Wickham, Jerry, Env. Health

From: Peter Sims [psims@ninyoandmoore.com]
Sent: Wednesday, March 12, 2014 3:45 PM
To: Wickham, Jerry, Env. Health
Subject: RE: Ashland Housing Project
Attachments: Lab Report SP-4, -5, -6, -7.pdf

Jerry,

Attached is the second round of soil stockpile sample laboratory analytical results.

Thank you,

Peter D. Sims, LEED AP
Project Environmental Geologist
Ninyo & Moore
Geotechnical & Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612
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New San Jose office
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Experience * Quality * Commitment

-----Original Message-----
From: Peter Sims
Sent: Wednesday, March 05, 2014 2:22 PM
To: 'Wickham, Jerry, Env. Health'
Subject: RE: Ashland Housing Project

Jerry, I have answered your questions below. The attached figures
describe locations of the fill source and stockpile IDs/locations.

Peter D. Sims, LEED AP
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-----Original Message-----
From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Tuesday, March 04, 2014 9:01 AM
To: Peter Sims
Subject: RE: Ashland Housing Project

Peter,

Here is the information I would need to go with analytical results in order to review the fill for reuse:

1) A map or aerial photo showing the general area where the fill came from.
    See attached. Stockpiles SP1 through SP3 came from trenching in Kent Avenue. Stockpiles SP4 through SP7 came from trenching in E 14th Street.

2) The volume of the stockpiles and volume that each sample represents and which sample goes with which stockpile
    SP1-1 through SP1-4 were collected from stockpile SP1 (approximately 48 cubic yards) each sample represents approximately 12 cubic yards.
    SP2-1 through SP2-4 were collected from stockpile SP2 (approximately 10 cubic yards) each sample represents approximately 2.5 cubic yards.
    SP3-1 through SP3-4 were collected from stockpile SP3 (approximately 45 cubic yards) each sample represents approximately 11 cubic yards.
    SP4-1 through SP4-4 were collected from stockpile SP4 (approximately 28 cubic yards) each sample represents approximately 7 cubic yards.
    SP5-1 through SP5-4 were collected from stockpile SP5 (approximately 47 cubic yards) each sample represents approximately 12 cubic yards.
    SP6-1 through SP6-4 were collected from stockpile SP6 (approximately 8 cubic yards) each sample represents 2 cubic yards.
    SP7-1 through SP7-4 were collected from stockpile SP7 (approximately 5 cubic yards)each sample represents approximately 1 cubic yard.

3) The type of samples - composite or discrete
    Discrete samples were collected and composited by the laboratory. VOC and SVOC analyses were performed on discrete samples. All other analyses were performed on composite samples.

4) The type of fill and the heterogeneity
    The fill was described as generally homogenous silty sand.

5) Whether the fill contains any debris or construction material
Debris or construction material were not observed in the stockpiles at the time of the sampling. Some construction material (broken concrete) had been removed from stockpile SP7.

6) Whether any staining or odor was observed
Staining and odor were not observed in the stockpiled fill.

7) Where the soil is to be reused - In this case, will the soil be used in housing areas or under a street?
The site is made up of housing/communal areas and driveway/parking areas. The stockpiled soil is currently planned to be used across the entire site. However, if certain stockpiles could only be used under parking/driveway areas then the grading plan could be modified to accommodate.

8) Whether this is a variance from the Work Plan
Stockpile sampling was performed in accordance with the Interim Remedial Action Plan.

9) Laboratory analytical results
Lab results for stockpiles SP1, SP2, and SP3 are attached. Results for SP4 through SP7 will be provided when they are completed by the laboratory.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
phone: 510-567-6791
jerry.wickham@acgov.org

-----Original Message-----
From: Peter Sims [mailto:psims@ninyoandmoore.com]
Sent: Monday, March 03, 2014 12:18 PM
To: Wickham, Jerry, Env. Health
Subject: RE: Ashland Housing Project

That's right, thanks for the reminder. Attached are the lab results for the three soil stockpiles that originated from trenching activities in Kent Avenue.

Peter D. Sims, LEED AP
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-----Original Message-----
From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Monday, March 03, 2014 11:55 AM
To: Peter Sims
Subject: Re: Ashland Housing Project

Our 12/11/2013 approval of the IRAP requested that analytical results for reuse of stockpiles be submitted to ACEH for approval prior to reuse on site. There are other factors in addition to cleanup goals that could enter into decisions on reuse.

Jerry Wickham
Alameda County Environmental Health
Sent from my iPad

> On Mar 3, 2014, at 11:22 AM, "Peter Sims" <psims@ninyoandmoore.com>
> wrote:
>
> Will do, samples from the stockpile of unknown origin (hereafter known

> as SP-7), will be analyzed for the full suite of analyses as detailed
> in the IRAP.
>
> I had previously thought that we would be using the May 2013 Tier 1
> ESLs as our screening levels for on-site reuse of stockpiled soil as
> well as cleanup goals. Should we be using different numbers for
> on-site reuse screening and cleanup goals?
>
> Thanks,
>
> Peter D. Sims, LEED AP
> Project Environmental Geologist
> Ninyo & Moore
> Geotechnical & Environmental Sciences Consultants
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>
> -----Original Message-----
> From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
> Sent: Monday, March 03, 2014 10:02 AM
> To: Peter Sims
> Subject: Re: Ashland Housing Project
>
>
> Peter,
>
> Given the conditions and time that has passed for the stockpile of
> unknown origin, it should not be treated the same as any other
> stockpile generated during the project. In addition to the analyses
> proposed below, please include PAHs by Method 8270 and PCBs by Method
> 8082.
>
> I do not see a need to revise the cleanup goal of 500 mg/kg for TPHmo
> at this time. However, the ceiling value may be considered along with

> other factors in making decisions on reuse of soil.
>
> Regards,
> Jerry Wickham
> Alameda County Environmental Health
>
>
> Sent from my iPad
>
> On Feb 28, 2014, at 11:45 AM, "Peter Sims"
> <psims@ninyoandmoore.com<mailto:psims@ninyoandmoore.com>> wrote:
>
> Hi Jerry,
>
> The stockpile of unknown origin at the site has been identified.
> According to the remediation contractor and site owner, it was
> generated during utility trenching in East 14th Street. As such, I'd
> like to treat it the same as any other soil stockpiled on site from
> trenching in adjacent streets. The stockpile would be sampled for
> on-site reuse at a rate of one 4-point composite per 50 cubic yards.
> The composite sample would be analyzed for TPHg, TPHd, TPHmo, Title 22

> Metals, and BTEX. Is this acceptable?
>
> The new Tier 1 ESL (December, 2013) for TPHo is 100 mg/kg (based on
> Ceiling Value) which is lower than the previous ESL (May, 2013) for
> TPHo of 500mg/kg which is our proposed cleanup goal for TPHo. Since
> the residential direct exposure ESL for TPHo is 1,000 mg/kg and
> impacts to groundwater have shown to not be a concern, I believe the
> 500mg/kg cleanup goal will be sufficient for the planned site use.
> What's your take?
>
> Thanks,
>
>
> Peter D. Sims, LEED AP
> Project Environmental Geologist
> Ninyo & Moore

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March 12, 2014

Peter Sims
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1956 Webster Street, Suite 400
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Tel: (510) 633-5640
Fax:(510) 633-5646

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1400547

Client Reference : Ashland Housing Project, 402090002

Enclosed are the results for sample(s) received on February 25, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

Certificate of Analysis

Ninyo & Moore		Project Number :	Ashland Housing Project, 402090002
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	03/12/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP4-1	1400547-01	Soil	2/24/14 9:15	2/25/14 8:40
SP5-2	1400547-06	Soil	2/24/14 9:25	2/25/14 8:40
SP6-3	1400547-11	Soil	2/24/14 9:35	2/25/14 8:40
SP7-4	1400547-16	Soil	2/24/14 9:45	2/25/14 8:40
COMP-4	1400547-17	Soil	2/24/14 0:00	2/25/14 8:40
COMP-5	1400547-18	Soil	2/24/14 0:00	2/25/14 8:40
COMP-6	1400547-19	Soil	2/24/14 0:00	2/25/14 8:40
COMP-7	1400547-20	Soil	2/24/14 0:00	2/25/14 8:40

CASE NARRATIVE

The sample for Asbestos CARB 435 (400 pt ct) analysis was subcontracted to AmeriSci Los Angeles with ELAP Cert.# 2322.

The sample for EPA 8141 (Organophosphorus Pesticides) and EPA 8151 (Chlorinated Herbicides) was subcontracted to AETL with ELAP Cert.# 1541.

Certificate of Analysis

Ninyo & Moore		Project Number :	Ashland Housing Project, 402090002
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	03/12/2014

Client Sample ID SP4-1

Lab ID: 1400547-01

BTEX/MTBE by EPA 8021 **Analyst: TP**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:17	
Toluene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:17	
Ethylbenzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:17	
m,p-Xylene	ND	10	NA	1	B4B0410	02/26/2014	02/26/14 12:17	
o-Xylene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:17	
Surrogate: 4-Bromofluorobenzene	*105 %*	*53 - 144*			B4B0410	02/26/2014	*02/26/14 12:17*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID SP5-2

Lab ID: 1400547-06

BTEX/MTBE by EPA 8021 **Analyst: TP**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:33	
Toluene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:33	
Ethylbenzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:33	
m,p-Xylene	ND	10	NA	1	B4B0410	02/26/2014	02/26/14 12:33	
o-Xylene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:33	
Surrogate: 4-Bromofluorobenzene	*98.6 %*	*53 - 144*			B4B0410	02/26/2014	*02/26/14 12:33*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID SP6-3

Lab ID: 1400547-11

BTEX/MTBE by EPA 8021 **Analyst: TP**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:49	
Toluene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:49	
Ethylbenzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:49	
m,p-Xylene	ND	10	NA	1	B4B0410	02/26/2014	02/26/14 12:49	
o-Xylene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 12:49	
Surrogate: 4-Bromofluorobenzene	*98.1 %*	*53 - 144*			B4B0410	02/26/2014	*02/26/14 12:49*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID SP7-4
Lab ID: 1400547-16

BTEX/MTBE by EPA 8021

Analyst: TP

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 13:05	
Toluene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 13:05	
Ethylbenzene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 13:05	
m,p-Xylene	ND	10	NA	1	B4B0410	02/26/2014	02/26/14 13:05	
o-Xylene	ND	5.0	NA	1	B4B0410	02/26/2014	02/26/14 13:05	
Surrogate: 4-Bromofluorobenzene	*100 %*	*53 - 144*			B4B0410	02/26/2014	*02/26/14 13:05*	

