoline.



#### SAMPLE RESULTS

Report prepared for:	Jim Hanlon Tec Accutite						Date/Time	e Received Date		1/16, 12 <b>rted:</b> 08	•
Client Sample ID:	Well 00				Lab Samp	le ID:	160809	99-001B			
Project Name/Location:	2607 Myrtl	e, Oakla	nd		Sample Ma	atrix:	Water				
Project Number:	F1-150810	)									
Date/Time Sampled:	08/10/16 /	7:55									
SDG:											
Tag Number:	2607 Myrtl	e St									
Prep Method: 3510_TPH Prep Batch ID: 1682					Prep Batch Prep Analy		<b>me:</b> 8/15/ MKA	-	2:12:00	РМ	
	Analysis Method	DF	MDL	PQL	-			-		PM By	Analytical Batch
Prep Batch ID: 1682	-	5	MDL 0.19	0.50	Prep Analy	st:	MKA	UR	Time		-



Work Order:	1608099	Prep I	Method:	5030VOC	Prep Date:	08/12/16	Prep Batch:	1672
Matrix:	Water	Analy		SW8260B	Analyzed Date:	8/12/2016	Analytical	419254
Units:	ug/L	Metho	d:				Batch:	
				Barth a d	I			
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier			
Dichlorodifluorom	nethane	0.26	0.50	ND				
Chloromethane		0.17	0.50	ND				
Vinyl Chloride		0.21	0.50	ND				
Bromomethane		0.21	0.50	ND				
Chloroethane		0.11	0.50	ND				
Trichlorofluorome	ethane	0.19	0.50	ND				
1,1-Dichloroether	ne	0.14	0.50	ND				
Freon 113		0.34	0.50	ND				
Methylene Chlori	de	0.13	0.50	ND				
trans-1,2-Dichlor		0.16	0.50	ND				
MTBE		0.077	0.50	ND				
tert-Butanol		7.4	10	ND				
Diisopropyl ether	(DIPE)	0.12	0.50	ND				
1,1-Dichloroethar		0.12	0.50	ND				
ETBE		0.064	0.50	ND				
cis-1,2-Dichloroe	thene	0.15	0.50	ND				
2,2-Dichloropropa		0.094	0.50	ND				
Bromochlorometh		0.15	0.50	ND				
Chloroform		0.12	0.50	0.18				
Carbon Tetrachlo	oride	0.16	0.50	ND				
1,1,1-Trichloroeth		0.16	0.50	ND				
1,1-Dichloroprope		0.19	0.50	ND				
Benzene		0.16	0.50	ND				
TAME		0.072	0.50	ND				
1,2-Dichloroethar	ne	0.11	0.50	0.12				
Trichloroethylene		0.11	0.50	ND				
Dibromomethane		0.13	0.50	ND				
1,2-Dichloropropa		0.089	0.50	ND				
Bromodichlorome		0.089	0.50	ND				
cis-1,3-Dichlorop		0.078	0.50	ND				
Toluene	opene	0.078	0.50	ND				
	200	0.14	0.50	ND				
Tetrachloroethyle		0.24	0.50 0.50	ND				
trans-1,3-Dichloro		0.22		ND				
1,1,2-Trichloroeth			0.50					
		0.18	0.50	ND				
1,3-Dichloropropa		0.22	0.50	ND				
1,2-Dibromoetha	ne	0.079	0.50	ND				
Chlorobenzene		0.16	0.50	ND				
Ethyl Benzene		0.20	0.50	ND				
1,1,1,2-Tetrachlo	roethane	0.087	0.50	ND				
m,p-Xylene		0.39	1.0	ND				



