LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
SANITARY SEWER REHABILITATION PROJECT
SUB-BASIN 60-04
OAKLAND, CALIFORNIA

PREPARED FOR:
Mr. Mark Arniola, Environmental Program Specialist
City of Oakland, Public Works
Department Environmental Sciences Division
250 Frank Ogawa Plaza, Suite 5301
Oakland, California 94612

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612

January 8, 2016
Project No. 402231013

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Mr. Mark Arniola, Environmental Program Specialist
City of Oakland, Public Works
Department Environmental Sciences Division
250 Frank Ogawa Plaza, Suite 5301
Oakland, California 94612

Subject: Limited Phase II Environmental Site Assessment,
Sanitary Sewer Rehabilitation Project, Sub-Basin 60-04
2301 East 12th Street and 1125 Miller Place
Oakland, California

Dear Mr. Arniola:

In general accordance with our proposal dated October 29th, 2015, Ninyo & Moore has performed a Limited Phase II Environmental Site Assessment for the above-referenced properties in Oakland. This report documents the recent site assessment activities, the results of site work, and our conclusions and recommendations regarding the environmental conditions at the site.

We appreciate the opportunity to be of service to you on this project.

Sincerely,
NINYO & MOORE

Kris M. Larson, PG 8059
Principal Environmental Geologist

Duane W. Blamer, PG 6913
Manager, Environmental Sciences

KML/DWB/vmp

Distribution: Addressee (2 hard copies and 1 electronic copy)

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1. INTRODUCTION

Ninyo & Moore was retained by the City of Oakland Public Works Agency, Environmental Services Division (City) to conduct a Limited Phase II Environmental Site Assessment (ESA) within the public right of way (ROW) and within the boundaries of Sub-Basin 60-04 in Oakland, California (site; Figure 1). The work was conducted in general accordance with our proposal dated October 29, 2015.

Our scope of work for this Phase II Environmental Site Assessment (ESA) was focused on two potential areas of concern reported in our Hazardous Materials Assessment (HMA) dated June 10, 2015 (Ninyo 2015) including 2301 East 12th Street, which is an open Leaking Underground Storage Tank (LUST) case, and 1125 Miller Place, which is a closed LUST case. Both of these cases are adjacent to proposed sewer line construction work proposed by the City of Oakland Public Works Agency. Due to the potential for impacts to soil and groundwater within the proposed sewer line work areas in these two areas of concern, Ninyo & Moore collected soil samples to 1) evaluate the potential for worker exposure, and 2) classify soil for disposal. Groundwater samples were not collected because groundwater was not encountered during our sampling event. Our sample locations included the following areas:

- Two borings (2301-B-1 and 2301-B-2) were advanced on a sidewalk adjacent to a suspected sewer lateral on the northeast side of the 2301 East 12th Street building.
- Two borings (1125-B-1 and 1125-B-2) were advanced adjacent to a sewer lateral located within the public ROW beneath Miller Place.

2. OBJECTIVE

The objective of the Limited Phase II ESA was to classify soil for disposal and evaluate potential worker exposure concerns relating to soils encountered during future construction activities.

3. SITE SETTING

The site boundary for this Phase II ESA included Sub-Basin 60-04, specifically sewer laterals in the vicinity of 2301 East 12th Street and 1125 Miller Avenue in Oakland (Figures 2 and 3).

Investigative activities consisted of pre-field preparations and boring installation for soil sampling. Ninyo & Moore conducted the soil sampling activities on December 18, 2015. Our pre-field and field activities are discussed in the sections below.

3.1. Pre-field Preparation

Pre-field preparations were performed prior to implementation of drilling activities. Ninyo & Moore performed the following pre-field preparations.

3.1.1. Permits

Two drilling permits for four boring locations were obtained on December 8, 2015, from the Alameda County Public Works Agency. Two obstruction permits and two excavation permits were obtained on December 9, 2015, from the City of Oakland. Copies of these permits are included in Appendix A of this report.

3.1.2. Underground Services Alert (USA)

Ninyo & Moore marked proposed boring locations with white paint and notified USA more than 48 hours in advance of any drilling per USA guidelines.

3.2. Drilling Company and Drilling Dates

Vapor Tech Services of Hayward, California, performed drilling of the borings on December 18, 2015 using a hand auger and a truck-mounted Geoprobe rig. Vapor Tech is a C-57 licensed California well drilling contractor.

3.3. Ninyo & Moore Personnel

Ninyo & Moore's Project Environmental Geologist, Forrest McFarland, supervised the installation of the borings and completed sampling efforts on December 18, 2015. Mr. McFarland is a California Registered Geologist.

3.4. Sampling Methodology

Four soil borings, including borings 2301-B-1 and 2301-B-2 (2301 East 12th Street), and borings 1125-B-1 and 1125-B-2 (1125 Miller Place), were advanced for the collection of soil samples (Figures 2 and 3). One boring from each address was also proposed for groundwater

sample collection; however groundwater was not encountered at any of the borings. Soil borings were advanced to 20 feet below ground surface (bgs) in three of the borings (2301-B-2, 1125-B-1 and 1125-B-2) and to 22 feet bgs at boring 2301-B-1 using a Geoprobe sampling rig subsequent to hand-augering the first five feet for utility clearance. Samples were collected from acetate sleeves within the sampling rods or from the hand auger bucket. A photoionization detector (PID) was used to measure potential volatile organic vapors from the soil sample sleeves and aid in determining the best depth to collect soil samples for laboratory analysis. One soil sample was submitted from each boring at a depth where obvious signs of contamination were observed, where elevated PID readings were observed, or if no contamination or elevated PID readings were observed, at approximately one-foot above first-observed groundwater.

The direct push Geoprobe rods and hand auger were decontaminated between borings using a steam cleaner to help minimize cross contamination. The water generated from the steam cleaning was mixed with cement grout, which was used during tremmie grouting operations for each of the boreholes. The grout was placed to match the surface condition.

3.5. Site Sedimentology and Soil Conditions

The surface cover at borings 2301-B-1 and 2301-B-2 consisted of 4 inches of concrete underlain by approximately one foot of sand and gravel fill. Moist and stiff sandy silt was observed underlying the fill to approximately 14 feet bgs in 2301-B-1 and 18 feet bgs in 2301-B-2. A two-foot lens of silty sand/ gravel was encountered in boring 2301-B-2 between 18 and 20 feet bgs, while the lithology changed from a stiff clay (encountered at 14 feet bgs) to a sandy silt at approximately 18 feet bgs in boring 2301-B-1 to the bottom of the boring at 22 feet bgs. Boring 2301-B-2 terminated at 20 feet bgs. Soil in both borings was field evaluated for organic vapors using a PID meter during sampling, and measurements were generally very low with the exception of the soil at approximately 10 feet bgs in boring 2301-B-1, where organic vapor was measured at 365 parts per million (ppm).

The surface cover at borings 1125-B-1 and 1125-B-2 consisted of 6 inches of concrete underlain by approximately one foot of sand and gravel fill. Silty sand was observed

underlying the fill in boring 1125-B-1 to approximately 10 feet bgs where a change was noted in the lithology to a sandy silt. No other changes were observed until the very bottom of the boring (20 feet bgs) where a clayey silt was observed. Trace gravels were observed in shallow and deeper soils. The lithology observed beneath the fill in boring 1125-B-2 was observed as silt to approximately 10 feet bgs where it was underlain by sandy silt to the bottom of the boring at 20 feet bgs. Trace gravels were observed throughout. No PID measurements exceeded 2.7 ppm during our evaluation of organic vapors in either boring. A more detailed description of lithology features is described in boring logs included in Appendix B.

3.6. Sample Collection and Laboratory Analysis

The soil samples used for laboratory analysis were obtained by removing the sample from the Geoprobe acetate sleeves. The analyses selected for soil samples were based on the likely environmental concerns attributed to the historical site use in the vicinity of the proposed project areas and for waste classification.

The soil samples were placed in a cooler on ice and delivered to TestAmerica Laboratories in Pleasanton, California for analysis with completed chain-of-custody documentation.

Soil samples were analyzed for the following:

- Total petroleum hydrocarbons as diesel (TPHd), and motor oil (TPHmo) using EPA Method 8015B.
- Benzene, toluene, ethylbenzene and total xylenes (BTEX) compounds and total petroleum hydrocarbons as gasoline (TPHg) using EPA Method 8260B.
- Title 22 Metals using EPA Method 6010B. Groundwater samples were Lab-filtered.

3.7. Soil Sample Laboratory Analytical Results

The soil laboratory analytical results are summarized in Tables 1 and 2. The laboratory analytical reports are included in Appendix C. Soil sample analytical results were compared to Regional Water Quality Control Board Environmental Screening Levels (ESLs), Tables K-2 and K-3 (RWQCB, 2013), as well as the Duverge and RWQCB Established Background

Arsenic in Soil of Urbanized San Francisco Bay Region (Duverge, 2011). A summary of the constituents is below.

- **Title 22 Metals**- Barium, chromium, cobalt, copper, lead, nickel, mercury, vanadium, and zinc were reported above laboratory reporting limits (RLs) within all of the soil samples. Arsenic was reported above RLs in two samples and beryllium was reported in one of the four samples collected. The detected metals concentrations were below Construction/Trench Worker ESLs in all samples. The Commercial/Industrial worker ESL (Table K-2) of 1.6 milligrams per kilograms (mg/kg) for arsenic was exceeded in two of the four soil samples collected. However, the arsenic concentrations were within the Duverge and RWQCB *Established Background Arsenic in Soil of Urbanized San Francisco Bay Region* (Duverge, 2011) of 11 mg/kg.

- **Total Petroleum Hydrocarbons** -TPHg was reported at concentrations above the RL (14 mg/kg) in sample 2301-B-1-10. TPHg was not reported above the RL in any of the other three samples collected. TPHd was reported above the RL in all samples with the exception of 1125-B-1-10. The highest concentration of TPHD was detected at 200 mg/kg in sample 1125-B-2-16. TPHmo was not reported above the RLs in any of the samples. None of the samples exceeded the Construction/Trench Worker and Commercial/Industrial Worker ESLs for TPH constituents.

