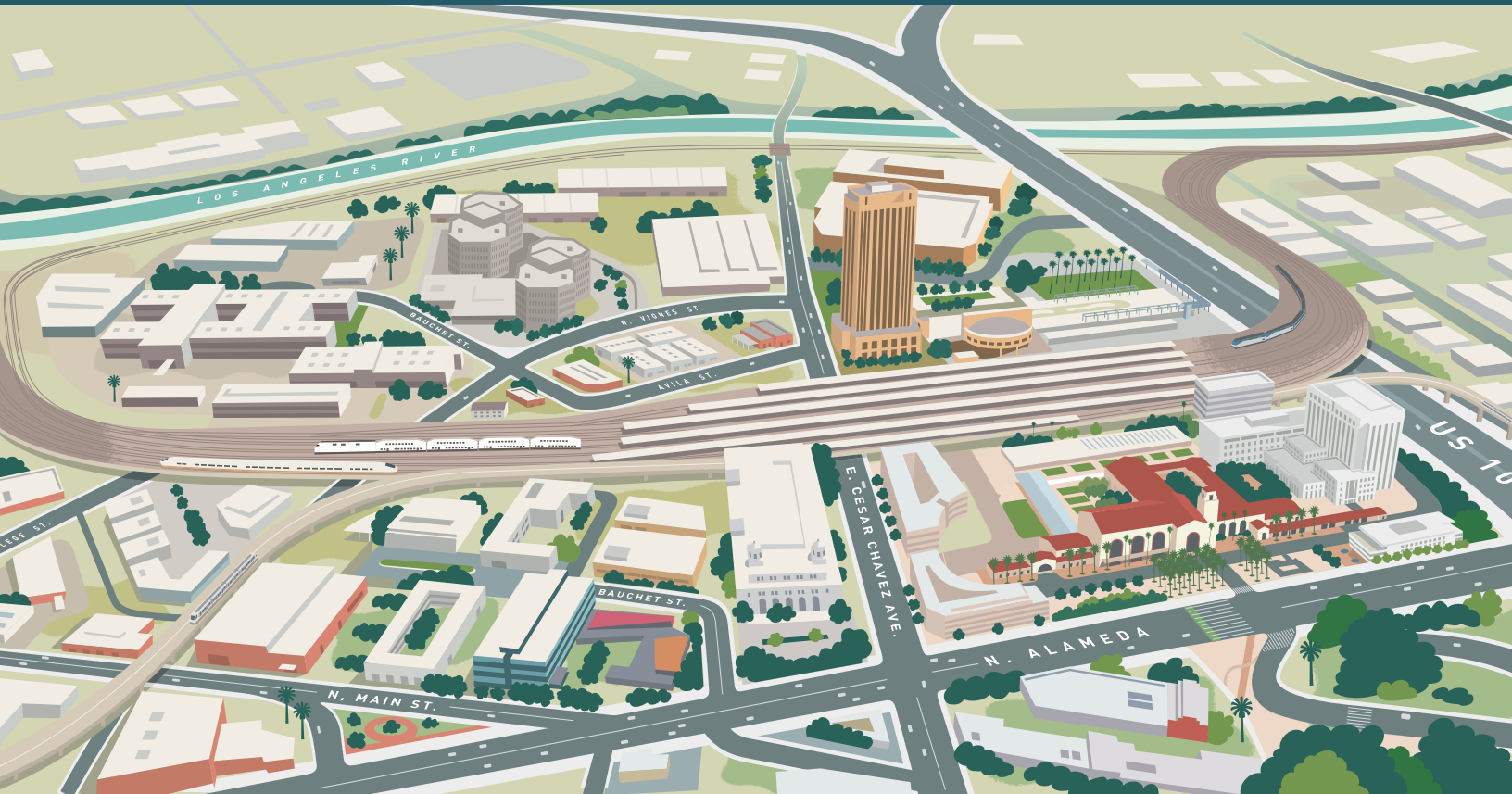


Link Union Station

Phase I Environmental Site Assessment

October 2016



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CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID: Client Sample ID:	1506-007-2 B1-10'	1506-007-3 B1-15'	1506-007-4 B1-20'	Method	Units	Detection Limit
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	ND	ND	19	EPA 8260B	mg/Kg	0.001
m,p-Xylene	ND	ND	55	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	ND	ND	24	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	2.3	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	ND	6.7	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	ND	12	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	ND	30	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	0.53	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	ND	4.2	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	ND	2.7	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	ND	ND	390	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	112	107	101	70-130
1,2 Dichloromethane ⁴	119	115	113	70-130
Toluene-d8	108	96	126	70-130
Bromofluorobenzene	113	108	122	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427
Fax: (909) 593-2105

Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15.- 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-6	1506-007-7	1506-007-9	Method	Units:	Detection Limit
Client Sample ID:	B2-10'	B2-15'	B3-10'			
Dilution	1	1	1			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID: Client Sample ID:	1506-007-6 B2-10'	1506-007-7 B2-15'	1506-007-9 B3-10'	Method	Units	Detection Limit
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
m,p-Xylene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	ND	ND	ND	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	102	113	111	70-130
1,2 Dichloromethane ⁴	108	113	119	70-130
Toluene-d8	108	110	112	70-130
Bromofluorobenzene	113	119	126	70-130

CTEL Project No: CT165-1506007
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Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15.- 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-10	1506-007-12	1506-007-13	Method	Units:	Detection Limit
Client Sample ID:	B3-15'	B4-10'	B4-15'			
Dilution	1	1	1			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	0.025	ND	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID:	1506-007-10	1506-007-12	1506-007-13	Method	Units	Detection Limit
Client Sample ID:	B3-15'	B4-10'	B4-15'			
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	0.040	ND	ND	EPA 8260B	mg/Kg	0.001
m,p-Xylene	0.043	ND	ND	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	0.015	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	1.3	ND	ND	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	111	113	114	70-130
1,2 Dichloromethaned4	119	113	119	70-130
Toluene-d8	114	113	112	70-130
Bromofluorobenzene	122	119	115	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427
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Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15 - 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-15	1506-007-16	1506-007-18	Method	Units:	Detection Limit
Client Sample ID:	B6-10'	B6-15'	B7-10'			
Dilution	1	100	1			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	ND	0.67	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	3.0	ND	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID:	1506-007-15	1506-007-16	1506-007-18	Method	Units	Detection Limit
Client Sample ID:	B6-10'	B6-15'	B7-10'			
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	0.027	2.3	ND	EPA 8260B	mg/Kg	0.001
m,p-Xylene	0.030	10	ND	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	0.006	5.3	ND	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	0.020	0.95	ND	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	0.077	1.9	ND	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	0.40	6.8	ND	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	0.008	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	0.13	1.1	ND	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	0.83	3.3	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	3.8	220	ND	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	670	430	200	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	113	102	102	70-130
1,2 Dichloromethaned4	115	119	106	70-130
Toluene-d8	118	124	102	70-130
Bromofluorobenzene	112	121	113	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427
Fax: (909) 593-2105

Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15 – 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-20	1506-007-22	1506-007-23	Method	Units:	Detection Limit
Client Sample ID:	B7-20'	B8-10'	B8-15'			
Dilution	100	1	1			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	3.4	ND	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	29	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID:	1506-007-20	1506-007-22	1506-007-23	Method	Units	Detection Limit
Client Sample ID:	B7-20'	B8-10'	B8-15'			
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	7.4	ND	ND	EPA 8260B	mg/Kg	0.001
m,p-Xylenc	31	ND	ND	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	14	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	0.54	ND	ND	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	1.7	ND	ND	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	3.1	ND	ND	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	12	ND	ND	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	1.1	ND	ND	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	1.0	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	390	ND	0.24	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	93	101	99	70-130
1,2 Dichloromethaned4	119	112	114	70-130
Toluene-d8	118	110	96	70-130
Bromofluorobenzene	124	117	112	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427
Fax: (909) 593-2105

Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15.- 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-25	1506-007-26	1506-007-28	Method	Units:	Detection Limit
Client Sample ID:	B9-10'	B9-15'	B10-10'			
Dilution	1	5	1			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID: Client Sample ID:	1506-007-25 B9-10'	1506-007-26 B9-15'	1506-007-28 B10-10'	Method	Units	Detection Limit
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
m,p-Xylene	ND	0.060	ND	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	ND	0.035	ND	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	0.050	ND	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	0.070	ND	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	0.28	ND	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	0.045	ND	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	0.12	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	ND	3.1	0.29	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	94	109	104	70-130
1,2 Dichloromethaned4	87	112	111	70-130
Toluene-d8	98	95	96	70-130
Bromofluorobenzene	102	106	110	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427

Fax: (909) 593-2105

Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15 - 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-29	1506-007-31	1506-007-32	Method	Units:	Detection Limit
Client Sample ID:	B10-15'	B11-10'	B11-15'			
Dilution	1	1	1			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID: Client Sample ID:	1506-007-29 B10-15'	1506-007-31 B11-10'	1506-007-32 B11-15'	Method	Units	Detection Limit
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
m,p-Xylene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	0.34	ND	ND	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	96	86	104	70-130
1,2 Dichloromethaned4	116	75	113	70-130
Toluene-d8	97	92	98	70-130
Bromofluorobenzene	110	105	110	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427
Fax: (909) 593-2105

Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15.- 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-34	1506-007-35	1506-007-36	Method	Units:	Detection Limit
Client Sample ID:	B12-10'	B12-15'	B12-20'			
Dilution	1	1	200			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	ND	ND	3.0	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	ND	60	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
Project Name: Arroyo Hill

Laboratory ID:	1506-007-34	1506-007-35	1506-007-36	Method	Units	Detection Limit
Client Sample ID:	B12-10'	B12-15'	B12-20'			
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	ND	ND	36	EPA 8260B	mg/Kg	0.001
m,p-Xylene	ND	ND	130	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	ND	ND	51	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	4.6	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	ND	15	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	ND	24	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	ND	81	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	ND	5.6	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	ND	5.2	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	ND	0.86	800	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	400	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	89	107	86	70-130
1,2 Dichloromethaned4	80	119	81	70-130
Toluene-d8	102	98	99	70-130
Bromofluorobenzene	96	109	92	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427
Fax: (909) 593-2105

Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15.- 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-38	1506-007-39	1506-007-41	Method	Units:	Detection Limit
Client Sample ID:	B13-10'	B13-15'	B14-10'			
Dilution	1	1	1			
Dichlorodifluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005

CTEL Project No: CT165-1506007

Project ID: E939
 Project Name: Arroyo Hill

Laboratory ID:	1506-007-38	1506-007-39	1506-007-41	Method	Units	Detection Limit
Client Sample ID:	B13-10'	B13-15'	B14-10'			
1,2-Dibromoethane(EDB)	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
m,p-Xylene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	ND	ND	ND	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	ND	0.60	ND	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY			Control Limit
Dibromofluoromethane	105	104	90	70-130
1,2 Dichloromethaned4	118	112	73	70-130
Toluene-d8	100	97	96	70-130
Bromofluorobenzene	107	114	111	70-130

CTEL Project No: CT165-1506007
Client Name: PIC Environmental Services
 2619 Sierra Way
 La Verne, CA 91750
Attention: J. Tim Hersch

Phone:(909) 593-2427
Fax: (909) 593-2105

Project ID: E939
Project Name: Arroyo Hill

Date Sampled: 06/01/15 @ 09:00 am
Date Received: 06/01/15 @ 13:50 pm
Date Analyzed: 06/02/15 - 06/05/15