Volatile Organic Compounds by EPA 8260B

Analyst: TP

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,1,1-Trichloroethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,1,2,2-Tetrachloroethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,1,2-Trichloroethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,1-Dichloroethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,1-Dichloroethene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,1-Dichloropropene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2,3-Trichloropropane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2,3-Trichlorobenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2,4-Trichlorobenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2,4-Trimethylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2-Dibromo-3-chloropropane	ND	10	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2-Dibromoethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2-Dichlorobenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2-Dichloroethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,2-Dichloropropane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,3,5-Trimethylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,3-Dichlorobenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,3-Dichloropropane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
1,4-Dichlorobenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
2,2-Dichloropropane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
2-Chlorotoluene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
4-Chlorotoluene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
4-Isopropyltoluene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Benzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Bromobenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID SP7-4

Lab ID: 1400547-16

Volatile Organic Compounds by EPA 8260B **Analyst: TP**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromochloromethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Bromodichloromethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Bromoform	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Bromomethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Carbon disulfide	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Carbon tetrachloride	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Chlorobenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Chloroethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Chloroform	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Chloromethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
cis-1,2-Dichloroethene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
cis-1,3-Dichloropropene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Di-isopropyl ether	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Dibromochloromethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Dibromomethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Dichlorodifluoromethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Ethyl Acetate	ND	50	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Ethyl Ether	ND	50	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Ethyl tert-butyl ether	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Ethylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Freon-113	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Hexachlorobutadiene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Isopropylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
m,p-Xylene	ND	10	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Methylene chloride	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
MTBE	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
n-Butylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
n-Propylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Naphthalene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
o-Xylene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
sec-Butylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Styrene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
tert-Amyl methyl ether	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
tert-Butanol	ND	100	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
tert-Butylbenzene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Tetrachloroethene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Toluene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID SP7-4
Lab ID: 1400547-16

Volatile Organic Compounds by EPA 8260B

Analyst: TP

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
trans-1,2-Dichloroethene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
trans-1,3-Dichloropropene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Trichloroethene	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Trichlorofluoromethane	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Vinyl acetate	ND	50	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Vinyl chloride	ND	5.0	NA	1	B4C0012	03/03/2014	03/03/14 18:04	
Surrogate: 1,2-Dichloroethane-d4	*78.1 %*	*67 - 152*			B4C0012	03/03/2014	*03/03/14 18:04*	
Surrogate: 4-Bromofluorobenzene	*85.6 %*	*59 - 135*			B4C0012	03/03/2014	*03/03/14 18:04*	
Surrogate: Dibromofluoromethane	*93.2 %*	*71 - 150*			B4C0012	03/03/2014	*03/03/14 18:04*	
Surrogate: Toluene-d8	*92.2 %*	*77 - 129*			B4C0012	03/03/2014	*03/03/14 18:04*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
1,2-Dichlorobenzene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
1,3-Dichlorobenzene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
1,4-Dichlorobenzene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2,4,5-Trichlorophenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2,4,6-Trichlorophenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2,4-Dichlorophenol	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2,4-Dimethylphenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2,4-Dinitrophenol	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2,4-Dinitrotoluene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2,6-Dinitrotoluene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2-Chloronaphthalene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2-Chlorophenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2-Methylnaphthalene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2-Methylphenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2-Nitroaniline	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
2-Nitrophenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
3,3´-Dichlorobenzidine	ND	6600	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
3-Nitroaniline	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
4,6-Dinitro-2-methyphenol	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
4-Bromophenyl-phenylether	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
4-Chloro-3-methylphenol	ND	6600	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID SP7-4

Lab ID: 1400547-16

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Chloroaniline	ND	6600	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
4-Chlorophenyl-phenylether	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
4-Methylphenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
4-Nitroaniline	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
4-Nitrophenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Acenaphthene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Acenaphthylene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Anthracene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzidine (M)	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzo(a)anthracene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzo(a)pyrene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzo(b)fluoranthene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzo(g,h,i)perylene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzo(k)fluoranthene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzoic acid	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Benzyl alcohol	ND	6600	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
bis(2-chloroethoxy)methane	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
bis(2-Chloroethyl)ether	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
bis(2-chloroisopropyl)ether	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
bis(2-ethylhexyl)phthalate	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Butylbenzylphthalate	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Chrysene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Di-n-butylphthalate	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Di-n-octylphthalate	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Dibenz(a,h)anthracene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Dibenzofuran	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Diethyl phthalate	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Dimethyl phthalate	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Fluoranthene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Fluorene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Hexachlorobenzene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Hexachlorobutadiene	ND	6600	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Hexachlorocyclopentadiene	ND	6600	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Hexachloroethane	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Indeno(1,2,3-cd)pyrene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Isophorone	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
N-Nitroso-di-n propylamine	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID SP7-4

Lab ID: 1400547-16

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
N-Nitrosodiphenylamine	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Naphthalene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Nitrobenzene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Pentachlorophenol	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Phenanthrene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Phenol	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Pyrene	ND	3300	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Pyridine	ND	16000	NA	10	B4C0053	03/04/2014	03/05/14 15:01	D1
Surrogate: 1,2-Dichlorobenzene-d4	*81.0 %*	*42 - 119*			B4C0053	03/04/2014	*03/05/14 15:01*	D1
Surrogate: 2,4,6-Tribromophenol	*87.7 %*	*27 - 150*			B4C0053	03/04/2014	*03/05/14 15:01*	D1
Surrogate: 2-Chlorophenol-d4	*84.3 %*	*40 - 126*			B4C0053	03/04/2014	*03/05/14 15:01*	D1
Surrogate: 2-Fluorobiphenyl	*86.5 %*	*54 - 128*			B4C0053	03/04/2014	*03/05/14 15:01*	D1
Surrogate: 2-Fluorophenol	*79.8 %*	*33 - 133*			B4C0053	03/04/2014	*03/05/14 15:01*	D1
Surrogate: 4-Terphenyl-d14	*95.0 %*	*37 - 160*			B4C0053	03/04/2014	*03/05/14 15:01*	D1
Surrogate: Nitrobenzene-d5	*76.1 %*	*41 - 128*			B4C0053	03/04/2014	*03/05/14 15:01*	D1
Surrogate: Phenol-d5	*82.4 %*	*33 - 127*			B4C0053	03/04/2014	*03/05/14 15:01*	D1

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID COMP-4

Lab ID: 1400547-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Arsenic	**3.6**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Barium	**77**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Beryllium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Cadmium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Chromium	**21**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Cobalt	**8.1**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Copper	**18**	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Lead	**14**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Molybdenum	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Nickel	**31**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Selenium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Silver	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Thallium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Vanadium	**21**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	
Zinc	**38**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:31	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B4B0479	02/28/2014	02/28/14 17:00	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: TP

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4B0410	02/26/2014	02/26/14 13:21	
Surrogate: 4-Bromofluorobenzene	*99.0 %*	*48 - 137*			B4B0410	02/26/2014	*02/26/14 13:21*	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**98**	4.0	NA	2	B4B0441	02/27/2014	02/27/14 19:27	
ORO	**410**	4.0	NA	2	B4B0441	02/27/2014	02/27/14 19:27	
Surrogate: p-Terphenyl	*103 %*	*26 - 145*			B4B0441	02/27/2014	*02/27/14 19:27*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID COMP-5

Lab ID: 1400547-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Arsenic	**3.4**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Barium	**76**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Beryllium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Cadmium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Chromium	**28**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Cobalt	**6.6**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Copper	**20**	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Lead	**9.7**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Molybdenum	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Nickel	**28**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Selenium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Silver	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Thallium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Vanadium	**24**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	
Zinc	**38**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:33	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B4B0479	02/28/2014	02/28/14 17:12	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: TP

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4B0410	02/26/2014	02/26/14 13:36	
Surrogate: 4-Bromofluorobenzene	*96.8 %*	*48 - 137*			B4B0410	02/26/2014	*02/26/14 13:36*	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**170**	4.0	NA	2	B4B0441	02/27/2014	02/27/14 19:44	
ORO	**650**	4.0	NA	2	B4B0441	02/27/2014	02/27/14 19:44	
Surrogate: p-Terphenyl	*102 %*	*26 - 145*			B4B0441	02/27/2014	*02/27/14 19:44*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID COMP-6

Lab ID: 1400547-19

Title 22 Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Arsenic	**3.6**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Barium	**68**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Beryllium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Cadmium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Chromium	**20**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Cobalt	**6.4**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Copper	**16**	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Lead	**6.2**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Molybdenum	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Nickel	**25**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Selenium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Silver	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Thallium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Vanadium	**24**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	
Zinc	**36**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:38	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B4B0479	02/28/2014	02/28/14 17:15	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: TP

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4B0410	02/26/2014	02/26/14 13:52	
Surrogate: 4-Bromofluorobenzene	*99.7 %*	*48 - 137*			B4B0410	02/26/2014	*02/26/14 13:52*	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**430**	10	NA	5	B4B0441	02/27/2014	02/27/14 20:01	
ORO	**1600**	10	NA	5	B4B0441	02/27/2014	02/27/14 20:01	
Surrogate: p-Terphenyl	*101 %*	*26 - 145*			B4B0441	02/27/2014	*02/27/14 20:01*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID COMP-7

Lab ID: 1400547-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Arsenic	**3.6**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Barium	**97**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Beryllium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Cadmium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Chromium	**23**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Cobalt	**7.1**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Copper	**18**	2.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Lead	**11**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Molybdenum	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Nickel	**26**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Selenium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Silver	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Thallium	ND	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Vanadium	**23**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	
Zinc	**37**	1.0	NA	1	B4B0455	02/28/2014	02/28/14 22:40	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B4B0479	02/28/2014	02/28/14 17:17	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: TP

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4B0410	02/26/2014	02/26/14 14:07	
Surrogate: 4-Bromofluorobenzene	*94.0 %*	*48 - 137*			B4B0410	02/26/2014	*02/26/14 14:07*	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**18**	2.0	NA	2	B4B0441	02/27/2014	02/27/14 18:03	
ORO	**69**	2.0	NA	2	B4B0441	02/27/2014	02/27/14 18:03	
Surrogate: p-Terphenyl	*72.5 %*	*26 - 145*			B4B0441	02/27/2014	*02/27/14 18:03*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID COMP-7