- **BTEX** – none of the BTEX compounds exceeded their respective LRs or Construction/Trench Worker and Commercial/Industrial Worker ESLs in any of the samples collected.

4. QUALITY ASSURANCE/QUALITY CONTROL RESULTS

The laboratory analyses were reviewed by Ninyo & Moore as a check of overall quality. The data quality check process included a review of chain-of-custody forms, holding times, laboratory analytical reports, method blanks, surrogate recoveries, matrix spike, matrix spike duplicates, and detection limits.

A review of laboratory Quality Assurance/Quality Control analysis indicated that holding times were met for all samples indicating proper sample extraction and analysis procedures. Certain compounds in the matrix spike and matrix spike duplicate analysis were outside of their respective recovery criteria due to matrix interference and/or non-homogeneity; however, the lab control samples (LCS) were within limits. Elevated reporting limits due to sample dilution were reported for Method 6010B in sample 1125-B-1-10; however, none of the reporting limits

negatively impacted the data. The analytical batch was validated by the laboratory control sample and is deemed reliable for use.

5. CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this investigation, we provide the following conclusions and recommendations:

- None of the constituents detected in soil exceed the San Francisco Bay RWQCB ESLs for the construction/trench worker or commercial/industrial worker direct exposure scenarios with the exception of arsenic. Arsenic exceeded the commercial/industrial ESL, but was reported below the construction/trench worker ESL. Arsenic was also within the RWQCB/Duverge established background concentration range.

- Although none of the soil sample analytical results exceed screening criteria for construction/trench worker direct exposure (except arsenic as noted), moderate concentrations of TPH compounds were reported in soil, including soil that may be excavated for utility work. It is anticipated that excavated soil within the project area will be classified as Class II non-hazardous waste. However, if contaminated soil is encountered, which would be characterized by odors or obvious signs of staining, it should be stockpiled and sampled for waste profiling and identification of an appropriate facility for disposal. If contaminated soil is encountered during construction activities, the contractor should contact the City for further guidance regarding worker safety, soil handling, and disposal options.

6. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

Ninyo & Moore's findings, conclusions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between

sampling locations. Variations in soil conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

7. REFERENCES

Duverge and RWQCB, 2011 Established Background Arsenic in Soil of Urbanized San Francisco Bay Region, dated December.

Ninyo & Moore, 2014, *Hazardous Materials Assessment, Sanitary Sewer Rehabilitation Project, Sub Basin 60-06, Oakland, California*, dated July 25.

RWQCB, 2013, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater,* California Regional Water Quality Control Board, dated December.

TABLE 1
SOIL SAMPLE LABORATORY ANALYTICAL RESULTS
TITLE 22 METALS

Sample ID	Sample Collection Date	Sample Depth (ft bgs)	Analytes															
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury
			Soil Sample Analytical Results (mg/kg)																
2301-B-1-10	12/18/2015	10	ND<0.46	ND<0.92	140	ND<0.092	ND<0.11	22	6.9	8.5	7.5	ND<0.46	48	ND<0.92	ND<0.23	ND<0.46	25	30	0.073
2301-B-2-10	12/18/2015	10	ND<0.47	**6.4**	130	ND<0.093	ND<0.12	17	14	5.9	6.8	ND<0.47	88	ND<0.93	ND<0.23	ND<0.47	36	35	0.073
1125-B-1-10	12/18/2015	10	ND<1.4	**4.9**	180	0.55	ND<0.36	41	13	19	9.5	ND<1.4	54	ND<2.9	ND<0.72	ND<1.4	28	37	0.072
1125-B-2-16	12/18/2015	16	ND<0.48	ND<0.95	98	ND<0.095	ND<0.12	13	8	3.4	4.3	ND<0.48	61	ND<0.95	ND<0.24	ND<0.48	27	25	0.1
Construction/Trench Worker ESL[1]			120	10	61,000	180	110	NE	49	12,000	320	1,500	6,100	1,500	1,500	3.1	1,500	93,000	27
Commercial/Industrial Worker ESL[2]			410	1.6	190,000	2,000	1,000	NE	300	41,000	320	5,100	19,000	5,100	5,100	10	5,100	310,000	88
Duverge[3]			---	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

mg/kg = milligrams per kilogram

ft bgs = feet below ground surface

ND< X = concentration not detected above laboratory reporting limits of X

--- Not Applicable

[1] - Construction/Trench worker ESLs = San Francisco Bay RWQCB Environmental Screening Levels - Table K-3 Construction/Trench Worker Exposure Scenario, Revised December 2013

[2] - Commercial/Industrial worker ESLs = San Francisco Bay RWQCB Environmental Screening Levels - Table K-2 Direct Exposure Soil Screening Levels, Commercial/Industrail Worker Exposure Senario, Revised December 2013

[3] - Duverge and RWQCB, Established Background Arsenic in Soil of Urbanized San Francisco Bay Region dated December 2011

Samples analyzed for Title 22 Metals using EPA Method 6010B, except for Mercury which was analyzed using 7471A

Bold indicates exceedence of Commercial/Industrial Worker ESL

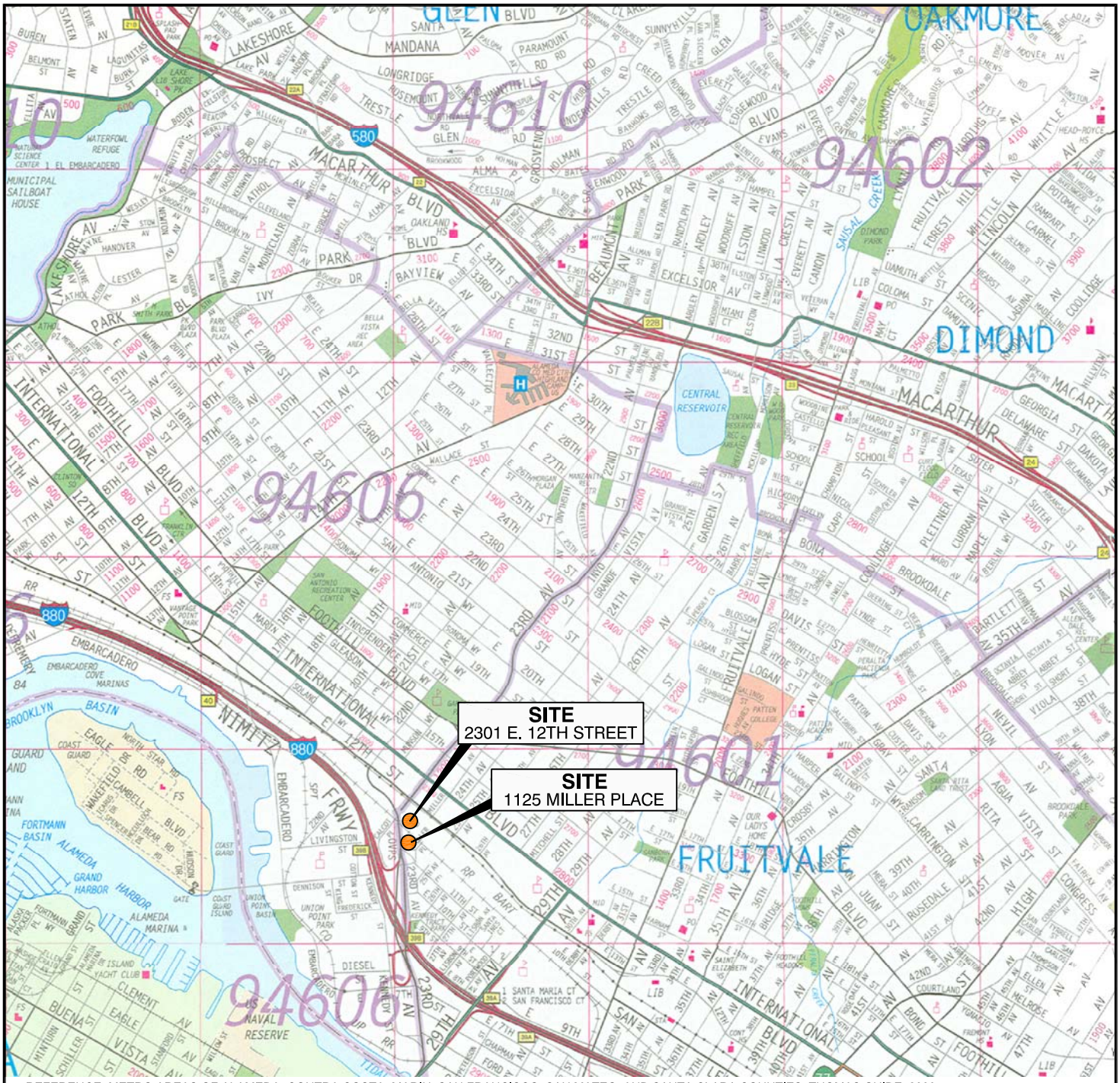
TABLE 2
SOIL SAMPLE LABORATORY ANALYTICAL RESULTS
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, DIESEL, MOTOR OIL
AND BENZENE, TOLUENE, ETHYLBENZENE AND TOAL XYLENES

Sample I.D.	Sample Collection Date	Sample Depth (ft bgs)	TPH (mg/kg)			VOCs (µg/kg)			
			Gasoline	Diesel	Motor Oil	Benzene	Ethyl-benzene	Toluene	Total Xylenes
2301-B-1-10	12/18/2015	10	14	37	ND<50	ND<5.0	ND<5.0	ND<5.0	ND<10
2301-B-2-10	12/18/2015	10	ND<0.24	1.6	ND<50	ND<4.9	ND<4.9	ND<4.9	ND<9.8
1125-B-1-10	12/18/2015	10	ND<0.25	ND<1.0	ND<50	ND<4.9	ND<4.9	ND<4.9	ND<9.8
1125-B-2-16	12/18/2015	16	ND<0.24	200	ND<150	ND<4.8	ND<4.8	ND<4.8	ND<9.7
Construction/Trench Worker ESL[1]			2,700	900	28,000	71,000	490,000	4,300,000	2,500,000
Commercial/Industrial Worker ESL[2]			4,000	1,100	100,000	3,700	24,000	4,900,000	2,600,000

Notes and Abbreviations:
TPH (total petroleum hydrocarbons) as diesel and motor oil analyzed by EPA Method 8015B
TPH as gasoline and benzene, toluene, ethylbenzene and total xylenes analyzed by EPA Method 8260B
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilograms
ft bgs = feet below ground surface
ND< X = concentration not detected above laboratory reporting limits of X

[1] -Construction/Trench worker ESLs = San Francisco Bay RWQCB Environmental Screening Levels - Table K-3 Construction/Trench Worker Exposure, Revised December 2013

[2] - Commercial/Industrial worker ESLs = San Francisco Bay RWQCB Environmental Screening Levels - Table K-2 Direct Exposure Soil Screening Levels, Commercial/Industrail Worker Exposure Senario, Revised December 2013



REFERENCE: METRO AREAS OF ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO, AND SANTA CLARA COUNTIES, THOMAS GUIDE, 2008.