Work Order:	1608099	Prep	Method:	5030VOC	Prep	Date:	08/12/16	Prep Batch:	1672
Matrix:	Water	Analy		SW8260B	Anal	yzed Date:	8/12/2016	Analytical	419254
Units:	ug/L	Metho	Dd:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
o-Xylene		0.15	0.50	ND		1			
Styrene		0.11	0.50	ND					
Bromoform		0.076	0.50	ND					
Isopropyl Benzene	e	0.22	0.50	ND					
n-Propylbenzene		0.30	0.50	ND					
Bromobenzene		0.15	0.50	ND					
1,1,2,2-Tetrachlor	oethane	0.079	0.50	ND					
2-Chlorotoluene		0.25	0.50	ND					
1,3,5-Trimethylber	nzene	0.24	0.50	ND					
1,2,3-Trichloropro	pane	0.15	0.50	ND					
4-Chlorotoluene		0.22	0.50	ND					
tert-Butylbenzene		0.26	0.50	ND					
1,2,4-Trimethylber	nzene	0.23	0.50	ND					
sec-Butyl Benzene	Э	0.30	0.50	ND					
p-Isopropyltoluene	9	0.27	0.50	ND					
1,3-Dichlorobenze	ene	0.17	0.50	ND					
1,4-Dichlorobenze	ene	0.18	0.50	ND					
n-Butylbenzene		0.27	0.50	ND					
1,2-Dichlorobenze	ene	0.16	0.50	ND					
1,2-Dibromo-3-Ch	loropropane	0.76	2.0	ND					
Hexachlorobutadie	ene	0.62	2.0	ND					
1,2,4-Trichlorober	izene	0.93	2.0	ND					
Naphthalene		1.2	2.0	ND					
1,2,3-Trichlorober	izene	1.2	2.0	ND					
(S) Dibromofluoro	methane			112					
(S) Toluene-d8				88.0					
(S) 4-Bromofluoro	benzene			95.9					
Work Order:	1608099	Prep	Method:	3510_TPH	Prep	Date:	08/15/16	Prep Batch:	1682
Matrix:	Water	Analy		SW8015B	Anal	yzed Date:	8/15/2016	Analytical	419296
Units:	mg/Kg	Metho	od:					Batch:	
				Method	Lab				

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel	0.037	0.10	ND		
TPH as Motor Oil	0.11	0.40	ND		
Pentacosane (S)			88.1		



Work Order:			Prep Method:		Prep	Date:	08/12/16	Prep Batch:	1689
Matrix:	Water	Analy		SW8260B	Anal	yzed Date:	8/12/2016	Analytical	419254
Units:	nits: ug/L		Method:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
TPH(Gasoline) (S) 4-Bromofluorobenzene		29	50	ND 63.8					



Work Order:	1608099	Prep I	lethod:	5030VOC	Prep Date:	08/15/16	Prep Batch:	1707
Matrix:	Water	Analy		SW8260B	Analyzed Da	ate: 8/15/2016	Analytical	419286
Units:	ug/L	Metho	d:				Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier			
Dichlorodifluoromet	thane	0.26	0.50	ND	1			
Chloromethane		0.17	0.50	ND				
Vinyl Chloride		0.21	0.50	ND				
Bromomethane		0.21	0.50	ND				
Chloroethane		0.11	0.50	ND				
Trichlorofluorometh	ane	0.19	0.50	ND				
1,1-Dichloroethene		0.14	0.50	ND				
Freon 113		0.34	0.50	ND				
Methylene Chloride	•	0.13	0.50	ND				
trans-1,2-Dichloroe		0.16	0.50	ND				
MTBE		0.077	0.50	ND				
tert-Butanol		7.4	10	ND				
Diisopropyl ether (D	DIPE)	0.12	0.50	ND				
1,1-Dichloroethane		0.12	0.50	ND				
ETBE		0.064	0.50	ND				
cis-1,2-Dichloroethe	ene	0.15	0.50	ND				
2,2-Dichloropropan		0.094	0.50	ND				
Bromochlorometha		0.15	0.50	ND				
Chloroform		0.12	0.50	ND				
Carbon Tetrachlorid	de	0.16	0.50	ND				
1,1,1-Trichloroethai		0.16	0.50	ND				
1,1-Dichloropropen		0.19	0.50	ND				
Benzene	•	0.16	0.50	ND				
TAME		0.072	0.50	ND				
1,2-Dichloroethane		0.11	0.50	0.12	J			
Trichloroethylene		0.15	0.50	ND	· ·			
Dibromomethane		0.11	0.50	ND				
1,2-Dichloropropan	e	0.089	0.50	ND				
Bromodichlorometh		0.076	0.50	ND				
cis-1,3-Dichloropro		0.078	0.50	ND				
Toluene		0.14	0.50	ND				
Tetrachloroethylene	9	0.24	0.50	ND				
trans-1,3-Dichlorop		0.24	0.50	ND				
1,1,2-Trichloroetha	•	0.076	0.50	ND				
Dibromochlorometh		0.18	0.50	ND				
1,3-Dichloropropan		0.10	0.50	ND				
1,2-Dibromoethane		0.079	0.50	ND				
Chlorobenzene		0.16	0.50	ND				
Ethyl Benzene		0.10	0.50	ND				
1,1,1,2-Tetrachloro	othano	0.20	0.50	ND				
1, 1, 1, Z <sup>-</sup> 1 Cliaciii010		0.087	1.0	ND				