Matrix: Soil

Laboratory ID:	1506-007-42	1506-007-43	Method	Units:	Detection Limit
Client Sample ID:	B14-15'	B14-20'			
Dilution	1	100			
Dichlorodifluoromethane	ND	ND	EPA 8260B	mg/Kg	0.005
Chloromethane	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl Chloride	ND	ND	EPA 8260B	mg/Kg	0.005
Bromomethane	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroethane	ND	ND	EPA 8260B	mg/Kg	0.005
Trichlorofluoromethane	ND	ND	EPA 8260B	mg/Kg	0.005
Iodomethane	ND	ND	EPA 8260B	mg/Kg	0.005
Acetone	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloroethene	ND	ND	EPA 8260B	mg/Kg	0.005
t-Butyl Alcohol (TBA)	ND	ND	EPA 8260B	mg/Kg	0.02
Methylene Chloride	ND	ND	EPA 8260B	mg/Kg	0.02
Freon 113	ND	ND	EPA 8260B	mg/Kg	0.01
Carbon disulfide	ND	ND	EPA 8260B	mg/Kg	0.005
Trans,1,2-Dichloroethene	ND	ND	EPA 8260B	mg/Kg	0.005
Methyl-tert-butyl-ether(MtBE)	ND	ND	EPA 8260B	mg/Kg	0.002
1,1-Dichloroethane	ND	ND	EPA 8260B	mg/Kg	0.005
Vinyl acetate	ND	ND	EPA 8260B	mg/Kg	0.005
Diisopropyl Ether (DIPE)	ND	ND	EPA 8260B	mg/Kg	0.002
Methyl Ethyl Ketone	ND	ND	EPA 8260B	mg/Kg	0.01
Cis,1,2-Dichloroethene	ND	ND	EPA 8260B	mg/Kg	0.005
Bromochloromethane	ND	ND	EPA 8260B	mg/Kg	0.005
Chloroform	ND	ND	EPA 8260B	mg/Kg	0.005
2,2-Dichloropropane	ND	ND	EPA 8260B	mg/Kg	0.005
Ethyl-t-butyl ether (ETBE)	ND	ND	EPA 8260B	mg/Kg	0.002
1,1,1-Trichloroethane	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichloroethane	ND	ND	EPA 8260B	mg/Kg	0.005
1,1-Dichloropropene	ND	ND	EPA 8260B	mg/Kg	0.005
Carbon Tetrachloride	ND	ND	EPA 8260B	mg/Kg	0.005
Benzene	ND	ND	EPA 8260B	mg/Kg	0.001
t-Amyl Methyl Ether (TAM)	ND	ND	EPA 8260B	mg/Kg	0.002
1,2-Dichloropropane	ND	ND	EPA 8260B	mg/Kg	0.005
Trichloroethene	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromomethane	ND	ND	EPA 8260B	mg/Kg	0.005
Bromodichloromethane	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chloroethylvinylether	ND	ND	EPA 8260B	mg/Kg	0.005
Cis, 1,3-Dichloropropene	ND	ND	EPA 8260B	mg/Kg	0.005
4-Methyl-2-pentanone(MI)	ND	ND	EPA 8260B	mg/Kg	0.01
Trans,1,3-Dichloropropene	ND	ND	EPA 8260B	mg/Kg	0.005
Toluene	ND	1.6	EPA 8260B	mg/Kg	0.001
1,1,2-Trichloroethane	ND	ND	EPA 8260B	mg/Kg	0.005


CTEL Project No: CT165-1506007

Project ID: E939
Project Name: Arroyo Hill

Laboratory ID:	1506-007-42	1506-007-43	Method	Units	Detection Limit
Client Sample ID:	B14-15'	B14-20'			
1,2-Dibromoethane(EDB)	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichloropropane	ND	ND	EPA 8260B	mg/Kg	0.005
Dibromochloromethane	ND	ND	EPA 8260B	mg/Kg	0.005
2-Hexanone	ND	ND	EPA 8260B	mg/Kg	0.01
Tetrachloroethene	ND	ND	EPA 8260B	mg/Kg	0.005
Chlorobenzene	ND	ND	EPA 8260B	mg/Kg	0.005
1,1,1,2-Tetrachloroethane	ND	ND	EPA 8260B	mg/Kg	0.005
Ethylbenzene	ND	3.4	EPA 8260B	mg/Kg	0.001
m,p-Xylene	ND	8.6	EPA 8260B	mg/Kg	0.001
Bromoform	ND	ND	EPA 8260B	mg/Kg	0.005
Styrene	ND	ND	EPA 8260B	mg/Kg	0.005
o-Xylene	ND	3.1	EPA 8260B	mg/Kg	0.001
1,1,2,2-Tetrachloroethane	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,3-Trichloropropane	ND	ND	EPA 8260B	mg/Kg	0.005
Isopropylbenzene	ND	0.63	EPA 8260B	mg/Kg	0.005
Bromobenzene	ND	ND	EPA 8260B	mg/Kg	0.005
2-Chlorotoluene	ND	ND	EPA 8260B	mg/Kg	0.005
n-Propylbenzene	ND	2.3	EPA 8260B	mg/Kg	0.005
4-Chlorotoluene	ND	ND	EPA 8260B	mg/Kg	0.005
1,3,5-Trimethylbenzene	ND	2.9	EPA 8260B	mg/Kg	0.005
Tert-Butylbenzene	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trimethylbenzene	ND	12	EPA 8260B	mg/Kg	0.005
Sec-Butylbenzene	ND	ND	EPA 8260B	mg/Kg	0.005
1,3-Dichlorobenzene	ND	ND	EPA 8260B	mg/Kg	0.005
1,4-Dichlorobenzene	ND	ND	EPA 8260B	mg/Kg	0.005
p-Isopropyltoluene	ND	ND	EPA 8260B	mg/Kg	0.005
1,2-Dichlorobenzene	ND	ND	EPA 8260B	mg/Kg	0.005
n-Butylbenzene	ND	0.67	EPA 8260B	mg/Kg	0.005
1,2 Dibromo-3-Chloropropane	ND	ND	EPA 8260B	mg/Kg	0.005
1,2,4-Trichlorobenzene	ND	ND	EPA 8260B	mg/Kg	0.005
Naphthalene	ND	2.1	EPA 8260B	mg/Kg	0.005
1,2,3-Trichlorobenzene	ND	ND	EPA 8260B	mg/Kg	0.005
Hexachlorobutadiene	ND	ND	EPA 8260B	mg/Kg	0.005
Ethanol	ND	ND	EPA 8260B	mg/Kg	0.1
Carbon Chain (C5~C12)	ND	100	EPA 8015M	mg/Kg	0.1
Carbon Chain (C13~C24)	ND	ND	EPA 8015M	mg/Kg	1
Carbon Chain (C25~C40)	ND	ND	EPA 8015M	mg/Kg	5

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY		Control Limit
Dibromofluoromethane	104	89	70-130
1,2 Dichloromethaned4	115	81	70-130
Toluene-d8	96	114	70-130
Bromofluorobenzene	109	85	70-130


Roobik Yaghoubi
Laboratory Director

*The results are base upon the samples received. Samples are not homogeneous.

Geologist: Tim Hersch, PG

Project Manager: Ethan Hersch

Page: 1 of 1

Client: Arroyo Hill

Project No.: E939

Boring: B1

Location: Tank 6

Well/Boring: Boring

Date: 6/1/2015

Drilling Co.: Strongarm

Driller: Frank / Rogelio

Rig: Geoprobe 6600

Auger/Casing Diam.: 2"

Filter Pack: NA

H₂O Depth: NA

No. of Samples: 4

Total Depth: 20'

Perforations: NA

	Description	Lithology	TPH (ppm)	Sample		Comments
				No.	Interval	
5	Asphalt					
	Brown medium grained sand, massive, unconsolidated, dry, no odor, no discoloration	SW	0.0	1	4-5	
10	Brown medium grained sand, massive, unconsolidated, dry, no odor, no discoloration	SW	0.0	2	9-10	
15	Greenish grey silt, clayey massive, unconsolidated, dry, petroleum odor	ML	105.0	3	14-15	
20	Greenish grey silt, massive, unconsolidated, dry, petroleum odor	ML	732.0	4	19-20	
25						
30						

Geologist: Tim Hersch, PG

Project Manager: Ethan Hersch

Page: 1 of 1

Client: Arroyo Hill

Project No.: E939

Boring: B2

Location: Tank 6

Well/Boring: Boring

Date: 6/1/2015

Drilling Co.: Strongarm

Driller: Frank / Rogelio

Rig: Geoprobe 6600

Auger/Casing Diam.: 2"

Filter Pack: NA

H₂O Depth: NA

No. of Samples: 3

Total Depth: 15'

Perforations: NA

Description	Lithology	TPH (ppm)	Sample		Comments
			No.	Interval	
Asphalt					
5 Brown medium grained sand, massive, unconsolidated, dry, no odor, no discoloration	SW	0.0	1	4-5	
10 Greenish brown silt and fine grained sand, massive, unconsolidated, dry, petroleum odor	ML	0.0	2	9-10	
15 Greenish grey silt, clayey massive, unconsolidated, dry, petroleum odor	ML	22.8	3	14-15	
20					
25					
30					

Geologist: Tim Hersch, PG

Project Manager: Ethan Hersch

Page: 1 of 1

Client: Arroyo Hill

Project No.: E939

Boring: B3

Location: Tank 1

Well/Boring: Boring

Date: 6/1/2015

Drilling Co.: Strongarm

Driller: Frank / Rogelio

Rig: Geoprobe 6600

Auger/Casing Diam.: 2"

Filter Pack: NA

H₂O Depth: NA

No. of Samples: 3

Total Depth: 15'

Perforations: NA

	Description	Lithology	TPH (ppm)	Sample		Comments
				No.	Interval	
5	Asphalt					
	Brown medium grained sand, massive, unconsolidated, dry, no odor, no discoloration	SW	0.0	1	4-5	
10	Greenish grey silt and fine grained sand, clayey massive, unconsolidated, dry, petroleum odor	ML	0.4	2	9-10	
15	Greenish grey silt, clayey massive, unconsolidated, dry, petroleum odor	ML	3.0	3	14-15	
20						
25						
30						

Geologist: Tim Hersch, PG

Project Manager: Ethan Hersch

Page: 1 of 1

Client: Arroyo Hill

Project No.: E939

Boring: B4

Location: Tank 1

Well/Boring: Boring

Date: 6/1/2015

Drilling Co.: Strongarm

Driller: Frank / Rogelio

Rig: Geoprobe 6600

Auger/Casing Diam.: 2"

Filter Pack: NA

H₂O Depth: NA

No. of Samples: 3

Total Depth: 15'

Perforations: NA

Description	Lithology	TPH (ppm)	Sample		Comments
			No.	Interval	
Asphalt					
5 Brown medium grained sand, massive, unconsolidated, dry, no odor, no discoloration	SW	0.0	1	4-5	
10 Greenish grey silt and fine grained sand, clayey massive, unconsolidated, dry, petroleum odor	ML	0.3	2	9-10	
15 Greenish grey silt, clayey massive, unconsolidated, dry, petroleum odor	ML	0.6	3	14-15	
20					
25					
30					

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J-30 - UPRR Cornfield, 1245 N Spring Street

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Memorandum

Date: 13 March 2015

To: Mr. Javier Hinojosa, Department of Toxic Substances Control

Cc: Mr. Nathan Arnold, Forest City Blossom, LP
Mr. James Ostrom, Forest City Blossom, LP
Mr. Frank Frallicciardi, Forest City Blossom, LP
Mr. Nicholas Targ, Holland & Knight, LLP
Ms. Nuna Tersibashian, City of Los Angeles

From: Ms. Wendy Key, Geosyntec Consultants, Inc.
Mr. Randy Brandt, Geosyntec Consultants, Inc.

Subject: Final Utility Trench Sampling Results
Blossom Plaza Development
900 North Broadway, Los Angeles, California
Geosyntec Project: WR1777

Dear Mr. Hinojosa:

Geosyntec Consultants, Inc. (Geosyntec) on behalf of Forest City Blossom, LP (Forest City) has prepared this Final Utility Trench Sampling Results Memorandum (Memorandum) to document the steps and procedures which were taken to assess offsite fill material located in planned utility trenches proximate to the Blossom Plaza Development Site located at 900 North Broadway in Los Angeles, California (Site). The Department of Toxic Substances Control (DTSC) had required, per the Voluntary Cleanup Agreement¹ (VCA) between Forest City and the DTSC and the protocol documented in the Risk Management Plan² (RMP), that representative fill samples be obtained from offsite utility trenches to assess the presence of lead and evaluate appropriate

¹ DTSC, 2013. Voluntary Cleanup Agreement, Docket No. HSA VCA 12/13-094, Blossom Plaza, 900 North Broadway, Los Angeles, California 90012, 9 June 2013.