N

SCALE IN FEET

0 2,000 4,000

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	SITE LOCATION	FIGURE
PROJECT NO. 402231013 / DATE 1/16	LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT SUB-BASIN 60-04 OAKLAND, CALIFORNIA	1

1_402231012-SL.dwg, Jan 05, 2016, 12:07pm, SN

REFERENCE: GOOGLE EARTH IMAGERY, 2015.

N

SCALE IN FEET

0 40 80

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND	
1125-B-2 TD=20'	SOIL BORING TD=TOTAL DEPTH IN FEET

Ninyo & Moore	BORING LOCATIONS: 1125 MILLER PLACE	FIGURE
PROJECT NO. 402231013 / DATE 1/16	LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT SUB-BASIN 60-04 OAKLAND, CALIFORNIA	2

REFERENCE: GOOGLE EARTH IMAGERY, 2015.

N

SCALE IN FEET

0 40 80

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND	
2301-B-2 TD=20'	SOIL BORING TD=TOTAL DEPTH IN FEET

Ninyo & Moore		BORING LOCATIONS: 2301 EAST 12TH STREET	FIGURE
PROJECT NO.	DATE	LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT SUB-BASIN 60-04 OAKLAND, CALIFORNIA	3
402231013	1/16		

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APPENDIX A

PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/08/2015 By jamesy

Permit Numbers: W2015-1058
Permits Valid from 12/23/2015 to 12/23/2015

Application Id: 1449085438209 **City of Project Site:** Oakland
Site Location: 2301 E. 12th Street
Oakland, CA
Work to be performed in public right-of-way (street and sidewalk).
Project Start Date: 12/23/2015 **Completion Date:** 12/23/2015
Assigned Inspector: Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com

Applicant: Ninyo & Moore - Peter Sims **Phone:** 510-343-3000 x15216
1956 Webster Street, Suite 400, Oakland, CA 94612
Property Owner: Benjamin Claus **Phone:** --
250 Frank H. Ogawa Plaza (Suite # 5301), Oakland, CA 94612
Client: ** same as Property Owner **

Total Due: $265.00
Receipt Number: WR2015-0578 **Total Amount Paid:** $265.00
Payer Name : Avram Ninyo Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 2 Boreholes
Driller: Vapor Tech Services - Lic #: 916085 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-1058	12/08/2015	03/22/2016	2	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/08/2015 By jamesy

Permit Numbers: W2015-1059
Permits Valid from 12/23/2015 to 12/23/2015

Application Id: 1449086538936 **City of Project Site:** Oakland
Site Location: 1125 Miller Place
Oakland, CA
Borings in public right-of-way (street).
Project Start Date: 12/23/2015 **Completion Date:** 12/23/2015
Assigned Inspector: Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com

Applicant: Ninyo & Moore - Peter Sims **Phone:** 510-343-3000 x15216
1956 Webster Street, Suite 400, Oakland, CA 94612
Property Owner: Benjamin Claus **Phone:** --
250 Frank H. Ogawa Plaza (Suite # 5301), Oakland, CA 94612
Client: ** same as Property Owner **

	Total Due:	$265.00
Receipt Number: WR2015-0579	**Total Amount Paid:**	$265.00
Payer Name : Avram Ninyo	Paid By: VISA	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 2 Boreholes
Driller: Vapor Tech Services - Lic #: 916085 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-1059	12/08/2015	03/22/2016	2	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

8. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

8. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

JOB SITE

CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department
www.oaklandnet.com

PH: 510-238-3891
FAX: 510-238-2263
TDD: 510-238-3254

Permit No: OB1501331 Obstruction **Filed Date:** 12/9/2015

Job Site: 1125 MILLER AVE **Schedule Inspection by calling:** 510-238-3444

Parcel No: 019 009900101

District:

Project Description: Divert 25' lane for Soil boring(s) on Miller Pl near E 11th St; see site plan.
If working within 25' feet of a monument you must comply with State Law 8771, contact the Inspector prior to starting excavation: minimum $5,800.00 fine for non-compliance.
No impact on traffic lane (vehicular or pedestrian) allowed without approved Traffic Control Plan.
Contact: B Claus 510 238-6361
Call PWA INSPECTION prior to start: 510-238-3651. 4th FLOOR.

Related Permits: X1502786

	Name	Applicant	Address	Phone	License #
Owner:	TWENTY THIRD AVENUE PARTNERS		1155 5TH ST #101 OAKLAND, CA		
Contractor-Employee:	VAPOR TECH SERVICES	X	2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	
Contractor:	VAPOR TECH SERVICES		2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	916085

PERMIT DETAILS: Building/Public Use/Activity/Obstructions

Work Information

Start Date: 12/18/2015
End Date: 12/18/2015

Obstruction Permit Type: Short Term (Max 14 Days)
Number of Meters (Metered Area):
Length Of Obstruction (Unmetered Area): 25

TOTAL FEES TO BE PAID AT FILING: $99.84

Application Fee	$70.00	Records Management Fee	$8.27	Short Term Permits	$17.00
Technology Enhancement Fee	$4.57				

Plans Checked By _____ Date _____ Permit Issued By _____ Date 12.9

Finalized By _____ Date _____

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

JOB SITE

Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.
Applications for which no permit is issued within ... expired.

CHECK REVERSE

CITY OF OAKLAND

CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department
www.oaklandnet.com

PH: 510-238-3891
FAX: 510-238-2263
TDD: 510-238-3254

Permit No: X1502786 OPW - Excavation

Filed Date: 12/9/2015

Job Site: 1125 MILLER AVE

Schedule Inspection by calling: 510-238-3444

Parcel No: 019 009900101

For SL; X; and CGS permits see **SPECIAL NOTE** below

District:

Project Description: Soil boring(s) on Miller Pl near E 11th St; see site plan.
If working within 25' feet of a monument you must comply with State Law 8771, contact the Inspector prior to starting excavation: minimum $5,800.00 fine for non-compliance.
No impact on traffic lane (vehicular or pedestrian) allowed without approved Traffic Control Plan.
Contact: B Claus 510 238-6361
Permit valid 90 days.
Separate Obstruction permit required to reserve/block parking lane.
Call PWA INSPECTION prior to start: 510-238-3651. 4th FLOOR.

Related Permits: X1502783 OB1501330

	Name	Applicant	Address	Phone	License #
Owner:	TWENTY THIRD AVENUE PARTNERS		1155 5TH ST #101 OAKLAND, CA		
Contractor-Employee:	VAPOR TECH SERVICES	X	2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	
Contractor:	VAPOR TECH SERVICES		2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	916085

PERMIT DETAILS: Building/Public Infrastructure/Excavation/NA

General Information

Excavation Type: Private Party
Date Street Last Resurfaced:
Worker's Compensation Company Name:
Worker's Compensation Policy #:

Special Paving Detail Required:

Tree Removal Involved:
Holiday Restriction (Nov 1 - Jan 1):
Limited Operation Area (7AM-9AM) And (4PM-6PM):

Key Dates

Approximate Start Date:
Approximate End Date:

TOTAL FEES TO BE PAID AT FILING: $434.91

Application Fee	$70.00	Excavation - Private Party Type	$309.00	Records Management Fee	$36.01
Technology Enhancement Fee	$19.90				

CITY OF OAKLAND

Plans Checked By ______ Date ______ Permit Issued By ___ Date 12.9

ADDRESS: ______

DIST: ______

SPECIAL NOTE Finalized By ______ Date ______

- For SL; X; and CGS permits Call PWA INSPECTION prior to start: 510-238-3651 or visit 4th FLOOR.
- SL and X permits valid 90 days; CGS permits valid 30 days

Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

JOB SITE

CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department
www.oaklandnet.com

PH: 510-238-3891
FAX: 510-238-2263
TDD: 510-238-3254

Permit No: OB1501330 Obstruction **Filed Date:** 12/9/2015

Job Site: 2301 E 12TH ST **Schedule Inspection by calling:** 510-238-3444

Parcel No: 019 010200101

District:

Project Description: Divert 25' travel lane & sidewalk for Soil boring(s) on E 12th St near west end of 23rd Ave cul-de-sac; see site plan.
If working within 25' feet of a monument you must comply with State Law 8771, contact the Inspector prior to starting excavation: minimum $5,800.00 fine for non-compliance.
Contact: B Claus 510 238-6361
Call PWA INSPECTION prior to start: 510-238-3651. 4th FLOOR.