Work Order:	1608099	Prep M	lethod:	5030VOC	Prep	Date:	08/15/16	Prep Batch:	1707	
Matrix:	Water	Analyt		SW8260B	Anal	yzed Date:	8/15/2016	Analytical	419286	
Units:	ug/L	Method:						Batch:		
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier					
o-Xylene		0.15	0.50	ND						
Styrene		0.11	0.50	ND						
Bromoform		0.076	0.50	ND						
Isopropyl Benzene	е	0.22	0.50	ND						
n-Propylbenzene		0.30	0.50	ND						
Bromobenzene		0.15	0.50	ND						
1,1,2,2-Tetrachlor	oethane	0.079	0.50	ND						
2-Chlorotoluene		0.25	0.50	ND						
1,3,5-Trimethylber	nzene	0.24	0.50	ND						
1,2,3-Trichloropro	pane	0.15	0.50	ND						
4-Chlorotoluene		0.22	0.50	ND						
tert-Butylbenzene		0.26	0.50	ND						
1,2,4-Trimethylber	nzene	0.23	0.50	ND						
sec-Butyl Benzen	e	0.30	0.50	ND						
p-Isopropyltoluene	e	0.27	0.50	ND						
1,3-Dichlorobenze	ene	0.17	0.50	ND						
1,4-Dichlorobenze	ene	0.18	0.50	ND						
n-Butylbenzene		0.27	0.50	ND						
1,2-Dichlorobenze	ene	0.16	0.50	ND						
1,2-Dibromo-3-Ch	loropropane	0.76	2.0	ND						
Hexachlorobutadi	ene	0.62	2.0	ND						
1,2,4-Trichlorober	nzene	0.93	2.0	ND						
Naphthalene		1.2	2.0	ND						
1,2,3-Trichlorober	nzene	1.2	2.0	ND						
(S) Dibromofluoro	methane			100						
(S) Toluene-d8				90.9						
(S) 4-Bromofluoro	benzene			94.6						



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1608099		Prep Methe	<b>od:</b> 5030	VOC	Prep Da	te:	08/12/16	Prep Batch: 1672					
Matrix:	Water		Analytical Method:	SW8	260B	Analyze	d Date:	8/12/2016	Analytical 419254 Batch:					
Units:	ug/L		mourou											
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier			
1,1-Dichloroethen	е	0.14	0.50		17.9	120	109	9.76	61.4 - 129	30				
Benzene		0.16	0.50		17.9	120	138	13.9	66.9 - 140	30				
Trichloroethylene		0.15	0.50		17.9	112	117	4.40	69.3 - 144	30				
Toluene		0.14	0.50		17.9	110	120	11.5	76.6 - 123	30				
Chlorobenzene		0.16	0.50		17.9	106	121	12.8	73.9 - 137	30				
(S) Dibromofluoro	methane				17.9	106	118		61.2 - 131					
(S) Toluene-d8					17.9	96.3	101		75.1 - 127					
(S) 4-Bromofluoro	benzene				17.9	91.3	102		64.1 - 120					
Work Order: 1608099			Prep Methe	<b>od:</b> 3510	_TPH	Prep Da	te:	08/15/16	Prep Ba	t <b>ch:</b> 168	2			
Matrix:	Matrix: Water		Analytical Method:	SW8	015B	Analyze	d Date:	8/15/2016	Analytic Batch:	<b>al</b> 419	296			
Units:	mg/Kg		mourour						Batom					
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier			
TPH as Diesel		0.037	0.10	ND	1.0	63.5	62.2	2.07	52 - 115	30				
Pentacosane (S)					200	70.1	73.1		59 - 129					
Work Order:	1608099		Prep Metho	od: 5030	GRO	Prep Da	te:	08/12/16	Prep Ba	t <b>ch:</b> 168	9			
Matrix:	Water		Analytical	SW8	260B	Analyze	d Date:	8/12/2016	Analytic	<b>al</b> 419	254			
Units:	ug/L		Method:						Batch:					
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier			
TPH(Gasoline)		29	50	ND	238	118	88.5	28.8	52.4 - 127	30	•			
					11.9	75.9								