² Geosyntec, 2013. Risk Management Plan, Proposed Blossom Plaza Development Site, 900 Broadway, Los Angeles, California, 10 December, 2013.

disposal options due to the presence of lead-impacted soil discovered on-site during excavation activities³.

Sampling Methodology

Utility trenches selected for sampling are shown in Figure 1. While several utility trench excavations are planned, the target trenches are the largest (longest and deepest) utility trenches planned for installation on both North Broadway and College Street and are believed to be representative of the material that will be encountered in all of the utility trenches. Consistent with the procedures outlined in Geosyntec's Final Utility Trench Sampling Memorandum⁴, potholes were installed to the maximum planned depth of excavation at each trench with two potholes per trench to allow for representative sample collection.

Two potholes were advanced on North Broadway (T1-NW and T1-SE) and two potholes were advanced on College Street (T2-N and T2-S). Each pothole was excavated using a backhoe equipped with a two-foot wide bucket. Potholes installed on Broadway were 7 feet long and 10 feet deep (T1-NW) and 5 feet long and 8.5 feet deep (T1-SE). One soil sample (vertical field composite consisting of a small amount of soil taken from each bucket excavated from the pothole and placed/combined in a laboratory supplied jar) was collected from T1-NW from depths ranging from 20 inches to 10 feet below ground surface (bgs) and one soil (vertical field composite) sample was collected from T1-SE from depths ranging from 1 to 8.5 feet bgs.

Potholes installed on College Street were 7 feet long and 6 feet deep (T2-S) and 5 feet long and 2.5 feet deep (T2-N). Two soil samples (vertical field composites) were collected from T2-N (T2-N-1 and T2-N-2) at depths ranging from 1.5 to 6 feet bgs and two soil samples (vertical field composites) were collected from T2-S (T2-S-1 and T2-S-2) at depths ranging from 1.25 to 2.5 feet bgs.

The soil samples collected were submitted to Eurofins CalScience analytical laboratory in Garden Grove, California and analyzed for the following constituents as summarized in the table below:

³ Geosyntec, 2014. Final Unexpected Condition Response Action Completion Report, Blossom Plaza Development, 900 North Broadway, Los Angeles, California, 10 October 2014.

⁴ Geosyntec, 2015. Final Utility Trench Sampling Memorandum, Blossom Plaza Development, 900 North Broadway, Los Angeles, California, 6 January 2015.

Constituent	US EPA Analysis Method	Composite		Trench 1 (T1) Samples Analyzed	Trench 2 (T2) Samples Analyzed
		Field	Laboratory		
Title 22 Metals	6010B/7071	X	X	Composite (T1-NW and T1-SE)	Composite (T2-N-1, T2-N-2, T2-S-1, and T2-S-2)
Volatile Organic Constituents (VOCs)	8260	X		T1-NW and T1-SE	T2-N-1, T2-N-2, T2-S-1, and T2-S-2
Total Petroleum Hydrocarbons (TPH)	8015	X		T1-NW and T1-SE	T2-N-1, T2-N-2, T2-S-1, and T2-S-2
Semi-Volatile Organic Constituents (SVOCs)	8270C	X	X	Composite (T1-NW and T1-SE)	Composite (T2-N-1, T2-N-2, T2-S-1, and T2-S-2)

Results

Soil encountered in the potholes installed on Broadway generally consisted of clayey sands and sandy clays with some silt, gravel, and cobbles (fill). Some concrete debris was noted at a depth of approximately 4 feet bgs in T1-NW. No evidence of fill materials containing glass, slag, or other significant construction debris similar to that encountered in the on-site Blossom Plaza excavations was observed in the potholes installed during sampling activities. Native soil was not encountered in the potholes to the depths explored.

Soil encountered in the potholes installed on College Street generally consisted of clayey sands with silt, gravel, and cobbles (fill). No evidence of fill materials containing glass, slag, or other significant construction debris similar to that encountered in the on-site Blossom Plaza excavations was observed in the potholes installed during sampling activities. Native soil was not encountered in the potholes to the depths explored.

Laboratory analytical results are provided as Attachment 1. Results showed that the VOCs and SVOCs in soil are not present above laboratory reporting limits. Metals concentrations reported in soil were generally below Regional Screening Levels (RSL) and consistent with background concentrations as identified in Table 3 of the RMP (Geosyntec, 2013). Lead concentrations ranged from 10.5 milligrams per kilogram (mg/kg) in the composite sample collected from T2 on College Street and 10.9 mg/kg in the composite sample collected from T1 on Broadway. Total petroleum hydrocarbons (TPH) in the diesel range (C10-28) were reported at a concentration of 8.2 milligrams per kilogram (mg/kg) in one sample (T1-NW) on Broadway. TPH concentrations in the diesel range and residual oil range (C28-C44) were reported as present in soil collected from College Avenue with TPH as diesel values reported at concentrations ranging from 5.2 mg/kg to 33 mg/kg. TPH as residual oil was reported at concentrations ranging from 107 mg/kg

to 170 mg/kg. These concentrations are below the screening levels of 100 mg/kg for TPH as diesel and 500 mg/kg for TPH as residual oil established in the RMP for reuse. As such, additional waste profiling analyses such as Soluble Threshold Limit Concentration (STLC) and Toxic Characterization Leaching Procedure (TCLP) was not conducted.

Conclusion and Construction Completion

Based on the above results, it was Geosyntec's opinion that the soil that was planned to be excavated from the utility trenches could be either: i) re-used as trench backfill following utility installation; ii) re-used on the Blossom Plaza Site in accordance with the conditions specified in the Risk Management Plan; or, iii) disposed offsite as non-hazardous waste.

Due to space restraints and construction logistics preventing the storage of excavated soil at the Site, the General Contractor elected to dispose the soil offsite as non-hazardous waste. Soil excavated from the Broadway utility trenches (approximately 90 cubic yards) was taken to ConGlobal Industries, Inc.'s (a construction material recycling company) facility located in Wilmington, California. Due to the higher TPH concentrations in soil from College Street, excavated soil from the utility trenches on College Street (approximately 121 cubic yards) was disposed at Waste Connections, Inc.'s Chiquita Canyon Landfill in Castaic, California and manifested as Class III non-hazardous waste.

If you have any questions or wish to discuss this memorandum, please contact Wendy Key (916-637-8326) or Randy Brandt (510-285-2736).

ATTACHMENTS:

Figure 1: Utility Sampling Location Map
Attachment 1: Laboratory Analytical Data

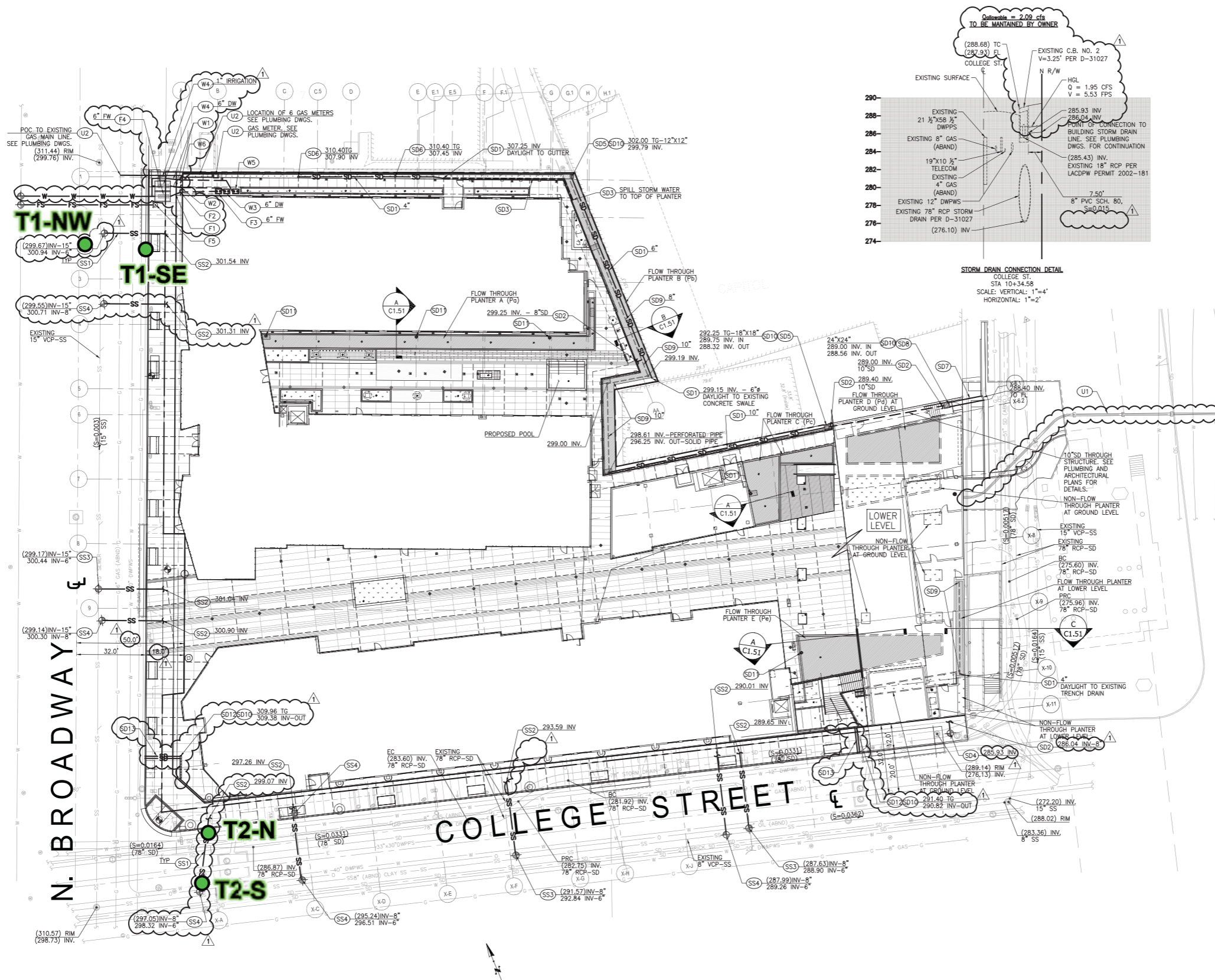


1111 Broadway Suite 600
Oakland, California 94607
PH 510.836.3034
FAX 510.836.3036
www.geosyntec.com

ATTACHMENTS

Final Utility Trench Sampling Results Memo_150313

engineers | scientists | innovators



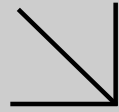
- UTILITY CONSTRUCTION NOTES:**
- STORM DRAIN**
- (SD1) PVC, SDR-35 STORM DRAIN PIPE PER DETAIL 1, SHEET C5.00 SIZE AND SLOPE PER PLAN.
 - (SD2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. COORDINATE AND MATCH LOCATION WITH PLUMBING DRAWINGS. PROVIDE REDUCING FITTINGS AS REQUIRED TO MATCH SIZE OF PLUMBING LINES. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (SD3) GUTTER PER ARCHITECTURAL.
 - (SD4) POINT OF CONNECTION TO EXISTING STORM DRAIN SYSTEM PER APWA STD. PLAN 335-2, CASE 1 AND LA COUNTY FLOOD CONTROL DISTRICT PERMIT NO. T201304548. CONNECT TO EXISTING CATCH BASIN. VERIFY IN FIELD INVERT ELEVATION.
 - (SD5) CAST-IN-PLACE CONCRETE CATCH BASIN PER DETAIL 4, SHEET C5.00. SEE PLAN FOR SIZE.
 - (SD6) 6" DIA. PLANTER DRAIN PER DETAIL 5, SHEET C5.00.
 - (SD7) 24" WIDE PARKWAY DRAIN PER APWA STD. PLAN 151-2.
 - (SD8) CUSTOM Poured IN PLACE TRANSITION BOX WITH 24"x24" FRAME AND COVER.
 - (SD9) PERFORATED PVC PIPE, SDR 35. SEE PLAN FOR SIZE AND INVERT ELEVATIONS.
 - (SD10) PROVIDE "NO DUMPING" SYMBOL PER DETAIL 1, HEREON.
 - (SD11) DOWNSPOUT. SEE PLUMBING AND ARCHITECTURAL DRAWINGS.
 - (SD12) INSTALL NDS DURA SLOPE TRENCH DRAINS WITH ADA COMPLIANT/HEEL PROOF GRATING. PROVIDE FLOORGRAD LOPRO TRENCH DRAIN FILTER INSERT FG-TDF4. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
 - (SD13) 2-4" CIP CURB DRAIN PER APWA STD. PLAN 150-3.
- SANITARY SEWER**
- (SS1) VCP SANITARY SEWER PIPE PER DETAIL 1, SHEET C5.00 SIZE AND SLOPE PER PLAN.
 - (SS2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. COORDINATE AND MATCH LOCATION WITH PLUMBING DRAWINGS. PROVIDE REDUCING FITTINGS AS REQUIRED TO MATCH SIZE OF PLUMBING LINES. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (SS3) POINT OF CONNECTION TO EXISTING SEWER MAIN LINE. PROVIDE NEW HOUSE CONNECTION PER DETAIL 2, SHEET C5.00. CONTRACTOR TO OBTAIN A SEWER CONNECTION PERMIT FROM THE CITY OF LA DEPARTMENT OF PUBLIC WORKS.
 - (SS4) CONNECT TO EXISTING SEWER LATERAL OR WYE. CONTRACTOR TO FIELD VERIFY THE ELEVATION AND CONDITION OF EXISTING LATERAL. IF EXISTING LATERAL IS NOT FEASIBLE FOR CONNECTION, EXTEND P.O.C TO SEWER MAIN LINE AND PROVIDE NEW CONNECTION PER CITY OF LOS ANGELES STANDARDS. CONTRACTOR TO OBTAIN A SEWER CONNECTION PERMIT FROM THE CITY OF LA DEPARTMENT OF PUBLIC WORKS.
- DOMESTIC WATER**
- (W1) PVC C-900 DOMESTIC WATER PIPE PER DETAIL 1, SHEET C5.00 SIZE PER PLAN.
 - (W2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (W3) BACKFLOW PREVENTION DEVICE PER PLUMBING DRAWINGS.
 - (W4) WATER METER VAULT. INSTALLATION BY DEPARTMENT OF WATER AND POWER. SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR TO COORDINATE WATER SERVICE CONNECTION WITH LOCAL PROVIDER.
 - (W5) BACKFLOW PREVENTION DEVICE PER IRRIGATION PLANS.
 - (W6) IRRIGATION P.O.C. SEE IRRIGATION PLANS.
- FIRE WATER**
- (F1) PVC C-900 FIRE WATER PIPE PER DETAIL 1, SHEET C5.00 SIZE AND MATERIAL PER PLAN.
 - (F2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (F3) BACKFLOW PREVENTION DEVICE PER PLUMBING DRAWINGS.
 - (F4) WATER METER VAULT. INSTALLATION BY DEPARTMENT OF WATER AND POWER. SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR TO COORDINATE FIRE WATER SERVICE CONNECTION WITH LOCAL PROVIDER.
 - (F5) FIRE HYDRANT. INSTALLATION BY DEPARTMENT OF WATER AND POWER. CONTRACTOR TO COORDINATE FIRE SERVICE CONNECTION WITH LOCAL PROVIDER.
- OTHER UTILITIES**
- (U1) ELECTRICAL CONDUIT. SEE ELECTRICAL DRAWINGS FOR DETAILS AND SPECIFICATIONS. SHOWN FOR COORDINATION PURPOSES ONLY.
 - (U2) GAS LINE / METERS. SEE PLUMBING AND GAS COMPANY DRAWINGS FOR DETAILS AND SPECIFICATIONS. SHOWN FOR COORDINATION PURPOSES ONLY.
- LEGEND:**
- EXISTING PROPERTY LINE
 - PROPOSED PROPERTY LINE
 - SHORING LINE
 - FLOW THROUGH PLANTER (SEE C1.51 FOR DETAILS)
 - NON-FLOW THROUGH PLANTER AREA/LANDSCAPE (REFER TO LANDSCAPING PLANS FOR DETAILS)

T2-S Utility Trench Sampling Location

Utility Trench Sampling Locations

Blossom Plaza Development
900 North Broadway, Los Angeles, California

January 2015	Figure: 1	Geosyntec consultants
--------------	-----------	--------------------------


WORK ORDER NUMBER: 15-01-0618
The difference is service


AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For
Client: Geosyntec Consultants

Client Project Name: Blossom Plaza Utility Trench Sampling /
WR1777-04

Attention: Wendy Key
3043 Gold Canal Drive
Suite 201
Rancho Cordova, CA 95670-6394



 Approved for release on 01/14/2015 by:
Stephen Nowak
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

Client Project Name: Blossom Plaza Utility Trench Sampling / WR1777-04
 Work Order Number: 15-01-0618

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Detections Summary.	5
4	Client Sample Data.	6
	4.1 EPA 8015B (M) C6-C44 (Solid).	6
	4.2 EPA 6010B/7471A CAC Title 22 Metals (Solid).	9
	4.3 EPA 7471A Mercury (Solid).	11
	4.4 EPA 8270C Semi-Volatile Organics (Solid).	12
	4.5 EPA 8260B Volatile Organics (Solid).	18
5	Quality Control Sample Data.	24
	5.1 MS/MSD.	24
	5.2 LCS/LCSD.	29
6	Sample Analysis Summary.	34
7	Glossary of Terms and Qualifiers.	35
8	Chain-of-Custody/Sample Receipt Form.	36

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 01/13/15. They were assigned to Work Order 15-01-0618.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Sample Summary

Client: Geosyntec Consultants	Work Order: 15-01-0618
3043 Gold Canal Drive, Suite 201	Project Name: Blossom Plaza Utility Trench Sampling /
Rancho Cordova, CA 95670-6394	WR1777-04
	PO Number:
	Date/Time Received: 01/13/15 07:30
	Number of Containers: 3

Attn: Wendy Key

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
T1-NW	15-01-0618-1	01/13/15 00:30	1	Solid
T1-SE	15-01-0618-2	01/13/15 02:00	1	Solid
Composite (T1-NW & T1-SE)	15-01-0618-3	01/13/15 00:30	1	Solid

Detections Summary

Client: Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Work Order: 15-01-0618
 Project Name: Blossom Plaza Utility Trench Sampling /
 WR1777-04
 Received: 01/13/15

Attn: Wendy Key

Page 1 of 1

Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
T1-NW (15-01-0618-1)						
C6-C44 Total	8.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Composite (T1-NW & T1-SE) (15-01-0618-3)						
Arsenic	3.60		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	155		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.452		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.71		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	22.7	B	0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	10.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.681		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	18.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	62.3	B	1.00	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-NW	15-01-0618-1-A	01/13/15 00:30	Solid	GC 47	01/13/15	01/13/15 13:05	150113B01A

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	8.2	5.0	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>	
n-Octacosane	91	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-SE	15-01-0618-2-A	01/13/15 02:00	Solid	GC 47	01/13/15	01/13/15 13:22	150113B01A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>	
n-Octacosane	98	61-145		

[Return to Contents](#)


RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-490-1355	N/A	Solid	GC 47	01/13/15	01/13/15 11:51	150113B01A
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
C6		ND		5.0		1.00	
C7		ND		5.0		1.00	
C8		ND		5.0		1.00	
C9-C10		ND		5.0		1.00	
C11-C12		ND		5.0		1.00	
C13-C14		ND		5.0		1.00	
C15-C16		ND		5.0		1.00	
C17-C18		ND		5.0		1.00	
C19-C20		ND		5.0		1.00	
C21-C22		ND		5.0		1.00	
C23-C24		ND		5.0		1.00	
C25-C28		ND		5.0		1.00	
C29-C32		ND		5.0		1.00	
C33-C36		ND		5.0		1.00	
C37-C40		ND		5.0		1.00	
C41-C44		ND		5.0		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		96		61-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T1-NW & T1-SE)	15-01-0618-3-A	01/13/15 00:30	Solid	ICP 7300	01/13/15	01/13/15 18:11	150113L01
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Antimony		ND	0.750		1.00		
Arsenic		3.60	0.750		1.00		
Barium		155	0.500		1.00		
Beryllium		0.452	0.250		1.00		
Cadmium		ND	0.500		1.00		
Chromium		18.2	0.250		1.00		
Cobalt		9.71	0.250		1.00		
Copper		22.7	0.500		1.00		B
Lead		10.9	0.500		1.00		
Molybdenum		0.681	0.250		1.00		
Nickel		18.1	0.250		1.00		
Selenium		ND	0.750		1.00		
Silver		ND	0.250		1.00		
Thallium		ND	0.750		1.00		
Vanadium		38.6	0.250		1.00		
Zinc		62.3	1.00		1.00		B

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-20164	N/A	Solid	ICP 7300	01/13/15	01/13/15 17:58	150113L01

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	0.711	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	1.09	1.00	1.00	


 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T1-NW & T1-SE)	15-01-0618-3-A	01/13/15 00:30	Solid	Mercury 05	01/13/15	01/13/15 22:18	150113L07

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0833	1.00	

Method Blank	099-16-272-877	N/A	Solid	Mercury 05	01/13/15	01/13/15 21:21	150113L07
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0833	1.00	

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T1-NW & T1-SE)	15-01-0618-3-A	01/13/15 00:30	Solid	GC/MS TT	01/13/15	01/14/15 13:26	150113L03

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 2 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	71	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	82	25-120	
Nitrobenzene-d5	72	33-123	
p-Terphenyl-d14	71	27-159	
Phenol-d6	83	26-122	
2,4,6-Tribromophenol	95	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-3164	N/A	Solid	GC/MS TT	01/13/15	01/14/15 12:49	150113L03

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 5 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	69	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 6 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	73	25-120	
Nitrobenzene-d5	66	33-123	
p-Terphenyl-d14	68	27-159	
Phenol-d6	72	26-122	
2,4,6-Tribromophenol	83	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-NW	15-01-0618-1-A	01/13/15 00:30	Solid	GC/MS RR	01/13/15	01/13/15 15:12	150113L004

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 2 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	91	60-132	
Dibromofluoromethane	113	63-141	
1,2-Dichloroethane-d4	113	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-SE	15-01-0618-2-A	01/13/15 02:00	Solid	GC/MS RR	01/13/15	01/13/15 17:29	150113L004

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 4 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	107	63-141	
1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9269	N/A	Solid	GC/MS RR	01/13/15	01/13/15 14:17	150113L004

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 6 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	110	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0532-1	Sample	Solid	GC 47	01/13/15	01/13/15 13:40	150113S01
15-01-0532-1	Matrix Spike	Solid	GC 47	01/13/15	01/13/15 12:28	150113S01
15-01-0532-1	Matrix Spike Duplicate	Solid	GC 47	01/13/15	01/13/15 12:46	150113S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	311.8	78	314.9	79	64-130	1	0-15	