Lab ID: 1400547-20

Organochlorine Pesticides by EPA 8081 **Analyst: PIL**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
4,4´-DDE [2C]	**2.2**	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
4,4´-DDT	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Aldrin	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
alpha-BHC	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
alpha-Chlordane	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
beta-BHC	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Chlordane	ND	8.5	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
delta-BHC	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Dieldrin [2C]	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Endosulfan I	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Endosulfan II	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Endosulfan sulfate	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Endrin	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Endrin aldehyde	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Endrin ketone	ND	2.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
gamma-BHC	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
gamma-Chlordane	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Heptachlor	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Heptachlor epoxide	ND	1.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Methoxychlor	ND	5.0	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Toxaphene	ND	50	NA	1	B4C0074	03/05/2014	03/05/14 17:13	
Surrogate: Decachlorobiphenyl	*72.0 %*	*29 - 143*			B4C0074	03/05/2014	*03/05/14 17:13*	
Surrogate: Tetrachloro-m-xylene	*89.1 %*	*52 - 114*			B4C0074	03/05/2014	*03/05/14 17:13*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Client Sample ID COMP-7

Lab ID: 1400547-20

Polychlorinated Biphenyls by EPA 8082 **Analyst: PIL**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1221	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1232	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1242	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1248	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1254	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1260	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1262	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Aroclor 1268	ND	16	NA	1	B4C0074	03/05/2014	03/05/14 12:56	
Surrogate: Decachlorobiphenyl	*88.3 %*		*16 - 152*		B4C0074	03/05/2014	*03/05/14 12:56*	
Surrogate: Tetrachloro-m-xylene	*92.6 %*		*38 - 131*		B4C0074	03/05/2014	*03/05/14 12:56*	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4B0455 - EPA 3050B									
Blank (B4B0455-BLK1)					Prepared: 2/28/2014 Analyzed: 2/28/2014				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	ND	1.0			NR				
Cobalt	ND	1.0			NR				
Copper	ND	2.0			NR				
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	ND	1.0			NR				
LCS (B4B0455-BS1)					Prepared: 2/28/2014 Analyzed: 2/28/2014				
Antimony	46.7297	2.0	50.0000		93.5	80 - 120			
Arsenic	46.2201	1.0	50.0000		92.4	80 - 120			
Barium	47.7153	1.0	50.0000		95.4	80 - 120			
Beryllium	48.3225	1.0	50.0000		96.6	80 - 120			
Cadmium	46.8584	1.0	50.0000		93.7	80 - 120			
Chromium	49.1868	1.0	50.0000		98.4	80 - 120			
Cobalt	48.8026	1.0	50.0000		97.6	80 - 120			
Copper	49.4048	2.0	50.0000		98.8	80 - 120			
Lead	48.0076	1.0	50.0000		96.0	80 - 120			
Molybdenum	49.7643	1.0	50.0000		99.5	80 - 120			
Nickel	47.8957	1.0	50.0000		95.8	80 - 120			
Selenium	43.1234	1.0	50.0000		86.2	80 - 120			
Silver	52.6882	1.0	50.0000		105	80 - 120			
Thallium	47.6753	1.0	50.0000		95.4	80 - 120			
Vanadium	49.3297	1.0	50.0000		98.7	80 - 120			
Zinc	48.7675	1.0	50.0000		97.5	80 - 120			
Matrix Spike (B4B0455-MS1)		**Source: 1400538-07**			Prepared: 2/28/2014 Analyzed: 2/28/2014				
Antimony	112.952	2.0	125.000	ND	90.4	21 - 109			
Arsenic	116.550	1.0	125.000	1.80968	91.8	55 - 102			
Barium	172.521	1.0	125.000	52.5527	96.0	40 - 130			
Beryllium	114.997	1.0	125.000	0.060134	91.9	60 - 104			

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4B0455 - EPA 3050B (continued)									
Matrix Spike (B4B0455-MS1) - Continued		**Source: 1400538-07**		Prepared: 2/28/2014 Analyzed: 2/28/2014					
Cadmium	107.130	1.0	125.000	ND	85.7	52 - 100			
Chromium	120.275	1.0	125.000	2.08275	94.6	53 - 113			
Cobalt	115.034	1.0	125.000	0.057262	92.0	53 - 104			
Copper	123.366	2.0	125.000	3.83897	95.6	51 - 122			
Lead	132.832	1.0	125.000	20.7431	89.7	51 - 106			
Molybdenum	120.915	1.0	125.000	0.507759	96.3	55 - 103			
Nickel	115.048	1.0	125.000	0.711240	91.5	48 - 112			
Selenium	107.563	1.0	125.000	ND	86.1	53 - 104			
Silver	114.597	1.0	125.000	ND	91.7	61 - 109			
Thallium	112.906	1.0	125.000	0.655987	89.8	44 - 103			
Vanadium	137.834	1.0	125.000	15.0086	98.3	55 - 115			
Zinc	120.868	1.0	125.000	14.5036	85.1	24 - 130			
Matrix Spike Dup (B4B0455-MSD1)		**Source: 1400538-07**		Prepared: 2/28/2014 Analyzed: 2/28/2014					
Antimony	112.947	2.0	125.000	ND	90.4	21 - 109	0.00407	20	
Arsenic	116.126	1.0	125.000	1.80968	91.5	55 - 102	0.364	20	
Barium	175.628	1.0	125.000	52.5527	98.5	40 - 130	1.78	20	
Beryllium	115.033	1.0	125.000	0.060134	92.0	60 - 104	0.0320	20	
Cadmium	107.555	1.0	125.000	ND	86.0	52 - 100	0.396	20	
Chromium	119.755	1.0	125.000	2.08275	94.1	53 - 113	0.434	20	
Cobalt	116.520	1.0	125.000	0.057262	93.2	53 - 104	1.28	20	
Copper	127.528	2.0	125.000	3.83897	99.0	51 - 122	3.32	20	
Lead	133.615	1.0	125.000	20.7431	90.3	51 - 106	0.588	20	
Molybdenum	120.384	1.0	125.000	0.507759	95.9	55 - 103	0.440	20	
Nickel	116.201	1.0	125.000	0.711240	92.4	48 - 112	0.997	20	
Selenium	106.077	1.0	125.000	ND	84.9	53 - 104	1.39	20	
Silver	116.163	1.0	125.000	ND	92.9	61 - 109	1.36	20	
Thallium	111.931	1.0	125.000	0.655987	89.0	44 - 103	0.867	20	
Vanadium	138.172	1.0	125.000	15.0086	98.5	55 - 115	0.244	20	
Zinc	135.276	1.0	125.000	14.5036	96.6	24 - 130	11.3	20	

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4B0479 - EPA 7471									
Blank (B4B0479-BLK1)				Prepared: 2/28/2014 Analyzed: 2/28/2014					
Mercury	ND	0.10			NR				
LCS (B4B0479-BS1)				Prepared: 2/28/2014 Analyzed: 2/28/2014					
Mercury	0.900292	0.10	0.833333		108	80 - 120			
Matrix Spike (B4B0479-MS1)		**Source: 1400547-17**		Prepared: 2/28/2014 Analyzed: 2/28/2014					
Mercury	0.875593	0.10	0.833333	0.075445	96.0	70 - 130			
Matrix Spike Dup (B4B0479-MSD1)		**Source: 1400547-17**		Prepared: 2/28/2014 Analyzed: 2/28/2014					
Mercury	0.877250	0.10	0.833333	0.075445	96.2	70 - 130	0.189	20	
Post Spike (B4B0479-PS1)		**Source: 1400547-17**		Prepared: 2/28/2014 Analyzed: 2/28/2014					
Mercury	0.006641		5.00000E-3	0.000905	115	85 - 115			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4B0410 - GCVOAS									
Blank (B4B0410-BLK1)					Prepared: 2/26/2014 Analyzed: 2/26/2014				
Gasoline Range Organics	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1988*		*0.200000*		*99.4*	*48 - 137*			
LCS (B4B0410-BS1)					Prepared: 2/26/2014 Analyzed: 2/26/2014				
Gasoline Range Organics	4.57500	1.0	5.00000		91.5	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2135*		*0.200000*		*107*	*48 - 137*			
LCS Dup (B4B0410-BSD1)					Prepared: 2/26/2014 Analyzed: 2/26/2014				
Gasoline Range Organics	5.37100	1.0	5.00000		107	70 - 130	16.0	20	
Surrogate: 4-Bromofluorobenzene	*0.2164*		*0.200000*		*108*	*48 - 137*			
Matrix Spike (B4B0410-MS1)		**Source: 1400547-01**			Prepared: 2/26/2014 Analyzed: 2/26/2014				
Gasoline Range Organics	4.47400	1.0	5.00000	ND	89.5	50 - 122			
Surrogate: 4-Bromofluorobenzene	*0.2012*		*0.200000*		*101*	*48 - 137*			
Matrix Spike Dup (B4B0410-MSD1)		**Source: 1400547-01**			Prepared: 2/26/2014 Analyzed: 2/26/2014				
Gasoline Range Organics	4.33100	1.0	5.00000	ND	86.6	50 - 122	3.25	20	
Surrogate: 4-Bromofluorobenzene	*0.2064*		*0.200000*		*103*	*48 - 137*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4B0441 - GCSEMI_DRO_SOIL_LL									
Blank (B4B0441-BLK1)					Prepared: 2/27/2014 Analyzed: 2/27/2014				
DRO	ND	1.0			NR				
ORO	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.198*		*2.66667*		*82.4*	*26 - 145*			
LCS (B4B0441-BS1)					Prepared: 2/27/2014 Analyzed: 2/27/2014				
DRO	29.4037	1.0	33.3333		88.2	28 - 138			
Surrogate: p-Terphenyl	*2.091*		*2.66667*		*78.4*	*26 - 145*			
Matrix Spike (B4B0441-MS1)		**Source: 1400533-08**			Prepared: 2/27/2014 Analyzed: 2/27/2014				
DRO	38.6647	1.0	33.3333	16.2843	67.1	18 - 122			
Surrogate: p-Terphenyl	*2.139*		*2.66667*		*80.2*	*26 - 145*			
Matrix Spike Dup (B4B0441-MSD1)		**Source: 1400533-08**			Prepared: 2/27/2014 Analyzed: 2/27/2014				
DRO	37.3790	1.0	33.3333	16.2843	63.3	18 - 122	3.38	20	
Surrogate: p-Terphenyl	*2.174*		*2.66667*		*81.5*	*26 - 145*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