Related Permits: X1502783

	Name	Applicant	Address	Phone	License #
Owner:	SILVEIRA J W & BARBARA O TRS		499 EMBARCADERO OAKLAND, CA		
Contractor-Employee:	VAPOR TECH SERVICES	X	2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	
Contractor:	VAPOR TECH SERVICES		2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	916085

PERMIT DETAILS: Building/Public Use/Activity/Obstructions

Work Information

Start Date: 12/18/2015
End Date: 12/18/2015

Obstruction Permit Type: Short Term (Max 14 Days)
Number of Meters (Metered Area):
Length Of Obstruction (Unmetered Area): 50

TOTAL FEES TO BE PAID AT FILING: $119.34

Application Fee	$70.00	Records Management Fee	$9.88	Short Term Permits	$34.00
Technology Enhancement Fee	$5.46				

Plans Checked By _____ Date _____ Permit Issued By _____ Date 12-9

Finalized By _____ Date _____

16C35

CITY OF OAKLAND • Community and Economic Development Agency

250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

JOB SITE

Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration or final. Applications for which no permit is issued within 180 days following the date of application shall expire.

CHECK REVERSE

CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department
www.oaklandnet.com

PH: 510-238-3891
FAX: 510-238-2263
TDD: 510-238-3254

Permit No: X1502783 OPW - Excavation **Filed Date:** 12/9/2015

Job Site: 2301 E 12TH ST **Schedule Inspection by calling:** 510-238-3444

Parcel No: 019 010200101

District:

For SL; X; and CGS permits see **SPECIAL NOTE** below

Project Description: Soil boring(s) on E 12th St near west end of 23rd Ave cul-de-sac; see site plan.
If working within 25' feet of a monument you must comply with State Law 8771, contact the Inspector prior to starting excavation: minimum $5,800.00 fine for non-compliance.
No impact on traffic lane (vehicular or pedestrian) allowed without approved Traffic Control Plan.
Contact: B Claus 510 238-6361
Permit valid 90 days.
Separate Obstruction permit required to reserve/block parking lane.
Call PWA INSPECTION prior to start: 510-238-3651. 4th FLOOR.

Related Permits:

	Name	Applicant	Address	Phone	License #
Owner:	SILVEIRA J W & BARBARA O TRS		499 EMBARCADERO OAKLAND, CA		
Contractor-Employee:	VAPOR TECH SERVICES	X	2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	
Contractor:	VAPOR TECH SERVICES		2316 TRIPALDI WAY HAYWARD, CA	(415) 378-0415	916085

PERMIT DETAILS: Building/Public Infrastructure/Excavation/NA

General Information

Excavation Type: Private Party
Special Paving Detail Required:
Tree Removal Involved:
Date Street Last Resurfaced:
Holiday Restriction (Nov 1 - Jan 1):
Worker's Compensation Company Name:
Limited Operation Area (7AM-9AM) And (4PM-6PM):
Worker's Compensation Policy #:

Key Dates

Approximate Start Date:
Approximate End Date:

TOTAL FEES TO BE PAID AT FILING: $434.91

Application Fee	$70.00	Excavation - Private Party Type	$309.00	Records Management Fee	$36.01
Technology Enhancement Fee	$19.90				

Plans Checked By _____ Date _____ Permit Issued By _____ Date 12/9

SPECIAL NOTE Finalized By _____ Date _____

- For SL; X; and CGS permits Call PWA INSPECTION prior to start: 510-238-3651 or visit 4th FLOOR.
- SL and X permits valid 90 days; CGS permits valid 30 days

ADDRESS:

DIST:

APPENDIX B

BORING LOGS

BORING LOG EXPLANATION SHEET

DEPTH (feet)	SAMPLES: Bulk	SAMPLES: Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
0	■							Bulk sample.
		■						Modified split-barrel drive sampler.
		⊠						2-inch inner diameter split-barrel drive sampler.
		⊠						No recovery with modified split-barrel drive sampler, or 2-inch inner diameter split-barrel drive sampler.
		▮						Sample retained by others.
5		◪						Standard Penetration Test (SPT).
		⁄						No recovery with a SPT.
		▯	XX/XX					Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.
		⁄						No recovery with Shelby tube sampler.
		▯						Continuous Push Sample.
10				⚲				Seepage.
				▽				Groundwater encountered during drilling.
				▼				Groundwater measured after drilling.
						▨	SM	MAJOR MATERIAL TYPE (SOIL): Solid line denotes unit change.
						▨	CL	Dashed line denotes material change.
15						▨		Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Shear Bedding Surface
								The total depth line is a solid line that is drawn at the bottom of the boring.
20								

Ninyo & Moore

BORING LOG

Explanation of Boring Log Symbols

PROJECT NO.	DATE	FIGURE

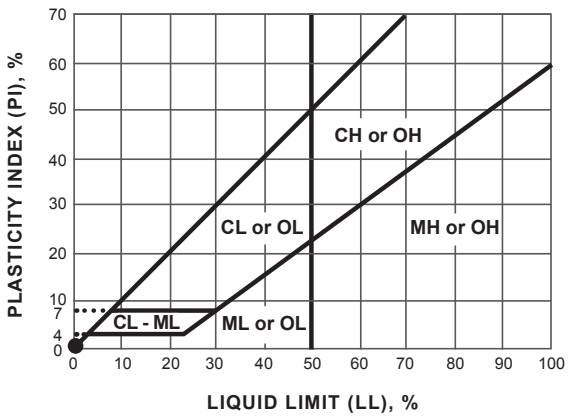
SOIL CLASSIFICATION CHART PER ASTM D 2488

PRIMARY DIVISIONS			SECONDARY DIVISIONS	
			GROUP SYMBOL	GROUP NAME
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	**GRAVEL** more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines	GW	well-graded GRAVEL
			GP	poorly graded GRAVEL
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines	GW-GM	well-graded GRAVEL with silt
			GP-GM	poorly graded GRAVEL with silt
			GW-GC	well-graded GRAVEL with clay
			GP-GC	poorly graded GRAVEL with clay
		GRAVEL with FINES more than 12% fines	GM	silty GRAVEL
			GC	clayey GRAVEL
			GC-GM	silty, clayey GRAVEL
	SAND 50% or more of coarse fraction passes No. 4 sieve	CLEAN SAND less than 5% fines	SW	well-graded SAND
			SP	poorly graded SAND
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines	SW-SM	well-graded SAND with silt
			SP-SM	poorly graded SAND with silt
			SW-SC	well-graded SAND with clay
			SP-SC	poorly graded SAND with clay
		SAND with FINES more than 12% fines	SM	silty SAND
			SC	clayey SAND
			SC-SM	silty, clayey SAND
FINE-GRAINED SOILS 50% or more passes No. 200 sieve	**SILT and CLAY** liquid limit less than 50%	INORGANIC	CL	lean CLAY
			ML	SILT
			CL-ML	silty CLAY
		ORGANIC	OL (PI > 4)	organic CLAY
			OL (PI < 4)	organic SILT
	SILT and CLAY liquid limit 50% or more	INORGANIC	CH	fat CLAY
			MH	elastic SILT
		ORGANIC	OH (plots on or above "A"-line)	organic CLAY
			OH (plots below "A"-line)	organic SILT
	Highly Organic Soils		PT	Peat

GRAIN SIZE

DESCRIPTION		SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller

PLASTICITY CHART



APPARENT DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

CONSISTENCY - FINE-GRAINED SOIL

CONSIS-TENCY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

Ninyo & Moore

USCS METHOD OF SOIL CLASSIFICATION

Explanation of USCS Method of Soil Classification

PROJECT NO.	DATE	FIGURE

DATE DRILLED 12/18/15 BORING NO. 2301 B-1

GROUND ELEVATION NA SHEET 1 OF 1

METHOD OF DRILLING HAND AUGER/GEOPROBE

DRIVE WEIGHT NA DROP NA

SAMPLED BY FSM LOGGED BY FSM REVIEWED BY

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0									CONCRETE: Approximately 4 inches thick.
					1.8			ML	FILL: Dark yellowish brown, moist, dense, sandy GRAVEL.
									ALLUVIUM: Yellowish brown, moist, stiff, sandy SILT.
		■			1.1				
10		■		2301-B-1-10	365				Dark olive gray, moist, stiff, sandy SILT with gravel.
		■			0.8			CL	Yellowish brown, moist, stiff, CLAY.
								ML	Yellowish brown, moist to wet, stiff, sandy SILT.
20		■			1.5				
30									Total depth = 22 feet below ground surface. Groundwater not encountered in borehole after 1.5 hours. Backfilled with neat cement.
40									

Ninyo & Moore

BORING LOG

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
SUB-BASIN 60-04, OAKLAND, CALIFORNIA

PROJECT NO.	DATE	FIGURE
402231013	1/16	

DATE DRILLED 12/18/15 BORING NO. 2301 B-2

GROUND ELEVATION NA SHEET 1 OF 1

METHOD OF DRILLING HAND AUGER/GEOPROBE

DRIVE WEIGHT NA DROP NA

SAMPLED BY FSM LOGGED BY FSM REVIEWED BY

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0									CONCRETE: Approximately 4 inches thick.
					1.8			ML	FILL: Yellowish brown, moist, dense, sandy GRAVEL.
									ALLUVIUM: Dark yellowish brown, moist, stiff, sandy SILT.
		■			1.3				Dark yellowish brown, moist, stiff, sandy SILT with gravel.
10		■		2301-B-2-10	1.8				Dark yellowish brown, moist stiff, SILT.
		■			1.4				Dark yellowish brown, moist, stiff, sandy SILT with trace gravel.
								SM	Yellowish brown, moist, hard, silty SAND with gravel.
20		■			2.0				Total depth = 20 feet below ground surface.
									Groundwater not encountered in borehole after 1.5 hours.
									Backfilled with neat cement.
30									
40									

Ninyo & Moore

BORING LOG

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
SUB-BASIN 60-04, OAKLAND, CALIFORNIA