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order: 160809			Prep Metho	rep Method: 5030VOC		Prep Da	te:	08/15/16	Prep Batch: 1707				
Matrix: Water			Analytical	SW8	SW8260B		d Date:	8/15/2016	Analytical 419286				
Units:	ug/L		Method:						Batch:				
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier		
1,1-Dichloroethen	e	0.14	0.50	ND	17.9	121	96.1	22.7	61.4 - 129	30	1		
Benzene		0.16	0.50	ND	17.9	137	107	24.8	66.9 - 140	30			
Trichloroethylene		0.15	0.50	ND	17.9	112	91.1	20.4	69.3 - 144	30			
Toluene		0.14	0.50	ND	17.9	116	93.4	21.4	76.6 - 123	30			
Chlorobenzene		0.16	0.50	ND	17.9	112	89.9	21.6	73.9 - 137	30			
(S) Dibromofluoro	methane				17.9	128	104		61.2 - 131				
(S) Toluene-d8					17.9	107	87.3		75.1 - 127				
(S) 4-Bromofluoro	) 4-Bromofluorobenzene				17.9	111	86.0		64.1 - 120				



## 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 gualifier 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.



Project Name: 2607 Myrtle, Oakland

Client Name: Tec Accutite

Work Order No.: 1608099

# Sample Receipt Checklist

Date and Time Received: <u>8/11/2016</u> <u>12:18:00PM</u> Received By: ke Physically Logged By: Lorna Imbat Checklist Completed By: Carrier Name: FedEx

#### 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?	Yes	Temperature:	4.0	°C
Water-VOA vials have zero headspace?	<u>Yes</u>			
Water-pH acceptable upon receipt?				
pH Checked by: n/a	pH Adjusted by: r	n/a		

#### **Comments:**



# Login Summary Report

Client ID:	TL5132	Tec Accutite			Q	C Level:	П	
Project Name:	2607 Myrtle, O	akland			ТА	T Reques	<b>ted:</b> 5	
Project # :	F1-150810				Da	te Receive	ed: 8/11/2016	
Report Due Date:	8/18/2016				Tir	ne Receiv	ed: 12:18 pm	
Comments:								
Work Order # :	1608099							
WO Sample ID	<u>Client</u> Sample ID	<u>Collect</u> Date/T		<u>Scheduled</u> <u>Disposal</u>	<u>Sample</u> <u>On Hold</u>	<u>Test</u> On Hold	<u>Requested</u> <u>Tests</u>	Subbed
1608099-001A	Well 00	08/10/16	7:55 Water	09/25/16			VOC_W_Pet VOC_W_GRO VOC_W_8260B EDF	
Sample Note:	BTEX,TPHg and	Napthalene						
1608099-001B	Well 00	08/10/16	7:55 Water	09/25/16			TPHDO_W_8015B(M)	



200

CONFLUT	Confluence Environmental, Inc. 3308 El Camino Ave, Suite 300 # 14 Sacramento, CA 95821 916-760-7641 - main 916-473-8617 - fax www.confluence-env.com Torrent Itess: 483 Sinclair Frontage Rd, Milpitas				:. #14	]	Ch Project Na Job Numb FAT: ST/	er:	ARI	Ŧ	5 DA	<u>86</u> ү	\0 2 D.					THE	R:			e		y <u>1 or 1</u> te land	
	inclair Frontage Rd	l, Milpita	s				California Giobal	-		the second s	_							_						6-473-8617	
Contact:							nclude EDF w			-		No						Cor	nflue	nce l	Log	Code:	CES	SC	
hone/ Fax: 40	8-263-5258					C	Consultant / PM:											Rep	ort to	);		mes H	anlon		
						Р	hone / Fax:	650	-616	-122	3				_			Invo	oice t	0:	TH	EC			-
	Sample ID		Date Date	Soil/Solid	Water/Liquid		.aboratory No.	65 No. of Containers	Unpreserved	HSO.		51 3	NaOH	(	TPH-GBTEX MTBE (8260)	(\$108) (I-HdL)	< Napryauene					22		Notes Comm	
	od:	Environ	nental				A	nquis	/		Filiati s ~A.	Rni	4	>	8/1	Date 7/6 1/2016 1/2016	Time 1403 10:54 1218	10			100	1 ATTILI	0	Date 53/10/1 8/11/20/	814.6

# ATTACHMENT C

GEOTRACKER SUBMISSION CONFIRMATION