BTEX/MTBE by EPA 8021 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4B0410 - GCVOAS									
Blank (B4B0410-BLK1)				Prepared: 2/26/2014 Analyzed: 2/26/2014					
Benzene	ND	5.0			NR				
Toluene	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
o-Xylene	ND	5.0			NR				
Surrogate: 4-Bromofluorobenzene	*206.4*		*200.000*		*103*	*53 - 144*			
LCS (B4B0410-BS2)				Prepared: 2/26/2014 Analyzed: 2/26/2014					
Benzene	96.1820	5.0	100.000		96.2	70 - 130			
Toluene	99.9640	5.0	100.000		100	70 - 130			
Ethylbenzene	98.1540	5.0	100.000		98.2	70 - 130			
m,p-Xylene	207.321	10	200.000		104	70 - 130			
o-Xylene	101.621	5.0	100.000		102	70 - 130			
Surrogate: 4-Bromofluorobenzene	*205.7*		*200.000*		*103*	*53 - 144*			
LCS Dup (B4B0410-BSD2)				Prepared: 2/26/2014 Analyzed: 2/26/2014					
Benzene	100.319	5.0	100.000		100	70 - 130	4.21	20	
Toluene	102.567	5.0	100.000		103	70 - 130	2.57	20	
Ethylbenzene	101.501	5.0	100.000		102	70 - 130	3.35	20	
m,p-Xylene	214.545	10	200.000		107	70 - 130	3.42	20	
o-Xylene	104.145	5.0	100.000		104	70 - 130	2.45	20	
Surrogate: 4-Bromofluorobenzene	*215.1*		*200.000*		*108*	*53 - 144*			
Matrix Spike (B4B0410-MS1)		**Source: 1400547-01**		Prepared: 2/26/2014 Analyzed: 2/26/2014					
Benzene	39.1590	5.0	40.7500	ND	96.1	14 - 146			
Toluene	175.430	5.0	202.250	ND	86.7	33 - 123			
Ethylbenzene	53.3050	5.0	76.0000	ND	70.1	20 - 102			
m,p-Xylene	194.459	10	206.500	ND	94.2	39 - 120			
o-Xylene	72.3350	5.0	73.5000	ND	98.4	34 - 131			
Surrogate: 4-Bromofluorobenzene	*209.7*		*200.000*		*105*	*53 - 144*			
Matrix Spike Dup (B4B0410-MSD1)		**Source: 1400547-01**		Prepared: 2/26/2014 Analyzed: 2/26/2014					
Benzene	43.3000	5.0	40.7500	ND	106	14 - 146	10.0	20	
Toluene	170.444	5.0	202.250	ND	84.3	33 - 123	2.88	20	
Ethylbenzene	51.6990	5.0	76.0000	ND	68.0	20 - 102	3.06	20	
m,p-Xylene	188.750	10	206.500	ND	91.4	39 - 120	2.98	20	
o-Xylene	73.3440	5.0	73.5000	ND	99.8	34 - 131	1.39	20	
Surrogate: 4-Bromofluorobenzene	*215.4*		*200.000*		*108*	*53 - 144*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Organochlorine Pesticides by EPA 8081 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST									
Blank (B4C0074-BLK1)				Prepared: 3/5/2014 Analyzed: 3/5/2014					
4,4´-DDD	ND	2.0			NR				
4,4´-DDD [2C]	ND	2.0			NR				
4,4´-DDE	ND	2.0			NR				
4,4´-DDE [2C]	ND	2.0			NR				
4,4´-DDT	ND	2.0			NR				
4,4´-DDT [2C]	ND	2.0			NR				
Aldrin	ND	1.0			NR				
Aldrin [2C]	ND	1.0			NR				
alpha-BHC	ND	1.0			NR				
alpha-BHC [2C]	ND	1.0			NR				
alpha-Chlordane	ND	1.0			NR				
alpha-Chlordane [2C]	ND	1.0			NR				
beta-BHC	ND	1.0			NR				
beta-BHC [2C]	ND	1.0			NR				
Chlordane	ND	8.5			NR				
Chlordane [2C]	ND	8.5			NR				
delta-BHC	ND	1.0			NR				
delta-BHC [2C]	ND	1.0			NR				
Dieldrin	ND	2.0			NR				
Dieldrin [2C]	ND	2.0			NR				
Endosulfan I	ND	1.0			NR				
Endosulfan I [2C]	ND	1.0			NR				
Endosulfan II	ND	2.0			NR				
Endosulfan II [2C]	ND	2.0			NR				
Endosulfan sulfate	ND	2.0			NR				
Endosulfan Sulfate [2C]	ND	2.0			NR				
Endrin	ND	2.0			NR				
Endrin [2C]	ND	2.0			NR				
Endrin aldehyde	ND	2.0			NR				
Endrin aldehyde [2C]	ND	2.0			NR				
Endrin ketone	ND	2.0			NR				
Endrin ketone [2C]	ND	2.0			NR				
gamma-BHC	ND	1.0			NR				
gamma-BHC [2C]	ND	1.0			NR				
gamma-Chlordane	ND	1.0			NR				
gamma-Chlordane [2C]	ND	1.0			NR				
Heptachlor	ND	1.0			NR				
Heptachlor [2C]	ND	1.0			NR				
Heptachlor epoxide	ND	1.0			NR				
Heptachlor epoxide [2C]	ND	1.0			NR				
Methoxychlor	ND	5.0			NR				