PROJECT NO.	DATE	FIGURE
402231013	1/16	

DATE DRILLED 12/18/15 BORING NO. 1125 B-1

GROUND ELEVATION NA SHEET 1 OF 1

METHOD OF DRILLING HAND AUGER/GEOPROBE

DRIVE WEIGHT NA DROP NA

SAMPLED BY FSM LOGGED BY FSM REVIEWED BY

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0									CONCRETE: Approximately 6 inches thick.
					0.7			SM	FILL: Brown, dry, medium dense, sandy GRAVEL.
									ALLUVIUM: Brown, moist, medium dense, silty SAND; trace subangular gravel.
					1.4				
								ML	
10				1125-B-1-10	1.5				Yellowish brown, moist, sandy SILT.
					1.1				Yellowish brown, moist, stiff, sandy SILT.
20					0.2			ML/CL	Yellowish brown, moist to wet, stiff, clayey SILT with gravel.
									Total depth = 20 feet below ground surface.
									Groundwater not encountered.
									Backfilled with neat cement.
30									
40									

Ninyo & Moore

BORING LOG

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
SUB-BASIN 60-04, OAKLAND, CALIFORNIA

PROJECT NO.	DATE	FIGURE
402231013	1/16	

DATE DRILLED 12/18/15 BORING NO. 1125 B-2

GROUND ELEVATION NA SHEET 1 OF 1

METHOD OF DRILLING HAND AUGER/GEOPROBE

DRIVE WEIGHT NA DROP NA

SAMPLED BY FSM LOGGED BY FSM REVIEWED BY

DEPTH (feet)	SAMPLES: Bulk	SAMPLES: Driven	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0									CONCRETE: Approximately 6 inches thick.
					1.2			ML	FILL: Dark yellowish brown, moist, dense, sandy GRAVEL.
									ALLUVIUM:
		■			0.7				Dark yellowish brown, moist, stiff, SILT with trace gravel, poor recovery.
10		■			1.3				Dark brown, moist, soft, sandy SILT with gravel.
		■		1125-B-2-16	2 2.7				Light olive brown, moist, soft, sandy SILT with trace gravel.
20		■			1.5				Yellowish brown, moist, soft, sandy SILT with gravel.
									Total depth = 20 feet below ground surface.
									Groundwater not encountered.
									Backfilled with neat cement.
30									
40									

Ninyo & Moore

BORING LOG

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
SUB-BASIN 60-04, OAKLAND, CALIFORNIA

PROJECT NO.	DATE	FIGURE
402231013	1/16	

APPENDIX C

LABORATORY ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

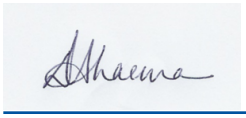
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-69326-1
Client Project/Site: City of Oakland-Sub Basin
Revision: 1

For:
Ninyo & Moore
1956 Webster Street
Suite 400
Oakland, California 94612

Attn: Mr. Peter D. Sims



Authorized for release by:
1/4/2016 5:13:51 PM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Job ID: 720-69326-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-69326-1

Comments
The report is revised to change the sample IDs.

Receipt
The samples were received on 12/18/2015 4:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-194561 and analytical batch 720-194618 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8260B: Surrogate recovery for the following sample was outside control limits: 1203-B-1-10 (720-69326-1). Evidence of matrix interference is present.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: (720-69326-A-4-G MS) and (720-69326-A-4-H MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The following sample was diluted due to the abundance of non-target analyte Fe: 1125-B-1-10 (720-69326-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Client Sample ID: 2301-B-1-10 — Lab Sample ID: 720-69326-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C5-C12	14000		1000		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	37		1.0		mg/Kg	1		8015B	Total/NA
Barium	140		1.8		mg/Kg	4		6010B	Total/NA
Chromium	22		1.8		mg/Kg	4		6010B	Total/NA
Cobalt	6.9		0.73		mg/Kg	4		6010B	Total/NA
Copper	8.5		5.5		mg/Kg	4		6010B	Total/NA
Lead	7.5		1.8		mg/Kg	4		6010B	Total/NA
Nickel	48		1.8		mg/Kg	4		6010B	Total/NA
Vanadium	25		1.8		mg/Kg	4		6010B	Total/NA
Zinc	30		5.5		mg/Kg	4		6010B	Total/NA
Mercury	0.073		0.0088		mg/Kg	1		7471A	Total/NA

Client Sample ID: 2301-B-2-10 — Lab Sample ID: 720-69326-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.6		0.99		mg/Kg	1		8015B	Total/NA
Arsenic	6.4		3.7		mg/Kg	4		6010B	Total/NA
Barium	130		1.9		mg/Kg	4		6010B	Total/NA
Chromium	17		0.47		mg/Kg	1		6010B	Total/NA
Cobalt	14		0.75		mg/Kg	4		6010B	Total/NA
Copper	5.9		1.4		mg/Kg	1		6010B	Total/NA
Lead	6.8		1.9		mg/Kg	4		6010B	Total/NA
Nickel	88		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	36		1.9		mg/Kg	4		6010B	Total/NA
Zinc	35		5.6		mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.0088		mg/Kg	1		7471A	Total/NA

Client Sample ID: 1125-B-1-10 — Lab Sample ID: 720-69326-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.9		2.9		mg/Kg	4		6010B	Total/NA
Barium	180		1.4		mg/Kg	4		6010B	Total/NA
Beryllium	0.55		0.29		mg/Kg	4		6010B	Total/NA
Chromium	41		1.4		mg/Kg	4		6010B	Total/NA
Cobalt	13		0.58		mg/Kg	4		6010B	Total/NA
Copper	19		4.3		mg/Kg	4		6010B	Total/NA
Lead	9.5		1.4		mg/Kg	4		6010B	Total/NA
Nickel	54		1.4		mg/Kg	4		6010B	Total/NA
Vanadium	28		1.4		mg/Kg	4		6010B	Total/NA
Zinc	37		4.3		mg/Kg	4		6010B	Total/NA
Mercury	0.072		0.0087		mg/Kg	1		7471A	Total/NA

Client Sample ID: 1125-B-2-16 — Lab Sample ID: 720-69326-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	200		3.0		mg/Kg	3		8015B	Total/NA
Barium	98		1.9		mg/Kg	4		6010B	Total/NA
Chromium	13		0.48		mg/Kg	1		6010B	Total/NA
Cobalt	8.0		0.76		mg/Kg	4		6010B	Total/NA
Copper	3.4		1.4		mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Client Sample ID: 1125-B-2-16 (Continued)

Lab Sample ID: 720-69326-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.3		1.9		mg/Kg	4		6010B	Total/NA
Nickel	61		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	27		1.9		mg/Kg	4		6010B	Total/NA
Zinc	25		5.7		mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.0086		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2301-B-1-10
Date Collected: 12/18/15 09:11
Date Received: 12/18/15 16:20

Lab Sample ID: 720-69326-1
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0		ug/Kg		12/21/15 19:10	12/22/15 03:43	1
Ethylbenzene	ND		5.0		ug/Kg		12/21/15 19:10	12/22/15 03:43	1
Toluene	ND		5.0		ug/Kg		12/21/15 19:10	12/22/15 03:43	1
Xylenes, Total	ND		10		ug/Kg		12/21/15 19:10	12/22/15 03:43	1
Gasoline Range Organics (GRO) -C5-C12	**14000**		1000		ug/Kg		12/22/15 18:44	12/22/15 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*194*	*X*	*45 - 131*	*12/21/15 19:10*	*12/22/15 03:43*	*1*
4-Bromofluorobenzene	*139*	*X*	*45 - 131*	*12/22/15 18:44*	*12/22/15 22:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*	*12/21/15 19:10*	*12/22/15 03:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*	*12/22/15 18:44*	*12/22/15 22:17*	*1*
Toluene-d8 (Surr)	*111*		*58 - 140*	*12/21/15 19:10*	*12/22/15 03:43*	*1*
Toluene-d8 (Surr)	*113*		*58 - 140*	*12/22/15 18:44*	*12/22/15 22:17*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**37**		1.0		mg/Kg		12/24/15 13:56	12/29/15 11:46	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		12/24/15 13:56	12/29/15 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*40 - 130*	*12/24/15 13:56*	*12/29/15 11:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.46		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Arsenic	ND		0.92		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Barium	**140**		1.8		mg/Kg		12/21/15 14:29	12/29/15 14:33	4
Beryllium	ND		0.092		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Cadmium	ND		0.11		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Chromium	**22**		1.8		mg/Kg		12/21/15 14:29	12/29/15 14:33	4
Cobalt	**6.9**		0.73		mg/Kg		12/21/15 14:29	12/29/15 14:33	4
Copper	**8.5**		5.5		mg/Kg		12/21/15 14:29	12/29/15 14:33	4
Lead	**7.5**		1.8		mg/Kg		12/21/15 14:29	12/29/15 14:33	4
Molybdenum	ND		0.46		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Nickel	**48**		1.8		mg/Kg		12/21/15 14:29	12/29/15 14:33	4
Selenium	ND		0.92		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Silver	ND		0.23		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Thallium	ND		0.46		mg/Kg		12/21/15 14:29	12/29/15 18:53	1
Vanadium	**25**		1.8		mg/Kg		12/21/15 14:29	12/29/15 14:33	4
Zinc	**30**		5.5		mg/Kg		12/21/15 14:29	12/29/15 14:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.073**		0.0088		mg/Kg		12/21/15 15:25	12/23/15 15:31	1