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
Work Order: 15-01-0618
Preparation: EPA 3050B
Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-01-0606-2	Sample	Solid	ICP 7300	01/13/15	01/13/15 18:01	150113S01				
15-01-0606-2	Matrix Spike	Solid	ICP 7300	01/13/15	01/13/15 18:02	150113S01				
15-01-0606-2	Matrix Spike Duplicate	Solid	ICP 7300	01/13/15	01/13/15 18:08	150113S01				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	5.361	21	5.247	21	50-115	2	0-20	3
Arsenic	4.608	25.00	33.47	115	32.84	113	75-125	2	0-20	
Barium	158.1	25.00	200.9	4X	201.4	4X	75-125	4X	0-20	Q
Beryllium	0.4347	25.00	28.24	111	27.72	109	75-125	2	0-20	
Cadmium	ND	25.00	25.85	103	25.99	104	75-125	1	0-20	
Chromium	19.56	25.00	50.14	122	49.81	121	75-125	1	0-20	
Cobalt	11.13	25.00	38.42	109	38.54	110	75-125	0	0-20	
Copper	16.88	25.00	47.20	121	46.47	118	75-125	2	0-20	
Lead	6.831	25.00	32.74	104	34.00	109	75-125	4	0-20	
Molybdenum	ND	25.00	23.37	93	22.93	92	75-125	2	0-20	
Nickel	11.86	25.00	39.35	110	39.55	111	75-125	0	0-20	
Selenium	ND	25.00	24.92	100	24.42	98	75-125	2	0-20	
Silver	ND	12.50	11.11	89	8.329	67	75-125	29	0-20	3,4
Thallium	ND	25.00	9.998	40	9.394	38	75-125	6	0-20	3
Vanadium	45.78	25.00	78.31	130	77.70	128	75-125	1	0-20	3
Zinc	57.78	25.00	89.00	125	91.20	134	75-125	2	0-20	3

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
Work Order: 15-01-0618
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0289-26	Sample	Solid	Mercury 05	01/13/15	01/13/15 21:25	150113S07
15-01-0289-26	Matrix Spike	Solid	Mercury 05	01/13/15	01/13/15 21:27	150113S07
15-01-0289-26	Matrix Spike Duplicate	Solid	Mercury 05	01/13/15	01/13/15 21:29	150113S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8950	107	0.9036	108	71-137	1	0-14	



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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
Work Order: 15-01-0618
Preparation: EPA 3545
Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0494-62	Sample	Solid	GC/MS TT	01/13/15	01/14/15 13:45	150113S03
15-01-0494-62	Matrix Spike	Solid	GC/MS TT	01/13/15	01/14/15 14:04	150113S03
15-01-0494-62	Matrix Spike Duplicate	Solid	GC/MS TT	01/13/15	01/14/15 14:22	150113S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	9.858	99	9.588	96	34-148	3	0-20	
Acenaphthylene	ND	10.00	9.565	96	9.348	93	53-120	2	0-20	
Butyl Benzyl Phthalate	ND	10.00	9.574	96	9.332	93	15-189	3	0-20	
4-Chloro-3-Methylphenol	ND	10.00	9.178	92	8.970	90	32-120	2	0-20	
2-Chlorophenol	ND	10.00	9.311	93	9.055	91	53-120	3	0-20	
1,4-Dichlorobenzene	ND	10.00	9.336	93	9.063	91	43-120	3	0-26	
Dimethyl Phthalate	ND	10.00	9.553	96	9.232	92	44-122	3	0-20	
2,4-Dinitrotoluene	ND	10.00	9.521	95	9.418	94	28-120	1	0-20	
Fluorene	ND	10.00	10.17	102	9.910	99	12-186	3	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	8.845	88	8.539	85	38-140	4	0-20	
Naphthalene	ND	10.00	9.510	95	9.345	93	20-140	2	0-20	
4-Nitrophenol	ND	10.00	8.361	84	8.426	84	14-128	1	0-59	
Pentachlorophenol	ND	10.00	8.266	83	8.315	83	10-124	1	0-20	
Phenol	ND	10.00	8.843	88	8.585	86	22-124	3	0-20	
Pyrene	ND	10.00	9.231	92	8.831	88	31-169	4	0-20	
1,2,4-Trichlorobenzene	ND	10.00	9.638	96	9.418	94	56-120	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
Work Order: 15-01-0618
Preparation: EPA 5030C
Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
T1-NW	Sample	Solid	GC/MS RR	01/13/15	01/13/15 15:12	150113S009				
T1-NW	Matrix Spike	Solid	GC/MS RR	01/13/15	01/13/15 16:07	150113S009				
T1-NW	Matrix Spike Duplicate	Solid	GC/MS RR	01/13/15	01/13/15 16:34	150113S009				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	47.84	96	47.04	94	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	43.91	88	45.85	92	51-135	4	0-29	
Chlorobenzene	ND	50.00	43.64	87	43.08	86	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	40.05	80	42.04	84	64-124	5	0-20	
1,2-Dichlorobenzene	ND	50.00	41.12	82	41.37	83	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	44.41	89	44.19	88	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	40.81	82	41.84	84	47-143	2	0-25	
Ethylbenzene	ND	50.00	44.86	90	44.95	90	57-129	0	0-22	
Toluene	ND	50.00	46.94	94	46.06	92	63-123	2	0-20	
Trichloroethene	ND	50.00	43.49	87	43.40	87	44-158	0	0-20	
Vinyl Chloride	ND	50.00	45.99	92	47.23	94	49-139	3	0-47	
p/m-Xylene	ND	100.0	88.41	88	88.30	88	70-130	0	0-30	
o-Xylene	ND	50.00	45.01	90	44.75	90	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	40.01	80	42.64	85	57-123	6	0-21	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1355	LCS	Solid	GC 47	01/13/15	01/13/15 12:09	150113B01A
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Diesel		400.0	333.3	83	75-123	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
097-01-002-20164	LCS	Solid	ICP 7300	01/13/15	01/13/15 18:00	150113L01	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Antimony		25.00	27.13	109	80-120	73-127	
Arsenic		25.00	27.13	109	80-120	73-127	
Barium		25.00	26.54	106	80-120	73-127	
Beryllium		25.00	25.19	101	80-120	73-127	
Cadmium		25.00	26.08	104	80-120	73-127	
Chromium		25.00	27.74	111	80-120	73-127	
Cobalt		25.00	28.02	112	80-120	73-127	
Copper		25.00	26.83	107	80-120	73-127	
Lead		25.00	27.24	109	80-120	73-127	
Molybdenum		25.00	25.51	102	80-120	73-127	
Nickel		25.00	27.83	111	80-120	73-127	
Selenium		25.00	24.55	98	80-120	73-127	
Silver		12.50	12.53	100	80-120	73-127	
Thallium		25.00	25.25	101	80-120	73-127	
Vanadium		25.00	26.19	105	80-120	73-127	
Zinc		25.00	26.04	104	80-120	73-127	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



 Return to Contents

Quality Control - LCS

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-877	LCS	Solid	Mercury 05	01/13/15	01/13/15 21:23	150113L07
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury		0.8350	0.8931	107	85-121	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 3545
 Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-549-3164	LCS	Solid	GC/MS TT	01/13/15	01/14/15 13:08	150113L03	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Acenaphthene		10.00	6.614	66	51-123	39-135	
Acenaphthylene		10.00	6.456	65	52-120	41-131	
Butyl Benzyl Phthalate		10.00	6.604	66	43-139	27-155	
4-Chloro-3-Methylphenol		10.00	6.252	63	55-121	44-132	
2-Chlorophenol		10.00	5.725	57	58-124	47-135	ME
1,4-Dichlorobenzene		10.00	5.640	56	42-132	27-147	
Dimethyl Phthalate		10.00	6.626	66	51-123	39-135	
2,4-Dinitrotoluene		10.00	6.691	67	51-129	38-142	
Fluorene		10.00	6.909	69	54-126	42-138	
N-Nitroso-di-n-propylamine		10.00	5.718	57	40-136	24-152	
Naphthalene		10.00	6.093	61	32-146	13-165	
4-Nitrophenol		10.00	5.402	54	24-126	7-143	
Pentachlorophenol		10.00	4.035	40	23-131	5-149	
Phenol		10.00	5.637	56	40-130	25-145	
Pyrene		10.00	6.333	63	47-143	31-159	
1,2,4-Trichlorobenzene		10.00	6.105	61	45-129	31-143	

Total number of LCS compounds: 16

Total number of ME compounds: 1

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



 Return to Contents

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 5030C
 Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-796-9269	LCS	Solid	GC/MS RR	01/13/15	01/13/15 11:26	150113L004	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Benzene		50.00	57.96	116	78-120	71-127	
Carbon Tetrachloride		50.00	54.56	109	49-139	34-154	
Chlorobenzene		50.00	54.71	109	79-120	72-127	
1,2-Dibromoethane		50.00	51.78	104	80-120	73-127	
1,2-Dichlorobenzene		50.00	50.77	102	75-120	68-128	
1,2-Dichloroethane		50.00	54.78	110	80-120	73-127	
1,1-Dichloroethene		50.00	49.90	100	74-122	66-130	
Ethylbenzene		50.00	55.55	111	76-120	69-127	
Toluene		50.00	56.03	112	77-120	70-127	
Trichloroethene		50.00	52.24	104	80-120	73-127	
Vinyl Chloride		50.00	53.33	107	68-122	59-131	
p/m-Xylene		100.0	111.2	111	75-125	67-133	
o-Xylene		50.00	55.68	111	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		50.00	48.18	96	77-120	70-127	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

Sample Analysis Summary Report

Work Order: 15-01-0618

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	771	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8260B	EPA 5030C	796	GC/MS RR	2
EPA 8270C	EPA 3545	923	GC/MS TT	1


Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Calscience

WORK ORDER #: 15-01- 0 6 1 8

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: GEOSYNTEC

DATE: 01/13/15

TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Temperature 2.7 °C + 0.2°C (CF) = 2.9 °C Blank Sample

- Sample(s) outside temperature criteria (PM/APM contacted by: _____)
- Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter

Checked by: 426

CUSTODY SEALS INTACT:

- Cooler _____ No (Not Intact) Not Present N/A
- Sample _____ No (Not Intact) Not Present

Checked by: 426

Checked by: 426

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....			
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Aqueous: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB

250PB 250PBn 125PB 125PBzanna 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Canister **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** 426

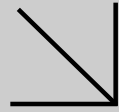
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 826

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure zanna: ZnAc₂+NaOH f: Filtered **Scanned by:** 826

Return to Contents



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WORK ORDER NUMBER: 15-01-0737

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Geosyntec Consultants

Client Project Name: Blossom Plaza Utility Trench Sampling /
WR1777-04

Attention: Wendy Key
3043 Gold Canal Drive
Suite 201
Rancho Cordova, CA 95670-6394

Approved for release on 01/19/2015 by:
Stephen Nowak
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

Client Project Name: Blossom Plaza Utility Trench Sampling / WR1777-04
 Work Order Number: 15-01-0737

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Detections Summary.	5
4	Client Sample Data.	6
	4.1 EPA 8015B (M) C6-C44 (Solid).	6
	4.2 EPA 6010B/7471A CAC Title 22 Metals (Solid).	11
	4.3 EPA 7471A Mercury (Solid).	13
	4.4 EPA 8270C Semi-Volatile Organics (Solid).	14
	4.5 EPA 8260B Volatile Organics (Solid).	20
5	Quality Control Sample Data.	30
	5.1 MS/MSD.	30
	5.2 LCS/LCSD.	35
6	Sample Analysis Summary.	40
7	Glossary of Terms and Qualifiers.	41
8	Chain-of-Custody/Sample Receipt Form.	42

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 01/14/15. They were assigned to Work Order 15-01-0737.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

All samples for EPA 8015B(M) Carbon Chain analysis were Silica Gel Treated.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Sample Summary

Client: Geosyntec Consultants 3043 Gold Canal Drive, Suite 201 Rancho Cordova, CA 95670-6394	Work Order: 15-01-0737 Project Name: Blossom Plaza Utility Trench Sampling / WR1777-04 PO Number: Date/Time Received: 01/14/15 14:10 Number of Containers: 5
---	--

Attn: Wendy Key

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
T2-S-1	15-01-0737-1	01/14/15 01:00	1	Solid
T2-S-2	15-01-0737-2	01/14/15 01:15	1	Solid
T2-N-1	15-01-0737-3	01/14/15 01:45	1	Solid
T2-N-2	15-01-0737-4	01/14/15 02:00	1	Solid
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5	01/14/15 00:00	1	Solid

Detections Summary

Client: Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Work Order: 15-01-0737
 Project Name: Blossom Plaza Utility Trench Sampling /
 WR1777-04
 Received: 01/14/15