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST (continued)									
Blank (B4C0074-BLK1) - Continued					Prepared: 3/5/2014 Analyzed: 3/5/2014				
Methoxychlor [2C]	ND	5.0			NR				
Toxaphene	ND	50			NR				
Toxaphene [2C]	ND	50			NR				
Surrogate: Decachlorobiphenyl	*13.17*		*16.6667*		*79.0*	*29 - 143*			
Surrogate: Decachlorobiphenyl [2C]	*13.30*		*16.6667*		*79.8*	*29 - 143*			
Surrogate: Tetrachloro-m-xylene	*12.02*		*16.6667*		*72.1*	*52 - 114*			
Surrogate: Tetrachloro-m-xylene [2C]	*12.42*		*16.6667*		*74.5*	*52 - 114*			
LCS (B4C0074-BS1)					Prepared: 3/5/2014 Analyzed: 3/5/2014				
4,4´-DDT	11.4855	2.0	16.6667		68.9	50 - 110			
4,4´-DDT [2C]	11.6550	2.0	16.6667		69.9	50 - 110			
Aldrin	11.7090	1.0	16.6667		70.3	59 - 101			
Aldrin [2C]	11.8443	1.0	16.6667		71.1	59 - 101			
Dieldrin	11.6843	2.0	16.6667		70.1	55 - 101			
Dieldrin [2C]	11.8672	2.0	16.6667		71.2	55 - 101			
Endrin	12.6877	2.0	16.6667		76.1	49 - 109			
Endrin [2C]	11.9353	2.0	16.6667		71.6	49 - 109			
gamma-BHC	12.1560	1.0	16.6667		72.9	62 - 102			
gamma-BHC [2C]	12.2750	1.0	16.6667		73.6	62 - 102			
Heptachlor	12.0750	1.0	16.6667		72.4	50 - 123			
Heptachlor [2C]	12.2638	1.0	16.6667		73.6	50 - 123			
Surrogate: Decachlorobiphenyl	*12.63*		*16.6667*		*75.8*	*29 - 143*			
Surrogate: Decachlorobiphenyl [2C]	*12.76*		*16.6667*		*76.6*	*29 - 143*			
Surrogate: Tetrachloro-m-xylene	*11.59*		*16.6667*		*69.6*	*52 - 114*			
Surrogate: Tetrachloro-m-xylene [2C]	*12.07*		*16.6667*		*72.4*	*52 - 114*			
Matrix Spike (B4C0074-MS1)		**Source: 1400547-20**			Prepared: 3/5/2014 Analyzed: 3/5/2014				
4,4´-DDT	15.7518	2.0	16.6667	1.97659	82.7	32 - 161			
4,4´-DDT [2C]	15.1962	2.0	16.6667	1.84364	80.1	32 - 161			
Aldrin	13.4605	1.0	16.6667	ND	80.8	51 - 137			
Aldrin [2C]	13.4002	1.0	16.6667	ND	80.4	51 - 137			
Dieldrin	13.4112	2.0	16.6667	0.822241	75.5	39 - 150			
Dieldrin [2C]	14.0577	2.0	16.6667	0.905686	78.9	39 - 150			
Endrin	15.0202	2.0	16.6667	ND	90.1	41 - 160			
Endrin [2C]	13.8383	2.0	16.6667	ND	83.0	41 - 160			
gamma-BHC	14.4537	1.0	16.6667	ND	86.7	63 - 126			
gamma-BHC [2C]	13.8873	1.0	16.6667	ND	83.3	63 - 126			
Heptachlor	14.4747	1.0	16.6667	ND	86.8	32 - 177			
Heptachlor [2C]	13.9745	1.0	16.6667	ND	83.8	32 - 177			
Surrogate: Decachlorobiphenyl	*11.60*		*16.6667*		*69.6*	*29 - 143*			
Surrogate: Decachlorobiphenyl [2C]	*13.70*		*16.6667*		*82.2*	*29 - 143*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST (continued)									
Matrix Spike (B4C0074-MS1) - Continued			**Source: 1400547-20**		Prepared: 3/5/2014 Analyzed: 3/5/2014				
Surrogate: Tetrachloro-m-xylene	*14.50*		*16.6667*		*87.0*	*52 - 114*			
Surrogate: Tetrachloro-m-xylene [2C]	*13.02*		*16.6667*		*78.1*	*52 - 114*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST (continued)									
Matrix Spike Dup (B4C0074-MSD1)		**Source: 1400547-20**		Prepared: 3/5/2014 Analyzed: 3/5/2014					
4,4´-DDT	15.6400	2.0	16.6667	1.97659	82.0	32 - 161	0.712	20	
4,4´-DDT [2C]	15.3698	2.0	16.6667	1.84364	81.2	32 - 161	1.14	20	
Aldrin	13.9190	1.0	16.6667	ND	83.5	51 - 137	3.35	20	
Aldrin [2C]	13.5858	1.0	16.6667	ND	81.5	51 - 137	1.38	20	
Dieldrin	14.2212	2.0	16.6667	0.822241	80.4	39 - 150	5.86	20	
Dieldrin [2C]	14.2808	2.0	16.6667	0.905686	80.3	39 - 150	1.57	20	
Endrin	15.4198	2.0	16.6667	ND	92.5	41 - 160	2.63	20	
Endrin [2C]	14.0543	2.0	16.6667	ND	84.3	41 - 160	1.55	20	
gamma-BHC	15.0282	1.0	16.6667	ND	90.2	63 - 126	3.90	20	
gamma-BHC [2C]	14.2835	1.0	16.6667	ND	85.7	63 - 126	2.81	20	
Heptachlor	15.3403	1.0	16.6667	ND	92.0	32 - 177	5.81	20	
Heptachlor [2C]	14.2763	1.0	16.6667	ND	85.7	32 - 177	2.14	20	
Surrogate: Decachlorobiphenyl	*11.29*		*16.6667*		*67.7*	*29 - 143*			
Surrogate: Decachlorobiphenyl [2C]	*14.59*		*16.6667*		*87.5*	*29 - 143*			
Surrogate: Tetrachloro-m-xylene	*14.65*		*16.6667*		*87.9*	*52 - 114*			
Surrogate: Tetrachloro-m-xylene [2C]	*13.28*		*16.6667*		*79.7*	*52 - 114*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST									
Blank (B4C0074-BLK2)				Prepared: 3/5/2014 Analyzed: 3/5/2014					
Aroclor 1016	ND	16			NR				
Aroclor 1221	ND	16			NR				
Aroclor 1232	ND	16			NR				
Aroclor 1242	ND	16			NR				
Aroclor 1248	ND	16			NR				
Aroclor 1254	ND	16			NR				
Aroclor 1260	ND	16			NR				
Aroclor 1262	ND	16			NR				
Aroclor 1268	ND	16			NR				
Surrogate: Decachlorobiphenyl	*12.92*		*16.6667*		*77.5*	*16 - 152*			
Surrogate: Tetrachloro-m-xylene	*13.18*		*16.6667*		*79.1*	*38 - 131*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Polychlorinated Biphenyls by EPA 8082 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST (continued)									
LCS (B4C0074-BS2)				Prepared: 3/5/2014 Analyzed: 3/5/2014					
Aroclor 1016	123.416	16	166.667		74.0	68 - 100			
Aroclor 1260	138.310	16	166.667		83.0	70 - 105			
Surrogate: Decachlorobiphenyl	*13.97*		*16.6667*		*83.8*	*16 - 152*			
Surrogate: Tetrachloro-m-xylene	*13.65*		*16.6667*		*81.9*	*38 - 131*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Polychlorinated Biphenyls by EPA 8082 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST (continued)									
Matrix Spike (B4C0074-MS2)		**Source: 1400569-04**		Prepared: 3/5/2014 Analyzed: 3/5/2014					
Aroclor 1016	148.913	16	166.667	ND	89.3	37 - 131			
Aroclor 1260	197.046	16	166.667	31.1032	99.6	44 - 133			
Surrogate: Decachlorobiphenyl	*16.49*		*16.6667*		*98.9*	*16 - 152*			
Surrogate: Tetrachloro-m-xylene	*15.49*		*16.6667*		*92.9*	*38 - 131*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Polychlorinated Biphenyls by EPA 8082 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0074 - GCSEMI_PCB/PEST (continued)									
Matrix Spike Dup (B4C0074-MSD2)		**Source: 1400569-04**		Prepared: 3/5/2014 Analyzed: 3/5/2014					
Aroclor 1016	145.702	16	166.667	ND	87.4	37 - 131	2.18	20	
Aroclor 1260	192.076	16	166.667	31.1032	96.6	44 - 133	2.55	20	
Surrogate: Decachlorobiphenyl	*16.57*		*16.6667*		*99.4*	*16 - 152*			
Surrogate: Tetrachloro-m-xylene	*15.33*		*16.6667*		*92.0*	*38 - 131*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0012 - MSVOAS									
Blank (B4C0012-BLK1)				Prepared: 3/3/2014 Analyzed: 3/3/2014					
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0012 - MSVOAS (continued)									
Blank (B4C0012-BLK1) - Continued				Prepared: 3/3/2014 Analyzed: 3/3/2014					
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*42.76*		*50.0000*		*85.5*	*67 - 152*			
Surrogate: 4-Bromofluorobenzene	*43.54*		*50.0000*		*87.1*	*59 - 135*			
Surrogate: Dibromofluoromethane	*50.37*		*50.0000*		*101*	*71 - 150*			
Surrogate: Toluene-d8	*46.41*		*50.0000*		*92.8*	*77 - 129*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0012 - MSVOAS (continued)									
LCS (B4C0012-BS1)				Prepared: 3/3/2014 Analyzed: 3/3/2014					
1,1-Dichloroethene	42.3500	5.0	50.0000		84.7	62 - 129			
Benzene	50.3300	5.0	50.0000		101	82 - 121			
Chlorobenzene	49.0200	5.0	50.0000		98.0	83 - 132			
MTBE	38.3600	5.0	50.0000		76.7	55 - 138			
Toluene	47.0900	5.0	50.0000		94.2	80 - 129			
Trichloroethene	45.3400	5.0	50.0000		90.7	75 - 133			
Surrogate: 1,2-Dichloroethane-d4	*38.73*		*50.0000*		*77.5*	*67 - 152*			
Surrogate: 4-Bromofluorobenzene	*43.02*		*50.0000*		*86.0*	*59 - 135*			
Surrogate: Dibromofluoromethane	*49.50*		*50.0000*		*99.0*	*71 - 150*			
Surrogate: Toluene-d8	*46.77*		*50.0000*		*93.5*	*77 - 129*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0012 - MSVOAS (continued)									
LCS Dup (B4C0012-BSD1)				Prepared: 3/3/2014 Analyzed: 3/3/2014					
1,1-Dichloroethene	41.8200	5.0	50.0000		83.6	62 - 129	1.26	20	
Benzene	49.4300	5.0	50.0000		98.9	82 - 121	1.80	20	
Chlorobenzene	48.5600	5.0	50.0000		97.1	83 - 132	0.943	20	
MTBE	39.2900	5.0	50.0000		78.6	55 - 138	2.40	20	
Toluene	46.7200	5.0	50.0000		93.4	80 - 129	0.789	20	
Trichloroethene	44.4400	5.0	50.0000		88.9	75 - 133	2.00	20	
Surrogate: 1,2-Dichloroethane-d4	*39.10*		*50.0000*		*78.2*	*67 - 152*			
Surrogate: 4-Bromofluorobenzene	*43.62*		*50.0000*		*87.2*	*59 - 135*			
Surrogate: Dibromofluoromethane	*51.06*		*50.0000*		*102*	*71 - 150*			
Surrogate: Toluene-d8	*47.33*		*50.0000*		*94.7*	*77 - 129*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0012 - MSVOAS (continued)									
Duplicate (B4C0012-DUP1)		**Source: 1400651-04**		Prepared: 3/3/2014 Analyzed: 3/3/2014					
1,1-Dichloroethene	ND	5.0		ND	NR			20	
Benzene	ND	5.0		ND	NR			20	
Chlorobenzene	ND	5.0		ND	NR			20	
MTBE	ND	5.0		ND	NR			20	
Toluene	ND	5.0		ND	NR			20	
Trichloroethene	ND	5.0		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*39.58*		*50.0000*		*79.2*	*67 - 152*			
Surrogate: 4-Bromofluorobenzene	*42.70*		*50.0000*		*85.4*	*59 - 135*			
Surrogate: Dibromofluoromethane	*48.83*		*50.0000*		*97.7*	*71 - 150*			
Surrogate: Toluene-d8	*46.18*		*50.0000*		*92.4*	*77 - 129*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0012 - MSVOAS (continued)									
Matrix Spike (B4C0012-MS1)		**Source: 1400613-05**		Prepared: 3/3/2014 Analyzed: 3/3/2014					
1,1-Dichloroethene	40.6500	5.0	50.0000	ND	81.3	51 - 125			
Benzene	45.6900	5.0	50.0000	ND	91.4	61 - 123			
Chlorobenzene	43.5400	5.0	50.0000	ND	87.1	46 - 140			
MTBE	37.3000	5.0	50.0000	ND	74.6	45 - 135			
Toluene	42.7900	5.0	50.0000	ND	85.6	45 - 140			
Trichloroethene	40.2400	5.0	50.0000	ND	80.5	50 - 146			
Surrogate: 1,2-Dichloroethane-d4	*42.07*		*50.0000*		*84.1*	*67 - 152*			
Surrogate: 4-Bromofluorobenzene	*44.07*		*50.0000*		*88.1*	*59 - 135*			
Surrogate: Dibromofluoromethane	*51.40*		*50.0000*		*103*	*71 - 150*			
Surrogate: Toluene-d8	*47.51*		*50.0000*		*95.0*	*77 - 129*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0012 - MSVOAS (continued)									
Matrix Spike Dup (B4C0012-MSD1)		**Source: 1400613-05**		Prepared: 3/3/2014 Analyzed: 3/3/2014					
1,1-Dichloroethene	39.5700	5.0	50.0000	ND	79.1	51 - 125	2.69	20	
Benzene	46.3400	5.0	50.0000	ND	92.7	61 - 123	1.41	20	
Chlorobenzene	43.2700	5.0	50.0000	ND	86.5	46 - 140	0.622	20	
MTBE	36.8400	5.0	50.0000	ND	73.7	45 - 135	1.24	20	
Toluene	42.9300	5.0	50.0000	ND	85.9	45 - 140	0.327	20	
Trichloroethene	41.0600	5.0	50.0000	ND	82.1	50 - 146	2.02	20	
Surrogate: 1,2-Dichloroethane-d4	*39.86*		*50.0000*		*79.7*	*67 - 152*			
Surrogate: 4-Bromofluorobenzene	*43.38*		*50.0000*		*86.8*	*59 - 135*			
Surrogate: Dibromofluoromethane	*48.02*		*50.0000*		*96.0*	*71 - 150*			
Surrogate: Toluene-d8	*47.06*		*50.0000*		*94.1*	*77 - 129*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0053 - MSSEMI									
Blank (B4C0053-BLK1)				Prepared: 3/4/2014 Analyzed: 3/5/2014					
1,2,4-Trichlorobenzene	ND	330			NR				
1,2-Dichlorobenzene	ND	330			NR				
1,3-Dichlorobenzene	ND	330			NR				
1,4-Dichlorobenzene	ND	330			NR				
2,4,5-Trichlorophenol	ND	330			NR				
2,4,6-Trichlorophenol	ND	330			NR				
2,4-Dichlorophenol	ND	1600			NR				
2,4-Dimethylphenol	ND	330			NR				
2,4-Dinitrophenol	ND	1600			NR				
2,4-Dinitrotoluene	ND	330			NR				
2,6-Dinitrotoluene	ND	330			NR				
2-Chloronaphthalene	ND	330			NR				
2-Chlorophenol	ND	330			NR				
2-Methylnaphthalene	ND	330			NR				
2-Methylphenol	ND	330			NR				
2-Nitroaniline	ND	1600			NR				
2-Nitrophenol	ND	330			NR				
3,3´-Dichlorobenzidine	ND	660			NR				
3-Nitroaniline	ND	1600			NR				
4,6-Dinitro-2-methyphenol	ND	1600			NR				
4-Bromophenyl-phenylether	ND	330			NR				
4-Chloro-3-methylphenol	ND	660			NR				
4-Chloroaniline	ND	660			NR				
4-Chlorophenyl-phenylether	ND	330			NR				
4-Methylphenol	ND	330			NR				
4-Nitroaniline	ND	1600			NR				
4-Nitrophenol	ND	330			NR				
Acenaphthene	ND	330			NR				
Acenaphthylene	ND	330			NR				
Anthracene	ND	330			NR				
Benzidine (M)	ND	1600			NR				
Benzo(a)anthracene	ND	330			NR				
Benzo(a)pyrene	ND	330			NR				
Benzo(b)fluoranthene	ND	330			NR				
Benzo(g,h,i)perylene	ND	330			NR				
Benzo(k)fluoranthene	ND	330			NR				
Benzoic acid	ND	1600			NR				
Benzyl alcohol	ND	660			NR				
bis(2-chloroethoxy)methane	ND	330			NR				
bis(2-Chloroethyl)ether	ND	330			NR				
bis(2-chloroisopropyl)ether	ND	330			NR				