Client Sample ID: 2301-B-2-10

Date Collected: 12/18/15 10:11
Date Received: 12/18/15 16:20

Lab Sample ID: 720-69326-2

Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.9		ug/Kg		12/21/15 19:10	12/22/15 04:13	1
Ethylbenzene	ND		4.9		ug/Kg		12/21/15 19:10	12/22/15 04:13	1
Toluene	ND		4.9		ug/Kg		12/21/15 19:10	12/22/15 04:13	1
Xylenes, Total	ND		9.8		ug/Kg		12/21/15 19:10	12/22/15 04:13	1
Gasoline Range Organics (GRO) -C5-C12	ND		240		ug/Kg		12/21/15 19:10	12/22/15 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*45 - 131*	*12/21/15 19:10*	*12/22/15 04:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*	*12/21/15 19:10*	*12/22/15 04:13*	*1*
Toluene-d8 (Surr)	*110*		*58 - 140*	*12/21/15 19:10*	*12/22/15 04:13*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.6**		0.99		mg/Kg		12/24/15 13:56	12/29/15 12:15	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		12/24/15 13:56	12/29/15 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*109*		*40 - 130*	*12/24/15 13:56*	*12/29/15 12:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.47		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Arsenic	**6.4**		3.7		mg/Kg		12/21/15 14:29	12/29/15 14:18	4
Barium	**130**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:18	4
Beryllium	ND		0.093		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Cadmium	ND		0.12		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Chromium	**17**		0.47		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Cobalt	**14**		0.75		mg/Kg		12/21/15 14:29	12/29/15 14:18	4
Copper	**5.9**		1.4		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Lead	**6.8**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:18	4
Molybdenum	ND		0.47		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Nickel	**88**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:18	4
Selenium	ND		0.93		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Silver	ND		0.23		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Thallium	ND		0.47		mg/Kg		12/21/15 14:29	12/29/15 18:48	1
Vanadium	**36**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:18	4
Zinc	**35**		5.6		mg/Kg		12/21/15 14:29	12/29/15 14:18	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.18**		0.0088		mg/Kg		12/21/15 15:25	12/23/15 15:33	1

Client Sample ID: 1125-B-1-10

Date Collected: 12/18/15 12:10
Date Received: 12/18/15 16:20

Lab Sample ID: 720-69326-3

Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.9		ug/Kg		12/21/15 20:15	12/22/15 04:44	1
Ethylbenzene	ND		4.9		ug/Kg		12/21/15 20:15	12/22/15 04:44	1
Toluene	ND		4.9		ug/Kg		12/21/15 20:15	12/22/15 04:44	1
Xylenes, Total	ND		9.8		ug/Kg		12/21/15 20:15	12/22/15 04:44	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg		12/21/15 20:15	12/22/15 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*45 - 131*	*12/21/15 20:15*	*12/22/15 04:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*	*12/21/15 20:15*	*12/22/15 04:44*	*1*
Toluene-d8 (Surr)	*107*		*58 - 140*	*12/21/15 20:15*	*12/22/15 04:44*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		12/24/15 13:56	12/29/15 13:38	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		12/24/15 13:56	12/29/15 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*117*		*40 - 130*	*12/24/15 13:56*	*12/29/15 13:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Arsenic	**4.9**		2.9		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Barium	**180**		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Beryllium	**0.55**		0.29		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Cadmium	ND		0.36		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Chromium	**41**		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Cobalt	**13**		0.58		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Copper	**19**		4.3		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Lead	**9.5**		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Molybdenum	ND		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Nickel	**54**		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Selenium	ND		2.9		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Silver	ND		0.72		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Thallium	ND		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Vanadium	**28**		1.4		mg/Kg		12/21/15 14:29	12/29/15 14:38	4
Zinc	**37**		4.3		mg/Kg		12/21/15 14:29	12/29/15 14:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.072**		0.0087		mg/Kg		12/21/15 15:25	12/23/15 15:36	1

Client Sample ID: 1125-B-2-16

Date Collected: 12/18/15 13:55
Date Received: 12/18/15 16:20

Lab Sample ID: 720-69326-4

Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.8		ug/Kg		12/22/15 18:44	12/23/15 00:51	1
Ethylbenzene	ND		4.8		ug/Kg		12/22/15 18:44	12/23/15 00:51	1
Toluene	ND	F1	4.8		ug/Kg		12/22/15 18:44	12/23/15 00:51	1
Xylenes, Total	ND		9.7		ug/Kg		12/22/15 18:44	12/23/15 00:51	1
Gasoline Range Organics (GRO) -C5-C12	ND		240		ug/Kg		12/22/15 18:44	12/23/15 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*45 - 131*	*12/22/15 18:44*	*12/23/15 00:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*60 - 140*	*12/22/15 18:44*	*12/23/15 00:51*	*1*
Toluene-d8 (Surr)	*108*		*58 - 140*	*12/22/15 18:44*	*12/23/15 00:51*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**200**		3.0		mg/Kg		12/24/15 13:56	12/29/15 13:03	3
Motor Oil Range Organics [C24-C36]	ND		150		mg/Kg		12/24/15 13:56	12/29/15 13:03	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*115*		*40 - 130*	*12/24/15 13:56*	*12/29/15 13:03*	*3*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.48		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Arsenic	ND		0.95		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Barium	**98**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:13	4
Beryllium	ND		0.095		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Cadmium	ND		0.12		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Chromium	**13**		0.48		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Cobalt	**8.0**		0.76		mg/Kg		12/21/15 14:29	12/29/15 14:13	4
Copper	**3.4**		1.4		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Lead	**4.3**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:13	4
Molybdenum	ND		0.48		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Nickel	**61**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:13	4
Selenium	ND		0.95		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Silver	ND		0.24		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Thallium	ND		0.48		mg/Kg		12/21/15 14:29	12/29/15 18:43	1
Vanadium	**27**		1.9		mg/Kg		12/21/15 14:29	12/29/15 14:13	4
Zinc	**25**		5.7		mg/Kg		12/21/15 14:29	12/29/15 14:13	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.10**		0.0086		mg/Kg		12/21/15 15:25	12/23/15 15:38	1

Surrogate Summary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (45-131)	12DCE (60-140)	TOL (58-140)
720-69326-1	2301-B-1-10	194 X	97	111
720-69326-1	2301-B-1-10	139 X	98	113
720-69326-2	2301-B-2-10	116	92	110
720-69326-3	1125-B-1-10	109	94	107
720-69326-4	1125-B-2-16	113	86	108
720-69326-4 MS	1125-B-2-16	118	86	116
720-69326-4 MSD	1125-B-2-16	124	92	121
LCS 720-194552/5	Lab Control Sample	114	98	114
LCS 720-194552/7	Lab Control Sample	117	98	113
LCS 720-194618/5	Lab Control Sample	121	96	110
LCS 720-194618/7	Lab Control Sample	118	101	114
LCSD 720-194552/6	Lab Control Sample Dup	113	91	115
LCSD 720-194552/8	Lab Control Sample Dup	116	96	113
LCSD 720-194618/6	Lab Control Sample Dup	115	97	112
LCSD 720-194618/8	Lab Control Sample Dup	118	100	113
MB 720-194552/4	Method Blank	111	98	110
MB 720-194618/4	Method Blank	108	105	106

Surrogate Legend

BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	PTP1 (40-130)
720-69326-1	2301-B-1-10	97
720-69326-2	2301-B-2-10	109
720-69326-3	1125-B-1-10	117
720-69326-4	1125-B-2-16	115
720-69326-4 MS	1125-B-2-16	0 X D
720-69326-4 MSD	1125-B-2-16	0 X D
LCS 720-194757/2-A	Lab Control Sample	120
MB 720-194757/1-A	Method Blank	122

Surrogate Legend

PTP = p-Terphenyl

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-194552/4
Matrix: Solid
Analysis Batch: 194552

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0		ug/Kg			12/21/15 18:36	1
Ethylbenzene	ND		5.0		ug/Kg			12/21/15 18:36	1
Toluene	ND		5.0		ug/Kg			12/21/15 18:36	1
Xylenes, Total	ND		10		ug/Kg			12/21/15 18:36	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			12/21/15 18:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*45 - 131*		*12/21/15 18:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*		*12/21/15 18:36*	*1*
Toluene-d8 (Surr)	*110*		*58 - 140*		*12/21/15 18:36*	*1*

Lab Sample ID: LCS 720-194552/5
Matrix: Solid
Analysis Batch: 194552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.3		ug/Kg		95	70 - 130
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
Toluene	50.0	48.8		ug/Kg		98	75 - 120
m-Xylene & p-Xylene	50.0	46.8		ug/Kg		94	70 - 146
o-Xylene	50.0	50.9		ug/Kg		102	70 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*114*		*58 - 140*

Lab Sample ID: LCS 720-194552/7
Matrix: Solid
Analysis Batch: 194552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	1000		ug/Kg		100	61 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*117*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*113*		*58 - 140*

Lab Sample ID: LCSD 720-194552/6
Matrix: Solid
Analysis Batch: 194552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	46.5		ug/Kg		93	70 - 130	2	20
Ethylbenzene	50.0	48.7		ug/Kg		97	80 - 137	2	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-194552/6
Matrix: Solid
Analysis Batch: 194552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			50.0	48.0		ug/Kg		96	75 - 120	2	20
m-Xylene & p-Xylene			50.0	46.0		ug/Kg		92	70 - 146	2	20
o-Xylene			50.0	50.0		ug/Kg		100	70 - 140	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*113*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*115*		*58 - 140*

Lab Sample ID: LCSD 720-194552/8
Matrix: Solid
Analysis Batch: 194552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			1000	1020		ug/Kg		102	61 - 128	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*113*		*58 - 140*

Lab Sample ID: 720-69326-4 MS
Matrix: Solid
Analysis Batch: 194618

Client Sample ID: 1125-B-2-16
Prep Type: Total/NA
Prep Batch: 194561

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		48.6	44.7		ug/Kg		92	70 - 130
Ethylbenzene	ND		48.6	56.4		ug/Kg		114	65 - 130
Toluene	ND	F1	48.6	73.1	F1	ug/Kg		142	70 - 130
m-Xylene & p-Xylene	7.0	F2 F1	48.6	81.8	F1	ug/Kg		154	70 - 130
o-Xylene	ND		48.6	64.5		ug/Kg		127	68 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*118*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*86*		*60 - 140*
Toluene-d8 (Surr)	*116*		*58 - 140*

Lab Sample ID: 720-69326-4 MSD
Matrix: Solid
Analysis Batch: 194618

Client Sample ID: 1125-B-2-16
Prep Type: Total/NA
Prep Batch: 194561

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		49.3	47.8		ug/Kg		97	70 - 130	7	20
Ethylbenzene	ND		49.3	51.5		ug/Kg		102	65 - 130	9	20
Toluene	ND	F1	49.3	60.9		ug/Kg		116	70 - 130	18	20
m-Xylene & p-Xylene	7.0	F2 F1	49.3	61.6	F2	ug/Kg		111	70 - 130	28	20
o-Xylene	ND		49.3	59.1		ug/Kg		115	68 - 130	9	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	*124*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*121*		*58 - 140*