Attn: Wendy Key

Page 1 of 1

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
T2-S-2 (15-01-0737-2)						
C19-C20	5.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	6.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	38		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	25		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	28		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	140		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
T2-N-1 (15-01-0737-3)						
C25-C28	5.2		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	31		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	32		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	33		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	30		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	130		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
T2-N-2 (15-01-0737-4)						
C29-C32	31		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	37		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	55		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	45		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	170		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2) (15-01-0737-5)						
Arsenic	2.85		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	140		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.405		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.6		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.71		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	17.5		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	10.5		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	15.8		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.0		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.8		0.976	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-1	15-01-0737-1-A	01/14/15 01:00	Solid	GC 48	01/15/15	01/15/15 16:12	150115B02

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	ND	5.1	1.00	
C25-C28	ND	5.1	1.00	
C29-C32	ND	5.1	1.00	
C33-C36	ND	5.1	1.00	
C37-C40	ND	5.1	1.00	
C41-C44	ND	5.1	1.00	
C6-C44 Total	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
n-Octacosane	84	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-2	15-01-0737-2-A	01/14/15 01:15	Solid	GC 48	01/15/15	01/15/15 16:29	150115B02

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	5.6	5.0	1.00	
C21-C22	6.3	5.0	1.00	
C23-C24	10	5.0	1.00	
C25-C28	11	5.0	1.00	
C29-C32	38	5.0	1.00	
C33-C36	25	5.0	1.00	
C37-C40	28	5.0	1.00	
C41-C44	16	5.0	1.00	
C6-C44 Total	140	5.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
n-Octacosane	92	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-1	15-01-0737-3-A	01/14/15 01:45	Solid	GC 48	01/15/15	01/15/15 16:44	150115B02

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	ND	5.1	1.00	
C25-C28	5.2	5.1	1.00	
C29-C32	31	5.1	1.00	
C33-C36	32	5.1	1.00	
C37-C40	33	5.1	1.00	
C41-C44	30	5.1	1.00	
C6-C44 Total	130	5.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
n-Octacosane	95	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-2	15-01-0737-4-A	01/14/15 02:00	Solid	GC 48	01/15/15	01/15/15 17:01	150115B02

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	31	4.9	1.00	
C33-C36	37	4.9	1.00	
C37-C40	55	4.9	1.00	
C41-C44	45	4.9	1.00	
C6-C44 Total	170	5.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
n-Octacosane	101	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-490-1362	N/A	Solid	GC 48	01/15/15	01/15/15 15:08	150115B02

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>	
n-Octacosane	72	61-145		

[Return to Contents](#)


RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5-A	01/14/15 00:00	Solid	ICP 7300	01/15/15	01/17/15 16:07	150115L02A
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Antimony		ND	0.732		0.976		
Arsenic		2.85	0.732		0.976		
Barium		140	0.488		0.976		
Beryllium		0.405	0.244		0.976		
Cadmium		ND	0.488		0.976		
Chromium		12.6	0.244		0.976		
Cobalt		8.71	0.244		0.976		
Copper		17.5	0.488		0.976		
Lead		10.5	0.488		0.976		
Molybdenum		ND	0.244		0.976		
Nickel		15.8	0.244		0.976		
Selenium		ND	0.732		0.976		
Silver		ND	0.244		0.976		
Thallium		ND	0.732		0.976		
Vanadium		28.0	0.244		0.976		
Zinc		48.8	0.976		0.976		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-20172	N/A	Solid	ICP 7300	01/15/15	01/16/15 16:53	150115L02A
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>
Antimony		ND		0.750	1.00		
Arsenic		ND		0.750	1.00		
Barium		ND		0.500	1.00		
Beryllium		ND		0.250	1.00		
Cadmium		ND		0.500	1.00		
Chromium		ND		0.250	1.00		
Cobalt		ND		0.250	1.00		
Copper		ND		0.500	1.00		
Lead		ND		0.500	1.00		
Molybdenum		ND		0.250	1.00		
Nickel		ND		0.250	1.00		
Selenium		ND		0.750	1.00		
Silver		ND		0.250	1.00		
Thallium		ND		0.750	1.00		
Vanadium		ND		0.250	1.00		
Zinc		ND		1.00	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5-A	01/14/15 00:00	Solid	Mercury 05	01/15/15	01/15/15 15:16	150115L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Mercury		ND		0.0820		1.00	
Method Blank	099-16-272-883	N/A	Solid	Mercury 05	01/15/15	01/15/15 14:43	150115L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Mercury		ND		0.0833		1.00	

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5-A	01/14/15 00:00	Solid	GC/MS TT	01/14/15	01/15/15 16:57	150114L09

Parameter	Result	RL	DF	Qualifiers
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	53	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	79	25-120	
Nitrobenzene-d5	66	33-123	
p-Terphenyl-d14	73	27-159	
Phenol-d6	79	26-122	
2,4,6-Tribromophenol	91	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-3169	N/A	Solid	GC/MS SS	01/14/15	01/14/15 22:32	150114L09

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 5 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	61	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 6 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	75	25-120	
Nitrobenzene-d5	62	33-123	
p-Terphenyl-d14	69	27-159	
Phenol-d6	75	26-122	
2,4,6-Tribromophenol	75	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-1	15-01-0737-1-A	01/14/15 01:00	Solid	GC/MS RR	01/14/15	01/15/15 01:55	150114L034

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 2 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	90	60-132	
Dibromofluoromethane	106	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-2	15-01-0737-2-A	01/14/15 01:15	Solid	GC/MS RR	01/14/15	01/15/15 02:22	150114L034

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	88	60-132		
Dibromofluoromethane	106	63-141		
1,2-Dichloroethane-d4	106	62-146		
Toluene-d8	100	80-120		



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-1	15-01-0737-3-A	01/14/15 01:45	Solid	GC/MS RR	01/14/15	01/15/15 02:49	150114L034

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 6 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	91	60-132	
Dibromofluoromethane	107	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-2	15-01-0737-4-A	01/14/15 02:00	Solid	GC/MS RR	01/14/15	01/15/15 03:17	150114L034

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 8 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	89	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9275	N/A	Solid	GC/MS RR	01/14/15	01/15/15 01:00	150114L034

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 10 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	91	60-132		
Dibromofluoromethane	106	63-141		
1,2-Dichloroethane-d4	102	62-146		
Toluene-d8	100	80-120		



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
T2-S-1	Sample	Solid	GC 48	01/15/15	01/15/15 16:12	150115S02
T2-S-1	Matrix Spike	Solid	GC 48	01/15/15	01/15/15 15:40	150115S02
T2-S-1	Matrix Spike Duplicate	Solid	GC 48	01/15/15	01/15/15 15:56	150115S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	430.3	108	454.2	114	64-130	5	0-15	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
Work Order: 15-01-0737
Preparation: EPA 3050B
Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-01-0795-1	Sample	Solid	ICP 7300	01/15/15	01/15/15 19:38	150115S02				
15-01-0795-1	Matrix Spike	Solid	ICP 7300	01/15/15	01/15/15 19:39	150115S02				
15-01-0795-1	Matrix Spike Duplicate	Solid	ICP 7300	01/15/15	01/15/15 19:40	150115S02				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.569	26	6.395	26	50-115	3	0-20	3
Arsenic	7.584	25.00	33.50	104	33.29	103	75-125	1	0-20	
Barium	118.5	25.00	139.1	4X	142.0	4X	75-125	4X	0-20	Q
Beryllium	0.3598	25.00	28.13	111	28.34	112	75-125	1	0-20	
Cadmium	ND	25.00	27.48	110	27.40	110	75-125	0	0-20	
Chromium	16.27	25.00	45.67	118	44.64	113	75-125	2	0-20	
Cobalt	11.87	25.00	41.00	117	40.58	115	75-125	1	0-20	
Copper	21.35	25.00	48.36	108	47.55	105	75-125	2	0-20	
Lead	19.01	25.00	49.57	122	51.02	128	75-125	3	0-20	3
Molybdenum	ND	25.00	26.08	104	25.85	103	75-125	1	0-20	
Nickel	14.15	25.00	42.33	113	41.60	110	75-125	2	0-20	
Selenium	ND	25.00	23.91	96	23.50	94	75-125	2	0-20	
Silver	ND	12.50	10.26	82	11.59	93	75-125	12	0-20	
Thallium	ND	25.00	7.466	30	7.260	29	75-125	3	0-20	3
Vanadium	34.37	25.00	60.47	104	59.97	102	75-125	1	0-20	
Zinc	62.01	25.00	87.93	104	87.64	103	75-125	0	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
Work Order: 15-01-0737
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-01-0757-1	Sample	Solid	Mercury 05	01/15/15	01/15/15 14:47	150115S01				
15-01-0757-1	Matrix Spike	Solid	Mercury 05	01/15/15	01/15/15 14:49	150115S01				
15-01-0757-1	Matrix Spike Duplicate	Solid	Mercury 05	01/15/15	01/15/15 14:52	150115S01				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.9837	118	0.9552	114	71-137	3	0-14	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3545
 Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0580-6	Sample	Solid	GC/MS SS	01/14/15	01/14/15 21:35	150114S09
15-01-0580-6	Matrix Spike	Solid	GC/MS SS	01/14/15	01/14/15 21:54	150114S09
15-01-0580-6	Matrix Spike Duplicate	Solid	GC/MS SS	01/14/15	01/14/15 22:13	150114S09

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	6.796	68	7.838	78	34-148	14	0-20	
Acenaphthylene	ND	10.00	6.840	68	7.748	77	53-120	12	0-20	
Butyl Benzyl Phthalate	ND	10.00	8.038	80	8.918	89	15-189	10	0-20	
4-Chloro-3-Methylphenol	ND	10.00	7.251	73	8.388	84	32-120	15	0-20	
2-Chlorophenol	ND	10.00	7.356	74	8.637	86	53-120	16	0-20	
1,4-Dichlorobenzene	ND	10.00	6.652	67	7.519	75	43-120	12	0-26	
Dimethyl Phthalate	ND	10.00	6.843	68	7.829	78	44-122	13	0-20	
2,4-Dinitrotoluene	ND	10.00	7.535	75	8.884	89	28-120	16	0-20	
Fluorene	ND	10.00	7.072	71	8.072	81	12-186	13	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	6.740	67	7.713	77	38-140	13	0-20	
Naphthalene	ND	10.00	6.698	67	7.582	76	20-140	12	0-20	
4-Nitrophenol	ND	10.00	6.403	64	7.666	77	14-128	18	0-59	
Pentachlorophenol	ND	10.00	6.058	61	7.383	74	10-124	20	0-20	
Phenol	ND	10.00	7.035	70	8.189	82	22-124	15	0-20	
Pyrene	ND	10.00	7.766	78	8.537	85	31-169	9	0-20	
1,2,4-Trichlorobenzene	ND	10.00	6.970	70	7.851	79	56-120	12	0-20	



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
Work Order: 15-01-0737
Preparation: EPA 5030C
Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
T2-S-1	Sample	Solid	GC/MS RR	01/14/15	01/15/15 01:55	150114S020				
T2-S-1	Matrix Spike	Solid	GC/MS RR	01/14/15	01/15/15 03:44	150114S020				
T2-S-1	Matrix Spike Duplicate	Solid	GC/MS RR	01/14/15	01/15/15 04:11	150114S020				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	45.89	92	42.82	86	61-127	7	0-20	
Carbon Tetrachloride	ND	50.00	44.54	89	41.72	83	51-135	7	0-29	
Chlorobenzene	ND	50.00	40.15	80	38.91	78	57-123	3	0-20	
1,2-Dibromoethane	ND	50.00	37.68	75	35.81	72	64-124	5	0-20	
1,2-Dichlorobenzene	ND	50.00	32.84	66	32.66	65	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	40.72	81	38.07	76	80-120	7	0-20	3
1,1-Dichloroethene	ND	50.00	39.46	79	36.86	74	47-143	7	0-25	
Ethylbenzene	ND	50.00	41.47	83	39.99	80	57-129	4	0-22	
Toluene	ND	50.00	43.95	88	41.58	83	63-123	6	0-20	
Trichloroethene	ND	50.00	42.34	85	40.15	80	44-158	5	0-20	
Vinyl Chloride	ND	50.00	44.50	89	40.80	82	49-139	9	0-47	
p/m-Xylene	ND	100.0	81.55	82	78.81	79	70-130	3	0-30	
o-Xylene	ND	50.00	40.46	81	39.34	79	70-130	3	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	34.40	69	32.39	65	57-123	6	0-21	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS

Geosyntec Consultants 3043 Gold Canal Drive, Suite 201 Rancho Cordova, CA 95670-6394	Date Received: 01/14/15 Work Order: 15-01-0737 Preparation: EPA 3550B Method: EPA 8015B (M)
Page 1 of 5	

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1362	LCS	Solid	GC 48	01/15/15	01/15/15 15:23	150115B02
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Diesel		400.0	374.3	94	75-123	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-20172	LCS	Solid	ICP 7300	01/15/15	01/15/15 18:21	150115L02A
<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Antimony	25.00	23.05	92	80-120	73-127	
Arsenic	25.00	25.08	100	80-120	73-127	
Barium	25.00	24.12	96	80-120	73-127	
Beryllium	25.00	23.06	92	80-120	73-127	
Cadmium	25.00	25.17	101	80-120	73-127	
Chromium	25.00	24.37	97	80-120	73-127	
Cobalt	25.00	24.35	97	80-120	73-127	
Copper	25.00	24.31	97	80-120	73-127	
Lead	25.00	25.04	100	80-120	73-127	
Molybdenum	25.00	23.34	93	80-120	73-127	
Nickel	25.00	24.12	96	80-120	73-127	
Selenium	25.00	22.11	88	80-120	73-127	
Silver	12.50	11.06	88	80-120	73-127	
Thallium	25.00	24.11	96	80-120	73-127	
Vanadium	25.00	23.79	95	80-120	73-127	
Zinc	25.00	23.96	96	80-120	73-127	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



 Return to Contents

Quality Control - LCS

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-883	LCS	Solid	Mercury 05	01/15/15	01/15/15 14:45	150115L01
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury		0.8350	0.9828	118	85-121	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3545
 Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-549-3169	LCS	Solid	GC/MS SS	01/14/15	01/14/15 22:52	150114L09	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Acenaphthene		10.00	6.890	69	51-123	39-135	
Acenaphthylene		10.00	6.847	68	52-120	41-131	
Butyl Benzyl Phthalate		10.00	8.204	82	43-139	27-155	
4-Chloro-3-Methylphenol		10.00	6.994	70	55-121	44-132	
2-Chlorophenol		10.00	7.059	71	58-124	47-135	
1,4-Dichlorobenzene		10.00	6.538	65	42-132	27-147	
Dimethyl Phthalate		10.00	6.698	67	51-123	39-135	
2,4-Dinitrotoluene		10.00	7.486	75	51-129	38-142	
Fluorene		10.00	7.138	71	54-126	42-138	
N-Nitroso-di-n-propylamine		10.00	6.548	65	40-136	24-152	
Naphthalene		10.00	6.551	66	32-146	13-165	
4-Nitrophenol		10.00	6.236	62	24-126	7-143	
Pentachlorophenol		10.00	5.763	58	23-131	5-149	
Phenol		10.00	6.795	68	40-130	25-145	
Pyrene		10.00	7.834	78	47-143	31-159	
1,2,4-Trichlorobenzene		10.00	6.812	68	45-129	31-143	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



 Return to Contents

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-796-9275	LCS	Solid	GC/MS RR	01/14/15	01/15/15 00:06	150114L034	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Benzene		50.00	55.98	112	78-120	71-127	
Carbon Tetrachloride		50.00	54.40	109	49-139	34-154	
Chlorobenzene		50.00	53.48	107	79-120	72-127	
1,2-Dibromoethane		50.00	51.61	103	80-120	73-127	
1,2-Dichlorobenzene		50.00	50.38	101	75-120	68-128	
1,2-Dichloroethane		50.00	52.17	104	80-120	73-127	
1,1-Dichloroethene		50.00	45.27	91	74-122	66-130	
Ethylbenzene		50.00	53.68	107	76-120	69-127	
Toluene		50.00	53.87	108	77-120	70-127	
Trichloroethene		50.00	49.89	100	80-120	73-127	
Vinyl Chloride		50.00	50.36	101	68-122	59-131	
p/m-Xylene		100.0	106.4	106	75-125	67-133	
o-Xylene		50.00	54.15	108	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		50.00	47.05	94	77-120	70-127	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents 

Sample Analysis Summary Report

Work Order: 15-01-0737

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	771	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 48	1
EPA 8260B	EPA 5030C	796	GC/MS RR	2
EPA 8270C	EPA 3545	923	GC/MS TT	1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofins.com or call us.

LABORATORY CLIENT:

GEOSINTEC CONSULTANTS

ADDRESS: 3013 Gold Canal Drive, Ste 201

CITY: Rancho Cordova, STATE: CA ZIP: 95670

TEL: 916-637-8326 E-MAIL: wkey@geosintec.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD

EDD: COELT EDF OTHER

SPECIAL INSTRUCTIONS:

For T22 Metals (6010/747X) and SVOCs (8270), composite
T2-S-1, T2-S-2, T2-N-1, T2-N-2
For TPH (8015) and VOCs (8260), analyze samples
discreetly: T2-S-1, T2-S-2, T2-N-1, T2-N-2
Hold samples for composite analysis of PCBs (8082)
and STEL/TEL for lead for T2-S-1, T2-S-2,
T2-N-1, T2-N-2

CHAIN-OF-CUSTODY RECORD

DATE: 1/13/15
PAGE: 1 OF 1

WORK: LAB USE ONLY
15-01-0737

CLIENT PROJECT NAME / NO.: Blossom Plaza Utility Trench Sampling / WR1777/01
P.O. NO.:
LAB CONTRACT OR QUOTE NO.:
PROJECT CONTACT: WENDY KEY
GLOBAL ID:
LOG CODE:
SAMPLER(S): (PRINT) RACHEL RAIGRO

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) □ GRO	TPH (d) □ DRO	TPH □ C6-C36 □ C6-C44	TPH	BTEX / MTBE □ 8260	VOCs (8260)	Oxygenates (8260)	Prep (5035) □ En Core □ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082) [Hold for Analysis]	PAHs □ 8270 □ 8270 SIM	T22 Metals (6010/747X) □ 6020/747X	Cr(VI) □ 7196 □ 7199 □ 218.6
1	T2-S-1	1/11/15	0100	Soil	1	X			X		X			X					X	X	X	X
2	T2-S-2	1/11/15	0115	Soil	1	X			X		X			X					X	X	X	X
3	T2-N-1	1/14/15	0145	Soil	1	X			X		X			X					X	X	X	X
4	T2-N-2	1/14/15	0200	Soil	1	X			X		X			X					X	X	X	X

Received by: (Signature/Affiliation) Amy Meyer
Date: 1/14/15
Time: 05:30 AM
Received by: (Signature/Affiliation) Donny Lee
Date: 1/14/15
Time: 14:10
Received by: (Signature/Affiliation)
Date:
Time:





Calscience

WORK ORDER #: 15-01-0737

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: GEOSINTEL

DATE: 01/14/15

TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0°C - 6.0°C, not frozen except sediment/tissue)

Temperature 3.3°C + 0.2°C (CF) = 3.5°C [X] Blank [] Sample

[] Sample(s) outside temperature criteria (PM/APM contacted by: _____)

[] Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

[] Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: [] Air [] Filter

Checked by: 678

CUSTODY SEALS INTACT:

[] Cooler [] _____ [] No (Not Intact) [X] Not Present [] N/A

Checked by: 678

[] Sample [] _____ [] No (Not Intact) [X] Not Present

Checked by: 876

SAMPLE CONDITION:

Chain-Of-Custody (COC) document(s) received with samples..... [X] Yes [] No [] N/A

COC document(s) received complete..... [X] Yes [] No [] N/A

[] Collection date/time, matrix, and/or # of containers logged in based on sample labels.

[] No analysis requested. [] Not relinquished. [] No date/time relinquished.

Sampler's name indicated on COC..... [X] Yes [] No [] N/A

Sample container label(s) consistent with COC..... [X] Yes [] No [] N/A

Sample container(s) intact and good condition..... [X] Yes [] No [] N/A

Proper containers and sufficient volume for analyses requested..... [X] Yes [] No [] N/A

Analyses received within holding time..... [X] Yes [] No [] N/A

Aqueous samples received within 15-minute holding time

[] pH [] Residual Chlorine [] Dissolved Sulfides [] Dissolved Oxygen..... [] Yes [] No [X] N/A

Proper preservation noted on COC or sample container..... [] Yes [] No [X] N/A

[] Unpreserved vials received for Volatiles analysis

Volatile analysis container(s) free of headspace..... [] Yes [] No [X] N/A

Tedlar bag(s) free of condensation..... [] Yes [] No [X] N/A

CONTAINER TYPE:

Solid: [] 4ozCGJ [X] 8ozCGJ [] 16ozCGJ [] Sleeve (____) [] EnCores® [] TerraCores® [] _____

Aqueous: [] VOA [] VOA_h [] VOA_{na2} [] 125AGB [] 125AGB_h [] 125AGB_p [] 1AGB [] 1AGB_{na2} [] 1AGB_s

[] 500AGB [] 500AGJ [] 500AGJ_s [] 250AGB [] 250CGB [] 250CGB_s [] 1PB [] 1PB_{na} [] 500PB

[] 250PB [] 250PB_n [] 125PB [] 125PB_{z_{na}} [] 100PJ [] 100PJ_{na2} [] _____ [] _____ [] _____

Air: [] Tedlar® [] Canister Other: [] _____ Trip Blank Lot#: _____ Labeled/Checked by: 678

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 678

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered Scanned by: 678

Return to Contents



Calscience

WORK ORDER #: 15-01-0737

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- Sample(s) NOT RECEIVED but listed on COC
- Sample(s) received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- Improper preservative used – list test
- No preservative noted on COC or label – list test & notify lab
- Sample labels illegible – note test/container type
- Sample label(s) do not match COC – Note in comments
 - Sample ID
 - Date and/or Time Collected
 - Project Information
 - # of Container(s)
 - Analysis
- Sample container(s) compromised – Note in comments
 - Water present in sample container
 - Broken
- Sample container(s) not labeled
- Air sample container(s) compromised – Note in comments
 - Flat
 - Very low in volume
 - Leaking (Not transferred - duplicate bag submitted)
 - Leaking (transferred into Calscience Tedlar® Bag*)
 - Leaking (transferred into Client's Tedlar® Bag*)
- Other: _____

(-2) Collection time per label 0100.

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: *8/16* 01/14/15

Stephen Nowak

From: Wendy Key [WKey@Geosyntec.com]
Sent: Thursday, January 15, 2015 8:56 AM
To: Stephen Nowak
Subject: RE: Blossom Plaza Utility Trench Sampling

Hi Stephen,

Per our conversation this morning, can you please add silica gel cleanup to the TPH analyses for the Blossom Plaza Utility Trench samples that were submitted by Rachel Ragoo (Geosyntec) yesterday, January 14 2015?

Thank you!

Wendy

Wendy Key, PG, CEM
Project Geologist

3043 Gold Canal Drive, Suite 201
Rancho Cordova, California 95670
Office: 916.637.8048
Direct: 916.637.8326
Fax: 916.637.8321
Mobile: 916.833.6214
www.Geosyntec.com



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Memorandum

Date: 13 March 2015

To: Mr. Javier Hinojosa, Department of Toxic Substances Control

Cc: Mr. Nathan Arnold, Forest City Blossom, LP
Mr. James Ostrom, Forest City Blossom, LP
Mr. Frank Frallicciardi, Forest City Blossom, LP
Mr. Nicholas Targ, Holland & Knight, LLP
Ms. Nuna Tersibashian, City of Los Angeles

From: Ms. Wendy Key, Geosyntec Consultants, Inc.
Mr. Randy Brandt, Geosyntec Consultants, Inc.