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0053 - MSSEMI (continued)									
Blank (B4C0053-BLK1) - Continued				Prepared: 3/4/2014 Analyzed: 3/5/2014					
bis(2-ethylhexyl)phthalate	ND	330			NR				
Butylbenzylphthalate	ND	330			NR				
Chrysene	ND	330			NR				
Di-n-butylphthalate	ND	330			NR				
Di-n-octylphthalate	ND	330			NR				
Dibenz(a,h)anthracene	ND	330			NR				
Dibenzofuran	ND	330			NR				
Diethyl phthalate	ND	330			NR				
Dimethyl phthalate	ND	330			NR				
Fluoranthene	ND	330			NR				
Fluorene	ND	330			NR				
Hexachlorobenzene	ND	330			NR				
Hexachlorobutadiene	ND	660			NR				
Hexachlorocyclopentadiene	ND	660			NR				
Hexachloroethane	ND	330			NR				
Indeno(1,2,3-cd)pyrene	ND	330			NR				
Isophorone	ND	330			NR				
N-Nitroso-di-n propylamine	ND	330			NR				
N-Nitrosodiphenylamine	ND	330			NR				
Naphthalene	ND	330			NR				
Nitrobenzene	ND	330			NR				
Pentachlorophenol	ND	1600			NR				
Phenanthrene	ND	330			NR				
Phenol	ND	330			NR				
Pyrene	ND	330			NR				
Pyridine	ND	1600			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*2657*		*3333.33*		*79.7*	*42 - 119*			
Surrogate: 2,4,6-Tribromophenol	*3244*		*3333.33*		*97.3*	*27 - 150*			
Surrogate: 2-Chlorophenol-d4	*2840*		*3333.33*		*85.2*	*40 - 126*			
Surrogate: 2-Fluorobiphenyl	*2797*		*3333.33*		*83.9*	*54 - 128*			
Surrogate: 2-Fluorophenol	*2774*		*3333.33*		*83.2*	*33 - 133*			
Surrogate: 4-Terphenyl-d14	*3285*		*3333.33*		*98.5*	*37 - 160*			
Surrogate: Nitrobenzene-d5	*2676*		*3333.33*		*80.3*	*41 - 128*			
Surrogate: Phenol-d5	*2820*		*3333.33*		*84.6*	*33 - 127*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0053 - MSSEMI (continued)									
LCS (B4C0053-BS1)				Prepared: 3/4/2014 Analyzed: 3/5/2014					
1,2,4-Trichlorobenzene	2889.00	330	3333.33		86.7	52 - 110			
1,4-Dichlorobenzene	2683.33	330	3333.33		80.5	51 - 102			
2,4-Dinitrotoluene	3581.33	330	3333.33		107	68 - 132			
2-Chlorophenol	2833.67	330	3333.33		85.0	59 - 108			
4-Chloro-3-methylphenol	3489.33	660	3333.33		105	62 - 121			
4-Nitrophenol	3376.00	330	3333.33		101	52 - 133			
Acenaphthene	3053.67	330	3333.33		91.6	66 - 121			
N-Nitroso-di-n propylamine	2949.33	330	3333.33		88.5	53 - 122			
Pentachlorophenol	3258.33	1600	3333.33		97.8	45 - 124			
Phenol	2830.00	330	3333.33		84.9	59 - 112			
Pyrene	2986.00	330	3333.33		89.6	50 - 135			
Surrogate: 1,2-Dichlorobenzene-d4	*2575*		*3333.33*		*77.2*	*42 - 119*			
Surrogate: 2,4,6-Tribromophenol	*3529*		*3333.33*		*106*	*27 - 150*			
Surrogate: 2-Chlorophenol-d4	*2836*		*3333.33*		*85.1*	*40 - 126*			
Surrogate: 2-Fluorobiphenyl	*2834*		*3333.33*		*85.0*	*54 - 128*			
Surrogate: 2-Fluorophenol	*2742*		*3333.33*		*82.3*	*33 - 133*			
Surrogate: 4-Terphenyl-d14	*3119*		*3333.33*		*93.6*	*37 - 160*			
Surrogate: Nitrobenzene-d5	*2695*		*3333.33*		*80.9*	*41 - 128*			
Surrogate: Phenol-d5	*2780*		*3333.33*		*83.4*	*33 - 127*			

Certificate of Analysis

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0053 - MSSEMI (continued)									
Matrix Spike (B4C0053-MS1)		**Source: 1400567-02**		Prepared: 3/4/2014 Analyzed: 3/5/2014					
1,2,4-Trichlorobenzene	3022.67	330	3333.33	ND	90.7	43 - 133			
1,4-Dichlorobenzene	2819.67	330	3333.33	ND	84.6	48 - 122			
2,4-Dinitrotoluene	3808.33	330	3333.33	ND	114	65 - 152			
2-Chlorophenol	2998.33	330	3333.33	ND	90.0	54 - 132			
4-Chloro-3-methylphenol	3666.33	660	3333.33	ND	110	53 - 143			
4-Nitrophenol	3795.33	330	3333.33	ND	114	66 - 143			
Acenaphthene	3160.33	330	3333.33	ND	94.8	60 - 140			
N-Nitroso-di-n propylamine	3049.33	330	3333.33	ND	91.5	55 - 138			
Pentachlorophenol	3354.67	1600	3333.33	ND	101	57 - 145			
Phenol	3015.67	330	3333.33	ND	90.5	39 - 138			
Pyrene	3191.00	330	3333.33	ND	95.7	51 - 157			
Surrogate: 1,2-Dichlorobenzene-d4	*2715*		*3333.33*		*81.5*	*42 - 119*			
Surrogate: 2,4,6-Tribromophenol	*3836*		*3333.33*		*115*	*27 - 150*			
Surrogate: 2-Chlorophenol-d4	*2919*		*3333.33*		*87.6*	*40 - 126*			
Surrogate: 2-Fluorobiphenyl	*2974*		*3333.33*		*89.2*	*54 - 128*			
Surrogate: 2-Fluorophenol	*2827*		*3333.33*		*84.8*	*33 - 133*			
Surrogate: 4-Terphenyl-d14	*3172*		*3333.33*		*95.2*	*37 - 160*			
Surrogate: Nitrobenzene-d5	*2834*		*3333.33*		*85.0*	*41 - 128*			
Surrogate: Phenol-d5	*2895*		*3333.33*		*86.9*	*33 - 127*			

Ninyo & Moore	Project Number : Ashland Housing Project, 402090002
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 03/12/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4C0053 - MSSEMI (continued)									
Matrix Spike Dup (B4C0053-MSD1)		**Source: 1400567-02**		Prepared: 3/4/2014 Analyzed: 3/5/2014					
1,2,4-Trichlorobenzene	3136.67	330	3333.33	ND	94.1	43 - 133	3.70	20	
1,4-Dichlorobenzene	2907.33	330	3333.33	ND	87.2	48 - 122	3.06	20	
2,4-Dinitrotoluene	3843.00	330	3333.33	ND	115	65 - 152	0.906	20	
2-Chlorophenol	3099.33	330	3333.33	ND	93.0	54 - 132	3.31	20	
4-Chloro-3-methylphenol	3820.00	660	3333.33	ND	115	53 - 143	4.11	20	
4-Nitrophenol	3672.67	330	3333.33	ND	110	66 - 143	3.29	20	
Acenaphthene	3211.67	330	3333.33	ND	96.4	60 - 140	1.61	20	
N-Nitroso-di-n propylamine	3208.00	330	3333.33	ND	96.2	55 - 138	5.07	20	
Pentachlorophenol	3554.67	1600	3333.33	ND	107	57 - 145	5.79	20	
Phenol	3103.67	330	3333.33	ND	93.1	39 - 138	2.88	20	
Pyrene	3184.67	330	3333.33	ND	95.5	51 - 157	0.199	20	
Surrogate: 1,2-Dichlorobenzene-d4	*2809*		*3333.33*		*84.3*	*42 - 119*			
Surrogate: 2,4,6-Tribromophenol	*3867*		*3333.33*		*116*	*27 - 150*			
Surrogate: 2-Chlorophenol-d4	*3062*		*3333.33*		*91.9*	*40 - 126*			
Surrogate: 2-Fluorobiphenyl	*3044*		*3333.33*		*91.3*	*54 - 128*			
Surrogate: 2-Fluorophenol	*2908*		*3333.33*		*87.2*	*33 - 133*			
Surrogate: 4-Terphenyl-d14	*3277*		*3333.33*		*98.3*	*37 - 160*			
Surrogate: Nitrobenzene-d5	*2866*		*3333.33*		*86.0*	*41 - 128*			
Surrogate: Phenol-d5	*2990*		*3333.33*		*89.7*	*33 - 127*			

Certificate of Analysis

Ninyo & Moore		Project Number :	Ashland Housing Project, 402090002
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	03/12/2014

Notes and Definitions

D1	Sample required dilution due to possible matrix interference.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

AMERISCI

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Advanced Technology Laboratories
Attn: Diane Galvan
3275 Walnut Street

Signal Hill , CA 90755

Date Received 03/04/14
Date Examined 03/10/14

RE: 1400547

AmeriSci Job # 914031134
P.O. # SC08455
Page 1 **of** 1

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1400547-20	914031134-01	*No*	NAD [1] (by 400 pt ct) by Arturo A. Aldana on 03/10/14

Location: Comp-7

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Soil
Asbestos Types:
Other Material: Non-Asbestos/Inert 100 %