Lab Sample ID: MB 720-194618/4
Matrix: Solid
Analysis Batch: 194618

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0		ug/Kg			12/22/15 19:14	1
Ethylbenzene	ND		5.0		ug/Kg			12/22/15 19:14	1
Toluene	ND		5.0		ug/Kg			12/22/15 19:14	1
Xylenes, Total	ND		10		ug/Kg			12/22/15 19:14	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			12/22/15 19:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*108*		*45 - 131*		*12/22/15 19:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*		*12/22/15 19:14*	*1*
Toluene-d8 (Surr)	*106*		*58 - 140*		*12/22/15 19:14*	*1*

Lab Sample ID: LCS 720-194618/5
Matrix: Solid
Analysis Batch: 194618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	43.2		ug/Kg		86	70 - 130
Ethylbenzene	50.0	48.8		ug/Kg		98	80 - 137
Toluene	50.0	46.0		ug/Kg		92	75 - 120
m-Xylene & p-Xylene	50.0	45.2		ug/Kg		90	70 - 146
o-Xylene	50.0	50.2		ug/Kg		100	70 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*121*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*110*		*58 - 140*

Lab Sample ID: LCS 720-194618/7
Matrix: Solid
Analysis Batch: 194618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	1020		ug/Kg		102	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*118*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*114*		*58 - 140*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-194618/6
Matrix: Solid
Analysis Batch: 194618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	44.8		ug/Kg		90	70 - 130	4	20
Ethylbenzene	50.0	48.0		ug/Kg		96	80 - 137	2	20
Toluene	50.0	46.0		ug/Kg		92	75 - 120	0	20
m-Xylene & p-Xylene	50.0	45.3		ug/Kg		91	70 - 146	0	20
o-Xylene	50.0	49.8		ug/Kg		100	70 - 140	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*115*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*112*		*58 - 140*

Lab Sample ID: LCSD 720-194618/8
Matrix: Solid
Analysis Batch: 194618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	1000	1020		ug/Kg		102	61 - 128	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*118*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*113*		*58 - 140*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-194757/1-A
Matrix: Solid
Analysis Batch: 194792

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		12/24/15 13:56	12/29/15 13:08	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		12/24/15 13:56	12/29/15 13:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*122*		*40 - 130*	*12/24/15 13:56*	*12/29/15 13:08*	*1*

Lab Sample ID: LCS 720-194757/2-A
Matrix: Solid
Analysis Batch: 194793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	83.3	92.2		mg/Kg		111	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*120*		*40 - 130*

Lab Sample ID: 720-69326-4 MS
Matrix: Solid
Analysis Batch: 194793

Client Sample ID: 1125-B-2-16
Prep Type: Total/NA
Prep Batch: 194757

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	200		82.8	313		mg/Kg		131	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Lab Sample ID: 720-69326-4 MSD
Matrix: Solid
Analysis Batch: 194793

Client Sample ID: 1125-B-2-16
Prep Type: Total/NA
Prep Batch: 194757

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	200		82.3	317		mg/Kg		137	50 - 150	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-194471/1-A
Matrix: Solid
Analysis Batch: 194838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Arsenic	ND		1.0		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Barium	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Beryllium	ND		0.10		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Cobalt	ND		0.20		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Lead	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Nickel	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Selenium	ND		1.0		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Silver	ND		0.25		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Thallium	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Vanadium	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 12:37	1
Zinc	ND		1.5		mg/Kg		12/18/15 18:46	12/29/15 12:37	1

Lab Sample ID: MB 720-194471/1-A
Matrix: Solid
Analysis Batch: 194857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.13		mg/Kg		12/18/15 18:46	12/29/15 17:18	1
Chromium	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 17:18	1
Copper	ND		1.5		mg/Kg		12/18/15 18:46	12/29/15 17:18	1
Molybdenum	ND		0.50		mg/Kg		12/18/15 18:46	12/29/15 17:18	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-194471/2-A
Matrix: Solid
Analysis Batch: 194838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.0		mg/Kg		96	80 - 120
Arsenic	50.0	48.1		mg/Kg		96	80 - 120
Barium	50.0	45.6		mg/Kg		91	80 - 120
Beryllium	50.0	49.8		mg/Kg		100	80 - 120
Cobalt	50.0	49.0		mg/Kg		98	80 - 120
Lead	50.0	50.7		mg/Kg		101	80 - 120
Nickel	50.0	48.1		mg/Kg		96	80 - 120
Selenium	50.0	46.0		mg/Kg		92	80 - 120
Silver	25.0	22.8		mg/Kg		91	80 - 120
Thallium	50.0	48.2		mg/Kg		96	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	46.0		mg/Kg		92	80 - 120

Lab Sample ID: LCS 720-194471/2-A
Matrix: Solid
Analysis Batch: 194857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	47.9		mg/Kg		96	80 - 120
Chromium	50.0	48.6		mg/Kg		97	80 - 120
Copper	50.0	48.4		mg/Kg		97	80 - 120
Molybdenum	50.0	49.1		mg/Kg		98	80 - 120

Lab Sample ID: LCSD 720-194471/3-A
Matrix: Solid
Analysis Batch: 194838

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194471

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	50.0	45.5		mg/Kg		91	80 - 120	5	20
Arsenic	50.0	45.7		mg/Kg		91	80 - 120	5	20
Barium	50.0	42.8		mg/Kg		86	80 - 120	6	20
Beryllium	50.0	47.4		mg/Kg		95	80 - 120	5	20
Cobalt	50.0	46.3		mg/Kg		93	80 - 120	6	20
Lead	50.0	48.3		mg/Kg		97	80 - 120	5	20
Nickel	50.0	45.4		mg/Kg		91	80 - 120	6	20
Selenium	50.0	44.0		mg/Kg		88	80 - 120	4	20
Silver	25.0	21.8		mg/Kg		87	80 - 120	5	20
Thallium	50.0	45.7		mg/Kg		91	80 - 120	5	20
Vanadium	50.0	46.0		mg/Kg		92	80 - 120	6	20
Zinc	50.0	43.5		mg/Kg		87	80 - 120	6	20

Lab Sample ID: LCSD 720-194471/3-A
Matrix: Solid
Analysis Batch: 194857

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194471

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	50.0	47.5		mg/Kg		95	80 - 120	1	20
Chromium	50.0	47.4		mg/Kg		95	80 - 120	2	20
Copper	50.0	48.0		mg/Kg		96	80 - 120	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 720-194471/3-A
Matrix: Solid
Analysis Batch: 194857

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194471

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	50.0	49.1		mg/Kg		98	80 - 120	0	20

Lab Sample ID: LCSSRM 720-194471/4-A
Matrix: Solid
Analysis Batch: 194838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194471

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	74.6	31.1		mg/Kg		42	11 - 101
Arsenic	45.5	43.0		mg/Kg		95	69 - 119
Barium	579	480		mg/Kg		83	61 - 117
Beryllium	155	146		mg/Kg		94	56 - 102
Cobalt	247	233		mg/Kg		94	64 - 133
Lead	302	283		mg/Kg		94	62 - 113
Nickel	305	276		mg/Kg		90	65 - 117
Selenium	133	124		mg/Kg		94	63 - 126
Silver	33.5	29.3		mg/Kg		87	51 - 130
Thallium	191	170		mg/Kg		89	64 - 124
Vanadium	214	203		mg/Kg		95	67 - 123
Zinc	388	333		mg/Kg		86	62 - 110

Lab Sample ID: LCSSRM 720-194471/4-A
Matrix: Solid
Analysis Batch: 194857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194471

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	201	190		mg/Kg		95	67 - 118
Chromium	106	101		mg/Kg		95	67 - 121
Copper	130	127		mg/Kg		98	68 - 126
Molybdenum	165	154		mg/Kg		93	62 - 128

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-194539/1-A
Matrix: Solid
Analysis Batch: 194692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		12/21/15 15:25	12/23/15 14:46	1

Lab Sample ID: LCS 720-194539/2-A
Matrix: Solid
Analysis Batch: 194692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.827		mg/Kg		99	80 - 120

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 720-194539/3-A
Matrix: Solid
Analysis Batch: 194692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194539

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.833	0.833		mg/Kg		100	80 - 120	1	20

QC Association Summary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

GC/MS VOA

Analysis Batch: 194552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	8260B/CA_LUFT MS	194561
720-69326-2	2301-B-2-10	Total/NA	Solid	8260B/CA_LUFT MS	194561
720-69326-3	1125-B-1-10	Total/NA	Solid	8260B/CA_LUFT MS	194561
LCS 720-194552/5	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 720-194552/7	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-194552/6	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-194552/8	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	
MB 720-194552/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

Prep Batch: 194561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	5030B	
720-69326-1	2301-B-1-10	Total/NA	Solid	5030B	
720-69326-2	2301-B-2-10	Total/NA	Solid	5030B	
720-69326-3	1125-B-1-10	Total/NA	Solid	5030B	
720-69326-4	1125-B-2-16	Total/NA	Solid	5030B	
720-69326-4 MS	1125-B-2-16	Total/NA	Solid	5030B	
720-69326-4 MSD	1125-B-2-16	Total/NA	Solid	5030B	