Reporting Notes:

(1) Sample analyzed by California Air Resources Board - Method 435 for serpentine aggregate which includes 400 pt ct analysis

Analyzed By: Arturo A. Aldana Arturo A. Aldana Date Analyzed: 3/10/2014 3/10/14

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0, CA ELAP lab #2322); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: 3/10/14

9140311 34

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1400547

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)

RECEIVING LABORATORY:

AmeriSci Los Angeles
24416 South Main Street, Suite 308
Carson, CA 90745
Phone :(310) 834-4868
Fax: (310) 834-4772
PO#: SC08455-STANDARD TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1400547-20 / COMP-7		**Soil**	**02/24/14 00:00**	
Asbestos_CARB_435_400	**03/10/14 17:00**	08/23/14 00:00		
[Asbestos CARB 435 (400 pt ct)]				
1-Plastic Baggie				

Released By	Date	Received By	Date
	3/4/14 1041	ATL	3-4-14 10:40
ATL	3-4-14 11:25		3/4/14 @ 1125

Released By Date Received By Date

3/7/14

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attention: Rachelle Arada

Number of Pages	**6**
Date Received	**03/04/2014**
Date Reported	**03/12/2014**

Job Number	Order Date	Client
72454	03/04/2014	ATL

Project ID: 1400547
Project Name: PO# SC08454

Enclosed please find results of analyses of 1 soil sample which was analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
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Ordered By

Advanced Technology Laboratories **3275 Walnut Avenue** **Signal Hill, CA 90755-5225**

Project ID: 1400547 **Date Received 03/04/2014** **Date Reported 03/12/2014**

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
72454	03/04/2014	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 1 samples with the following specification on 03/04/2014.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
72454.01	1400547-20	02/24/2014	Soil	1

Method ^ Submethod	*Req Date*	*Priority*	*TAT*	*Units*
(8141A)	03/11/2014	2	Normal	ug/Kg
(8151A)	03/11/2014	2	Normal	ug/Kg

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: **2**

Project ID: 1400547
Project Name: PO# SC08454

AETL Job Number	Submitted	Client
72454	03/04/2014	ATL

Method: (8141A), Organophosphorus Compounds by GC/NPD/FPD

QC Batch No: 030514

Our Lab I.D.			Method Blank	**72454.01**			
Client Sample I.D.				1400547-20			
Date Sampled				02/24/2014			
Date Prepared			03/05/2014	03/05/2014			
Preparation Method			3550B	3550B			
Date Analyzed			03/10/2014	03/11/2014			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Azinphos-methyl	50	50	ND	ND			
Bolstar (Sulprofos)	50	50	ND	ND			
Chloropyrifos (Dursban)	50	50	ND	ND			
Coumaphos	50	50	ND	ND			
Demeton-O & S	50	50	ND	ND			
Diazinon	50	50	ND	ND			
Dichlorvos (DDVP, Diclorovos)	50	50	ND	ND			
Disulfoton	50	50	ND	ND			
Ethoprop	50	50	ND	ND			
Fensulfothion	50	50	ND	ND			
Fenthion	50	50	ND	ND			
Malathion	50	50	ND	ND			
Merphos	50	50	ND	ND			
Methyl parathion (Parathion methyl)	50	50	ND	ND			
Mevinphos	100	100	ND	ND			
Naled	100	100	ND	ND			
Phorate (Phosphorodithioic acid)	50	50	ND	ND			
Ronnel	50	50	ND	ND			
Tetrachlorvinphos (Stirophos)	50	50	ND	ND			
Tokuthion (Prothiofos)	50	50	ND	ND			
Trichloronate	50	50	ND	ND			

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ANALYTICAL RESULTS

Project ID: 1400547
Project Name: PO# SC08454

AETL Job Number	Submitted	Client
72454	03/04/2014	ATL

Method: (8141A), Organophosphorus Compounds by GC/NPD/FPD

Our Lab I.D.			Method Blank	**72454.01**			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
Tributylphosphate	52-129		72.0	64.0			

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: **4**

Project ID: 1400547
Project Name: PO# SC08454

AETL Job Number	Submitted	Client
72454	03/04/2014	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030714

Our Lab I.D.			Method Blank	**72454.01**			
Client Sample I.D.				1400547-20			
Date Sampled				02/24/2014			
Date Prepared			03/07/2014	03/07/2014			
Preparation Method			3550B	3550B			
Date Analyzed			03/07/2014	03/07/2014			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	20	20	ND	ND			
Bentazon	10	10	ND	ND			
Chloramben	10	10	ND	ND			
2,4-D	10	10	ND	ND			
Dalapon	20	20	ND	ND			
2,4-DB	10	10	ND	ND			
DCPA diacid	20	20	ND	ND			
Dicamba	10	10	ND	ND			
3,5-Dichlorobenzoic acid	10	10	ND	ND			
Dichloroprop	10	10	ND	ND			
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND			
MCPA	2000	2000	ND	ND			
MCPP	2000	2000	ND	ND			
4-Nitrophenol	10	10	ND	ND			
Pentachlorophenol (PCP)	10	10	ND	ND			
Picloram	10	10	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND			
2,4,5-TP	10	10	ND	ND			
Our Lab I.D.			Method Blank	**72454.01**			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		72.8	72.6			

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: **5**

Project ID: 1400547
Project Name: PO# SC08454

AETL Job Number	Submitted	Client
72454	03/04/2014	ATL

Method: (8141A), Organophosphorus Compounds by GC/NPD/FPD

QC Batch No: 030514; LCS: Clean Sand; LCS Prepared: 03/05/2014; LCS Analyzed: 03/10/2014; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Bolstar (Sulprofos)	200	159	79.5	200	171	85.5	7.3	50-150	<50	
Ethoprop	200	167	83.5	200	177	88.5	5.8	50-150	<50	
Phorate (Phosphorodithioic acid)	200	148	74.0	200	156	78.0	5.3	50-150	<50	
Ronnel	200	145	72.5	200	155	77.5	6.7	50-150	<50	
Surrogates										
Tributylphosphate	200	168	84.0	200	176	88.0	4.7	50-150	<50	

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 6

Project ID: 1400547
Project Name: PO# SC08454

AETL Job Number	Submitted	Client
72454	03/04/2014	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030714; Dup or Spiked Sample: 72454.01; LCS: Clean Sand; QC Prepared: 03/07/2014; QC Analyzed: 03/07/2014; Units: ug/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
2,4-D	0.00	50.0	36.5	73.0	50.0	40.5	81.0	10.4	50-150	<40
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	0.00	50.0	36.8	73.6	50.0	40.0	80.0	8.3	50-150	<40
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.00	50.0	36.1	72.2	50.0	34.8	69.6	3.7	50-150	<40
Surrogates										
DCAA	0.00	100	80.4	80.4	100	80.7	80.7	<1	50-150	<40

QC Batch No: 030714; Dup or Spiked Sample: 72454.01; LCS: Clean Sand; QC Prepared: 03/07/2014; QC Analyzed: 03/07/2014; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	29.5	59.0	50.0	30.3	60.6	2.7	50-150	<50	
Dalapon	50.0	36.9	73.8	50.0	36.5	73.0	1.1	50-150	<50	
2,4-DB	50.0	32.4	64.8	50.0	31.7	63.4	2.2	50-150	<50	
Dicamba	50.0	35.1	70.2	50.0	34.8	69.6	<1	50-150	<50	
Dichloroprop	50.0	31.5	63.0	50.0	31.7	63.4	<1	50-150	<50	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	40.4	80.8	50.0	40.7	81.4	<1	50-150	<50	
MCPA	5,000	4,260	85.2	5,000	4,120	82.4	3.3	50-150	<50	
MCPP	5,000	3,890	77.8	5,000	3,820	76.4	1.8	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	32.7	65.4	50.0	33.4	66.8	2.1	50-150	<50	
2,4,5-TP	50.0	33.8	67.6	50.0	34.9	69.8	3.2	50-150	<50	
Surrogates										
DCAA	100	66.7	66.7	100	42.5	42.5	44.3	50-150	<50	

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Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1400547 72454

SENDING LABORATORY:	**RECEIVING LABORATORY:**
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC08454-STANDARD TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1400547-20 / COMP-7		**Soil**	**02/24/14 00:00**	72454-01
8141	**03/10/14 17:00**	03/10/14 00:00		
[Organophoshorus Pesticides]				
8151	**03/10/14 17:00**	03/10/14 00:00		
[Chlorinated Herbicides]				
1-Glass Jar - 4 oz				

Released By	Date	Received By	Date
	3/4/14 1343	Sargis P	3.4.14 1343
Sargis P	3.4.14 1730	Austin	03/04/14 1730

CHAIN OF CUSTODY RECORD

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: _____ Quote #: _____

As the authorized agent of the below named company, I hereby purchase testing services from ATL as dictated below and guarantee payment in full.

Submitter (Print): _____

Signature: _____

Submitter - Please complete all SHADED areas and include QUOTE # above to ensure proper invoicing.

FOR LABORATORY USE ONLY:

Method of Transport: ☐ Client ☐ ATL ☐ FedEx ☐ OnTrac ☐ GSO ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED 3.6 Y☑ N☐ 4. SEALED Y☐ N☐
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐
3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: _____ Address: 1956 Webster St. # 400 TEL: 510 343 3000

Attn: Ninyo & Moore - Peter Sims City Oakland State CA Zip Code 94612 FAX: 3001

Project Name: Ashland Housing Project Project #: 402090002 Sampler: (Printed Name) Melissa Terry (Signature) MTerry

Relinquished by: (Signature and Printed Name)	Melissa Terry	Date: 2/24/14	Time: 1425	Received by: (Signature and Printed Name)	Jeff Siegfried	Date: 2/24/14	Time: 225pm
Relinquished by: (Signature and Printed Name)	Jeff Siegfried	Date: 2/24/14	Time: 248p	Received by: (Signature and Printed Name)	GSO	Date: 2/24/14	Time: 248pm
Relinquished by: (Signature and Printed Name)		Date:	Time:	Received by: (Signature and Printed Name)	[illegible]	Date: 2/25/14	Time: 0840

Bill To:
Attn: Peter Sims E-mail:
Company: Ninyo & Moore
Address: psims@ninyoandmoore.com
City: State: Zip:

Send Report To:
Attn: E-mail:
Company:
Address:
City: State: Zip:

Special Instructions/Comments:
Please analyze only SP4-1, SP5-2, SP6-3, SP7-4 for BTEX
Please analyze composites for TPHg, d, mo and Title22 metals

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all Samples and Hardcopy will be disposed Forty-five(45) days after generation of report - electronic copies retained for five(5) years.
Storage Fees (applies when storage is requested):
■ Sample : Forty-five(45) Days Complimentary - $2.00 / sample / mo thereafter.
Hardcopy Reports $17.50 per report.

CIRCLE or Write IN Analyses Needed

CIRCLE APPROPRIATE MATRIX: SOIL/SEDIMENT/SLUDGE; SOLIDS/WIPES/FILTERS; WATER-DRINKING/GROUND; WATER-STORM/WASTE; AQUEOUS/LAYERED-OIL

ITEM	BUSINESS HOURS 8:30 am to 5:30 pm Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8260-624 (Volatiles)	8015B (DRO) / 8021 (BTEX)	TO-15 / TO-14 / TO-3 / RSK-175	8270B-625(BNA) / 8310(PAHs)	8015B(DRO)/8015B(HCID)	8081 OrgCl / 8141 OrgPO4 Pest	8082 PCBs	6010B-200.7 CAM Metals	6010B-200.7 Metals	6020B-200.8-1640 Metals	7199-218.6 (Hex. Chromium)	300(Anions) / 314 (Perchlorate)	TAT	Container(s) #	Container(s) Type	PRESERVATION
1	1400547-1	SP4-1	2/24	0915	X											X	5	1	5 1 4	
2	-2	SP4-2																		
3	-3	SP4-3 Comp-4																		
4	-4	SP4-4																		
5	-5	SP5-1		0925																
6	-6	SP5-2			X															
7	-7	SP5-3 Comp-5																		
8	-8	SP5-4																		
9	-9	SP6-1		0935																
10	-10	SP6-2 Comp-6																		

QA/QC
RTNE ☐ CT ☐ Legal ☐ SWRCB ☐ Logcode____ OTHER ____

REMARKS

☐ Samples Submitted AFTER 3:30 PM, are considered received the following business day at 8:30 AM. Weekend, Holiday, Off Hours Work ASK for QUOTE

Container Types: 1=Tube 2=VOA 3=Liter 4=Pint 5=Jar 6=Tedlar 7=Canister

Material: 1=Glass 2=Plastic 3=Metal

Preservatives: 1=HCl, 2=HNO_3 3=H_2SO_4 4=4°C 5=$Zn(Ac)_2$ 6=NaOH 7=$NA_2S_2O_4$

TAT 0	TAT 1	TAT 2	TAT 3	TAT 4	TAT 5	TAT 10
300% SURCHARGE SAME BUSINESS DAY IF RCV'D BY 9:00 AM	100% SURCHARGE NEXT BUSINESS DAY 5:30 PM	50% SURCHARGE 2ND BUSINESS DAY 5:30 PM	30% SURCHARGE 3RD BUSINESS DAY 5:30 PM	20% SURCHARGE 4TH BUSINESS DAY 5:30 PM	NO SURCHARGE 5 -7 BUSINESS DAYS 5:30 PM ☒	10% DISCOUNT 10th BUSINESS DAY 5:30 PM

For RUSH TCLP/STLC, add 2 days to respective TAT.

Subcon. TAT is 10-15 business days, Dioxin and Furans 21 business days.

CHAIN OF CUSTODY RECORD

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: _____ Quote #: _____

As the authorized agent of the below named company, I hereby purchase testing services from ATL as dictated below and guarantee payment in full.

Submitter (Print): _____

Signature: _____

Submitter - Please complete all SHADED areas and include QUOTE # above to ensure proper invoicing.

FOR LABORATORY USE ONLY:

Method of Transport: ☐ Client ☐ ATL ☐ FedEx ☐ OnTrac ☐ GSO ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 5.6 Y☑ N☐ 4. SEALED Y☐ N☐
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐
3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: _____ Address: 1956 Webster St. # 400 TEL: 510 343 3000

Attn: Ninyo & Moore - Peter Sims City Oakland State CA Zip Code 94612 FAX: 3001

Project Name: Ashland Housing Project Project #: 402090002 Sampler: (Printed Name) M Terry (Signature) M Terry

Relinquished by: (Signature and Printed Name) M Terry	Date: 2/24/14	Time: 1425	Received by: (Signature and Printed Name) Jeff Siegfried		Date: 2/24/14	Time: 225pm
Relinquished by: (Signature and Printed Name) Jeff Siegfried	Date: 2/24/14	Time: 248pm	Received by: (Signature and Printed Name) GSO		Date: 2/24/14	Time: 248pm
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name) [illegible]		Date: 2/25/14	Time: 0840

Bill To: Attn: Peter Sims E-mail: Company: Ninyo & Moore Address: psims@ninyoandmoore.com City: State: Zip:

Send Report To: Attn: E-mail: Company: Addrress: City: State: Zip:

Special Instructions/Comments: TPHg + TPHmo Title 22

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all Samples and Hardcopy will be disposed Forty-five(45) days after generation of report - electronic copies retained for five(5) years.
Storage Fees (applies when storage is requested):
■ Sample : Forty-five(45) Days Complimentary - $2.00 / sample / mo thereafter.
Hardcopy Reports $17.50 per report.

CIRCLE or Write IN Analyses Needed: 8260-624 (Volatiles); ~~8015B(GRO)~~ / 8021 (BTEX); TO-15 / TO-14 / TO-3 / RSK-175; 8270B-625(BNA) / 8310(PAHs); 8015B(DRO)~~8015B(HIGH)~~; 8081 OrgCl / 8141 OrgPO4 Pest; 8082 PCBs; 6010B-200.7 CAM Metals; 6010B-200.7 Metals; 6020B-200.8-1640 Metals; 7199-218.6 (Hex. Chromium); 300(Anions) / 314 (Perchlorate)

CIRCLE APPROPRIATE MATRIX: SOIL/SED/MENT/SLUDGE; SOLIDS/WIPES/FILTERS; WATER-DRINKING/GROUND; WATER-STORM/WASTE; AQUEOUS/LAYERED-OIL

ITEM	BUSINESS HOURS 8:30 am to 5:30 pm Lab No.	Sample Description Sample I.D. / Location	Date	Time	TAT	Container(s) #	Type	PRESERVATION
1	1400547 - 11	SP6-3 (comp-6)	2/24		5	1	5 1	4
2	- 12	SP6-4						
3	- 13	SP7-1		0945				
4	- 14	SP7-2 (comp-7)						
5	- 15	SP7-3						
6	- 16	SP7-4						
7	- 17	COMP-4						
8	- 18	COMP-5						
9	- 19	COMP- 6						
10	- 20	COMP- 7						

Q A / Q C: RTNE ☐ CT ☐ Legal ☐ SWRCB ☐ Logcode____ OTHER ____ REMARKS

☐ Samples Submitted AFTER 3:30 PM, are considered received the following business day at 8:30 AM. Weekend, Holiday, Off Hours Work ASK for QUOTE

Container Types: 1=Tube 2=VOA 3=Liter 4=Plnt 5=Jar 6=Tedlar 7= Canister

Material: 1=Glass 2=Plastic 3=Metal

Preservatives: 1=HCl, 2=HNO_3 3=H_2SO_4 4=4°C 5=$Zn(Ac)_2$ 6=NaOH 7=$NA_2S_2O_4$

TAT 0	TAT 1	TAT 2	TAT 3	TAT 4	TAT 5	TAT 10
300% SURCHARGE SAME BUSINESS DAY IF RCV'D BY 9:00 AM ☐	100% SURCHARGE NEXT BUSINESS DAY 5:30 PM ☐	50% SURCHARGE 2ND BUSINESS DAY 5:30 PM ☐	30% SURCHARGE 3RD BUSINESS DAY 5:30 PM ☐	20% SURCHARGE 4TH BUSINESS DAY 5:30 PM ☐	NO SURCHARGE 5 -7 BUSINESS DAYS 5:30 PM ☒	10% DISCOUNT 10th BUSINESS DAY 5:30 PM ☐

For RUSH TCLP/STLC, add 2 days to respective TAT.

Subcon. TAT is 10-15 business days, Dioxin and Furans 21 business days.

DISTRIBUTION: White with report Yellow to folder Pink to submitter

Carmen Aguila

From: Fernando Diwa
Sent: Tuesday, February 25, 2014 11:39 AM
To: Carmen Aguila; Rachelle Arada
Cc: Eddie Rodriguez; Edgar Morrison; Edric Caballero
Subject: FW: Ashland Housing Project, 402090002

From: Melissa Terry [mailto:mterry@ninyoandmoore.com]
Sent: Tuesday, February 25, 2014 11:21 AM
To: Fernando Diwa
Cc: Peter Sims
Subject: RE: Ashland Housing Project, 402090002

Hi Fernando --

The composite samples should be analyzed for TPHg, d, mo and Title 22 Metals. DO NOT analyze for BNAs or PAHs (COC is incorrect).

Thanks for checking!

Melissa Terry
Senior Staff Scientist
Ninyo & Moore
Geotechnical & Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612
(510) 343-3000 (x15230)
(510) 343-3001 (Fax)
(510) 455-1087 (Cell)
mterry@ninyoandmoore.com

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-----Original Message-----
From: Fernando Diwa [mailto:fernando@atlglobal.com]
Sent: Tuesday, February 25, 2014 11:06 AM
To: Melissa Terry
Cc: Peter Sims; Carmen Aguila; Rachelle Arada
Subject: Ashland Housing Project, 402090002

Hi Melissa,

Please confirm that the composite samples will be analyze for TPHg,d,mo and Title 22 Metals as specified on Special Instructions/Comments. The composite samples listed on Page 2 were marked for 8270-625(BNA) / 8310(PAHs) and Title 22 Metals. See attached cocs.

Thank you.

Regards,

Ronnie

Rachelle Arada

From: Peter Sims [psims@ninyoandmoore.com]
Sent: Monday, March 03, 2014 12:10 PM
To: Rachelle Arada
Subject: Ashland Housing Project 402090002

Hi Rachelle,

Please analyze sample SP7-4 for full range VOCs by 8260B and SVOCs by 8270C instead of just BTEX. Also, please analyze sample Comp-7 for asbestos by CARB Level A-400, PCBs by 8082, OCPs by 8081, organophosphorous pesticides by 8141, and chlorinated herbicides by 8151.

Thank you,

Peter D. Sims, LEED AP
Project Environmental Geologist
Ninyo & Moore
Geotechnical & Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612
(510) 343-3000 x15216 (Office)
(510) 327-9335 (Cell Phone)
(510) 343-3001 (Fax)
psims@ninyoandmoore.com

New San Jose office
2149 O'Toole Avenue, Suite 10
San Jose, CA 95131
(408) 435-9000
(408) 435-9006 (Fax)

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