Analysis Batch: 194618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	8260B/CA_LUFT MS	194561
720-69326-4	1125-B-2-16	Total/NA	Solid	8260B/CA_LUFT MS	194561
720-69326-4 MS	1125-B-2-16	Total/NA	Solid	8260B/CA_LUFT MS	194561
720-69326-4 MSD	1125-B-2-16	Total/NA	Solid	8260B/CA_LUFT MS	194561
LCS 720-194618/5	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 720-194618/7	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-194618/6	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-194618/8	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	
MB 720-194618/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 194757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	3546	
720-69326-2	2301-B-2-10	Total/NA	Solid	3546	
720-69326-3	1125-B-1-10	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 194757 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-4	1125-B-2-16	Total/NA	Solid	3546	
720-69326-4 MS	1125-B-2-16	Total/NA	Solid	3546	
720-69326-4 MSD	1125-B-2-16	Total/NA	Solid	3546	
LCS 720-194757/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 720-194757/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 194792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	8015B	194757
720-69326-2	2301-B-2-10	Total/NA	Solid	8015B	194757
720-69326-3	1125-B-1-10	Total/NA	Solid	8015B	194757
MB 720-194757/1-A	Method Blank	Total/NA	Solid	8015B	194757

Analysis Batch: 194793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-4	1125-B-2-16	Total/NA	Solid	8015B	194757
720-69326-4 MS	1125-B-2-16	Total/NA	Solid	8015B	194757
720-69326-4 MSD	1125-B-2-16	Total/NA	Solid	8015B	194757
LCS 720-194757/2-A	Lab Control Sample	Total/NA	Solid	8015B	194757

Metals

Prep Batch: 194471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	3050B	
720-69326-2	2301-B-2-10	Total/NA	Solid	3050B	
720-69326-3	1125-B-1-10	Total/NA	Solid	3050B	
720-69326-4	1125-B-2-16	Total/NA	Solid	3050B	
LCS 720-194471/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 720-194471/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 720-194471/4-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 720-194471/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 194539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	7471A	
720-69326-2	2301-B-2-10	Total/NA	Solid	7471A	
720-69326-3	1125-B-1-10	Total/NA	Solid	7471A	
720-69326-4	1125-B-2-16	Total/NA	Solid	7471A	
LCS 720-194539/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 720-194539/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
MB 720-194539/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 194692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	7471A	194539
720-69326-2	2301-B-2-10	Total/NA	Solid	7471A	194539
720-69326-3	1125-B-1-10	Total/NA	Solid	7471A	194539
720-69326-4	1125-B-2-16	Total/NA	Solid	7471A	194539
LCS 720-194539/2-A	Lab Control Sample	Total/NA	Solid	7471A	194539

Metals (Continued)

Analysis Batch: 194692 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-194539/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	194539
MB 720-194539/1-A	Method Blank	Total/NA	Solid	7471A	194539

Analysis Batch: 194838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	6010B	194471
720-69326-2	2301-B-2-10	Total/NA	Solid	6010B	194471
720-69326-3	1125-B-1-10	Total/NA	Solid	6010B	194471
720-69326-4	1125-B-2-16	Total/NA	Solid	6010B	194471
LCS 720-194471/2-A	Lab Control Sample	Total/NA	Solid	6010B	194471
LCSD 720-194471/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	194471
LCSSRM 720-194471/4-A	Lab Control Sample	Total/NA	Solid	6010B	194471
MB 720-194471/1-A	Method Blank	Total/NA	Solid	6010B	194471

Analysis Batch: 194857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69326-1	2301-B-1-10	Total/NA	Solid	6010B	194471
720-69326-2	2301-B-2-10	Total/NA	Solid	6010B	194471
720-69326-4	1125-B-2-16	Total/NA	Solid	6010B	194471
LCS 720-194471/2-A	Lab Control Sample	Total/NA	Solid	6010B	194471
LCSD 720-194471/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	194471
LCSSRM 720-194471/4-A	Lab Control Sample	Total/NA	Solid	6010B	194471
MB 720-194471/1-A	Method Blank	Total/NA	Solid	6010B	194471

Lab Chronicle

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Client Sample ID: 2301-B-1-10

Lab Sample ID: 720-69326-1

Date Collected: 12/18/15 09:11

Matrix: Solid

Date Received: 12/18/15 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			194561	12/21/15 19:10	JRM	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	194552	12/22/15 03:43	PRD	TAL PLS
Total/NA	Prep	5030B			194561	12/22/15 18:44	JRM	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	194618	12/22/15 22:17	PRD	TAL PLS
Total/NA	Prep	3546			194757	12/24/15 13:56	NVP	TAL PLS
Total/NA	Analysis	8015B		1	194792	12/29/15 11:46	JXL	TAL PLS
Total/NA	Prep	3050B			194471	12/21/15 14:29	MJD	TAL PLS
Total/NA	Analysis	6010B		4	194838	12/29/15 14:33	EFH	TAL PLS
Total/NA	Prep	3050B			194471	12/21/15 14:29	MJD	TAL PLS
Total/NA	Analysis	6010B		1	194857	12/29/15 18:53	SLK	TAL PLS
Total/NA	Prep	7471A			194539	12/21/15 15:25	ASB	TAL PLS
Total/NA	Analysis	7471A		1	194692	12/23/15 15:31	SLK	TAL PLS

Client Sample ID: 2301-B-2-10

Lab Sample ID: 720-69326-2

Date Collected: 12/18/15 10:11

Matrix: Solid

Date Received: 12/18/15 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			194561	12/21/15 19:10	JRM	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	194552	12/22/15 04:13	PRD	TAL PLS
Total/NA	Prep	3546			194757	12/24/15 13:56	NVP	TAL PLS
Total/NA	Analysis	8015B		1	194792	12/29/15 12:15	JXL	TAL PLS
Total/NA	Prep	3050B			194471	12/21/15 14:29	MJD	TAL PLS
Total/NA	Analysis	6010B		4	194838	12/29/15 14:18	EFH	TAL PLS
Total/NA	Prep	3050B			194471	12/21/15 14:29	MJD	TAL PLS
Total/NA	Analysis	6010B		1	194857	12/29/15 18:48	SLK	TAL PLS
Total/NA	Prep	7471A			194539	12/21/15 15:25	ASB	TAL PLS
Total/NA	Analysis	7471A		1	194692	12/23/15 15:33	SLK	TAL PLS

Client Sample ID: 1125-B-1-10

Lab Sample ID: 720-69326-3

Date Collected: 12/18/15 12:10

Matrix: Solid

Date Received: 12/18/15 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			194561	12/21/15 20:15	JRM	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	194552	12/22/15 04:44	PRD	TAL PLS
Total/NA	Prep	3546			194757	12/24/15 13:56	NVP	TAL PLS
Total/NA	Analysis	8015B		1	194792	12/29/15 13:38	JXL	TAL PLS
Total/NA	Prep	3050B			194471	12/21/15 14:29	MJD	TAL PLS
Total/NA	Analysis	6010B		4	194838	12/29/15 14:38	EFH	TAL PLS
Total/NA	Prep	7471A			194539	12/21/15 15:25	ASB	TAL PLS
Total/NA	Analysis	7471A		1	194692	12/23/15 15:36	SLK	TAL PLS

Lab Chronicle

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Client Sample ID: 1125-B-2-16

Date Collected: 12/18/15 13:55
Date Received: 12/18/15 16:20

Lab Sample ID: 720-69326-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			194561	12/22/15 18:44	JRM	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	194618	12/23/15 00:51	PRD	TAL PLS
Total/NA	Prep	3546			194757	12/24/15 13:56	NVP	TAL PLS
Total/NA	Analysis	8015B		3	194793	12/29/15 13:03	JXL	TAL PLS
Total/NA	Prep	3050B			194471	12/21/15 14:29	MJD	TAL PLS
Total/NA	Analysis	6010B		4	194838	12/29/15 14:13	EFH	TAL PLS
Total/NA	Prep	3050B			194471	12/21/15 14:29	MJD	TAL PLS
Total/NA	Analysis	6010B		1	194857	12/29/15 18:43	SLK	TAL PLS
Total/NA	Prep	7471A			194539	12/21/15 15:25	ASB	TAL PLS
Total/NA	Analysis	7471A		1	194692	12/23/15 15:38	SLK	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-16 *

Analysis Method	Prep Method	Matrix	Analyte

* Certification renewal pending - certification considered valid.

Method Summary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTMS	8260B / CA LUFT MS	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Ninyo & Moore
Project/Site: City of Oakland-Sub Basin

TestAmerica Job ID: 720-69326-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-69326-1	2301-B-1-10	Solid	12/18/15 09:11	12/18/15 16:20
720-69326-2	2301-B-2-10	Solid	12/18/15 10:11	12/18/15 16:20
720-69326-3	1125-B-1-10	Solid	12/18/15 12:10	12/18/15 16:20
720-69326-4	1125-B-2-16	Solid	12/18/15 13:55	12/18/15 16:20

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-69326

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 165718

Date 12/18/15 Page 1 of 1

Report To

Attn: Peter Sims
Company: Ninyo + Moore
Address: 1956 Webster St. STE 400
Email: PSIMS@ninyoandmoore.com
Bill To: [illegible]1013
Sampled By: F. McFarland
Attn: Peter Sims
Phone: 510 343-3000

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☒ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☒ Motor Oil ☒ Other [illegible]	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☒ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: Title 22 Metals	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity			Number of Containers
1203-B-1-10	12/18/15	0911	S	—			X	X						X											
1203-B-2-10	12/18/15	1011	S	—			X	X						X											
1125-B-1-10	12/18/15	1210	S	—			X	X						X											
1125-B-2-16	12/18/15	1355	S	—			X	X						X											

720-69326 Chain of Custody

Project Info.

Project Name/ #: City of Oakland Sub Basin 60-04
PO#:
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers: 4
Head Space: –
Temp: 4.3°C

T A T	10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:

TAT = STD 5-7 day

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

	Signature	Time	Printed Name	Date	Company
1) Relinquished by:	F. McFarland	1450	Forrest McFarland	12/18/15	Ninyo + Moore
1) Received by:	Sam B.	1450	Sam Banquerigo	12/18/15	TA
2) Relinquished by:	S. B.	1620	Sam Banquerigo	12/18/15	TA
2) Received by:	[signature]	1620	Dennis [illegible]	12/18/15	TA
3) Relinquished by:					
3) Received by:					

Rev. 10/201

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-69326-1

Login Number: 69326
List Number: 1
Creator: Arauz, Dennis

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	