Subject: Final Utility Trench Sampling Results
Blossom Plaza Development
900 North Broadway, Los Angeles, California
Geosyntec Project: WR1777

Dear Mr. Hinojosa:

Geosyntec Consultants, Inc. (Geosyntec) on behalf of Forest City Blossom, LP (Forest City) has prepared this Final Utility Trench Sampling Results Memorandum (Memorandum) to document the steps and procedures which were taken to assess offsite fill material located in planned utility trenches proximate to the Blossom Plaza Development Site located at 900 North Broadway in Los Angeles, California (Site). The Department of Toxic Substances Control (DTSC) had required, per the Voluntary Cleanup Agreement¹ (VCA) between Forest City and the DTSC and the protocol documented in the Risk Management Plan² (RMP), that representative fill samples be obtained from offsite utility trenches to assess the presence of lead and evaluate appropriate

¹ DTSC, 2013. Voluntary Cleanup Agreement, Docket No. HSA VCA 12/13-094, Blossom Plaza, 900 North Broadway, Los Angeles, California 90012, 9 June 2013.

² Geosyntec, 2013. Risk Management Plan, Proposed Blossom Plaza Development Site, 900 Broadway, Los Angeles, California, 10 December, 2013.

disposal options due to the presence of lead-impacted soil discovered on-site during excavation activities³.

Sampling Methodology

Utility trenches selected for sampling are shown in Figure 1. While several utility trench excavations are planned, the target trenches are the largest (longest and deepest) utility trenches planned for installation on both North Broadway and College Street and are believed to be representative of the material that will be encountered in all of the utility trenches. Consistent with the procedures outlined in Geosyntec's Final Utility Trench Sampling Memorandum⁴, potholes were installed to the maximum planned depth of excavation at each trench with two potholes per trench to allow for representative sample collection.

Two potholes were advanced on North Broadway (T1-NW and T1-SE) and two potholes were advanced on College Street (T2-N and T2-S). Each pothole was excavated using a backhoe equipped with a two-foot wide bucket. Potholes installed on Broadway were 7 feet long and 10 feet deep (T1-NW) and 5 feet long and 8.5 feet deep (T1-SE). One soil sample (vertical field composite consisting of a small amount of soil taken from each bucket excavated from the pothole and placed/combined in a laboratory supplied jar) was collected from T1-NW from depths ranging from 20 inches to 10 feet below ground surface (bgs) and one soil (vertical field composite) sample was collected from T1-SE from depths ranging from 1 to 8.5 feet bgs.

Potholes installed on College Street were 7 feet long and 6 feet deep (T2-S) and 5 feet long and 2.5 feet deep (T2-N). Two soil samples (vertical field composites) were collected from T2-N (T2-N-1 and T2-N-2) at depths ranging from 1.5 to 6 feet bgs and two soil samples (vertical field composites) were collected from T2-S (T2-S-1 and T2-S-2) at depths ranging from 1.25 to 2.5 feet bgs.

The soil samples collected were submitted to Eurofins CalScience analytical laboratory in Garden Grove, California and analyzed for the following constituents as summarized in the table below:

³ Geosyntec, 2014. Final Unexpected Condition Response Action Completion Report, Blossom Plaza Development, 900 North Broadway, Los Angeles, California, 10 October 2014.

⁴ Geosyntec, 2015. Final Utility Trench Sampling Memorandum, Blossom Plaza Development, 900 North Broadway, Los Angeles, California, 6 January 2015.

Constituent	US EPA Analysis Method	Composite		Trench 1 (T1) Samples Analyzed	Trench 2 (T2) Samples Analyzed
		Field	Laboratory		
Title 22 Metals	6010B/7071	X	X	Composite (T1-NW and T1-SE)	Composite (T2-N-1, T2-N-2, T2-S-1, and T2-S-2)
Volatile Organic Constituents (VOCs)	8260	X		T1-NW and T1-SE	T2-N-1, T2-N-2, T2-S-1, and T2-S-2
Total Petroleum Hydrocarbons (TPH)	8015	X		T1-NW and T1-SE	T2-N-1, T2-N-2, T2-S-1, and T2-S-2
Semi-Volatile Organic Constituents (SVOCs)	8270C	X	X	Composite (T1-NW and T1-SE)	Composite (T2-N-1, T2-N-2, T2-S-1, and T2-S-2)

Results

Soil encountered in the potholes installed on Broadway generally consisted of clayey sands and sandy clays with some silt, gravel, and cobbles (fill). Some concrete debris was noted at a depth of approximately 4 feet bgs in T1-NW. No evidence of fill materials containing glass, slag, or other significant construction debris similar to that encountered in the on-site Blossom Plaza excavations was observed in the potholes installed during sampling activities. Native soil was not encountered in the potholes to the depths explored.

Soil encountered in the potholes installed on College Street generally consisted of clayey sands with silt, gravel, and cobbles (fill). No evidence of fill materials containing glass, slag, or other significant construction debris similar to that encountered in the on-site Blossom Plaza excavations was observed in the potholes installed during sampling activities. Native soil was not encountered in the potholes to the depths explored.

Laboratory analytical results are provided as Attachment 1. Results showed that the VOCs and SVOCs in soil are not present above laboratory reporting limits. Metals concentrations reported in soil were generally below Regional Screening Levels (RSL) and consistent with background concentrations as identified in Table 3 of the RMP (Geosyntec, 2013). Lead concentrations ranged from 10.5 milligrams per kilogram (mg/kg) in the composite sample collected from T2 on College Street and 10.9 mg/kg in the composite sample collected from T1 on Broadway. Total petroleum hydrocarbons (TPH) in the diesel range (C10-28) were reported at a concentration of 8.2 milligrams per kilogram (mg/kg) in one sample (T1-NW) on Broadway. TPH concentrations in the diesel range and residual oil range (C28-C44) were reported as present in soil collected from College Avenue with TPH as diesel values reported at concentrations ranging from 5.2 mg/kg to 33 mg/kg. TPH as residual oil was reported at concentrations ranging from 107 mg/kg

to 170 mg/kg. These concentrations are below the screening levels of 100 mg/kg for TPH as diesel and 500 mg/kg for TPH as residual oil established in the RMP for reuse. As such, additional waste profiling analyses such as Soluble Threshold Limit Concentration (STLC) and Toxic Characterization Leaching Procedure (TCLP) was not conducted.

Conclusion and Construction Completion

Based on the above results, it was Geosyntec's opinion that the soil that was planned to be excavated from the utility trenches could be either: i) re-used as trench backfill following utility installation; ii) re-used on the Blossom Plaza Site in accordance with the conditions specified in the Risk Management Plan; or, iii) disposed offsite as non-hazardous waste.

Due to space restraints and construction logistics preventing the storage of excavated soil at the Site, the General Contractor elected to dispose the soil offsite as non-hazardous waste. Soil excavated from the Broadway utility trenches (approximately 90 cubic yards) was taken to ConGlobal Industries, Inc.'s (a construction material recycling company) facility located in Wilmington, California. Due to the higher TPH concentrations in soil from College Street, excavated soil from the utility trenches on College Street (approximately 121 cubic yards) was disposed at Waste Connections, Inc.'s Chiquita Canyon Landfill in Castaic, California and manifested as Class III non-hazardous waste.

If you have any questions or wish to discuss this memorandum, please contact Wendy Key (916-637-8326) or Randy Brandt (510-285-2736).

ATTACHMENTS:

Figure 1: Utility Sampling Location Map
Attachment 1: Laboratory Analytical Data

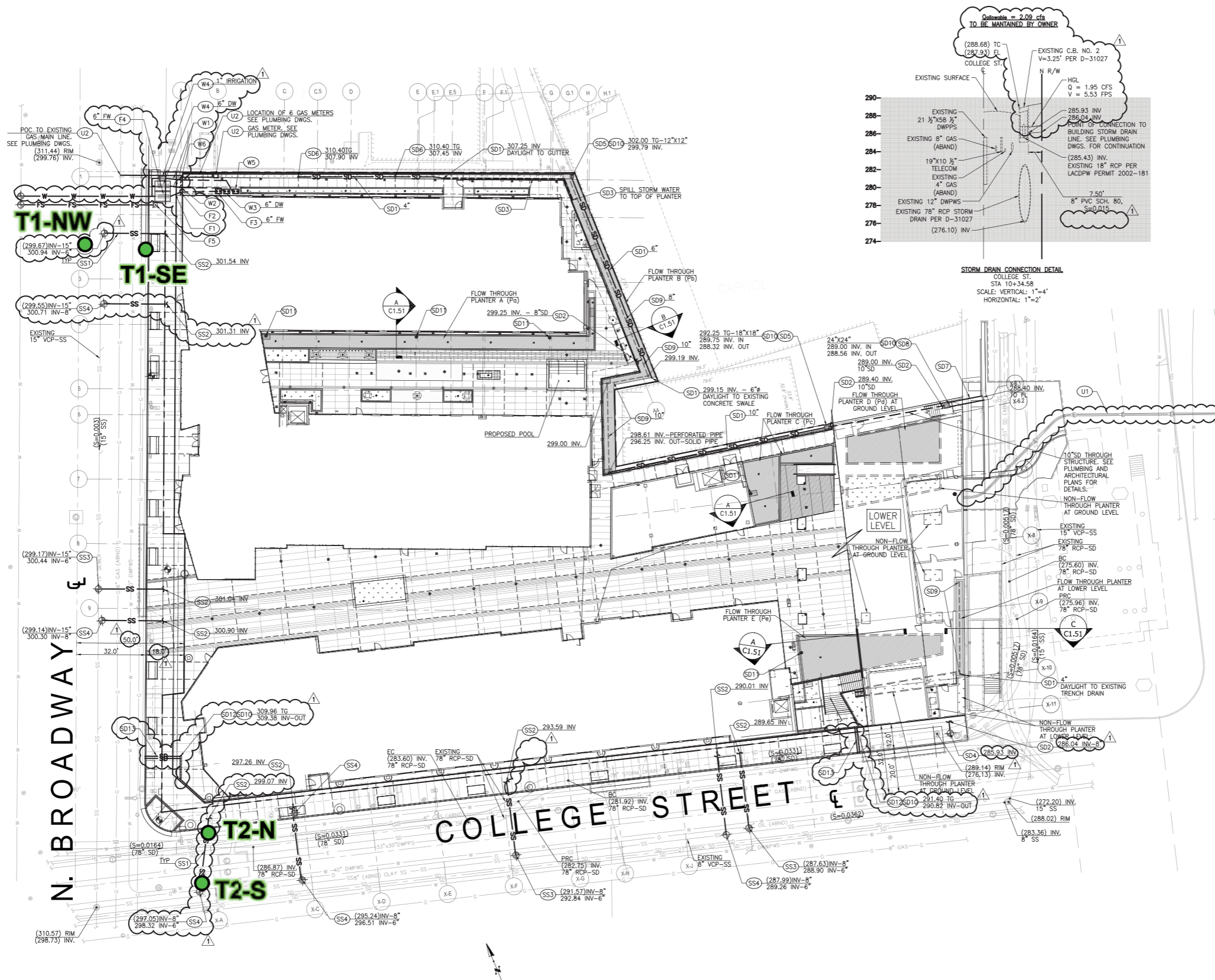


1111 Broadway Suite 600
Oakland, California 94607
PH 510.836.3034
FAX 510.836.3036
www.geosyntec.com

ATTACHMENTS

Final Utility Trench Sampling Results Memo_150313

engineers | scientists | innovators



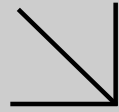
T2-S Utility Trench Sampling Location

- UTILITY CONSTRUCTION NOTES:**
- STORM DRAIN**
- (SD1) PVC, SDR-35 STORM DRAIN PIPE PER DETAIL 1, SHEET C5.00 SIZE AND SLOPE PER PLAN.
 - (SD2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. COORDINATE AND MATCH LOCATION WITH PLUMBING DRAWINGS. PROVIDE REDUCING FITTINGS AS REQUIRED TO MATCH SIZE OF PLUMBING LINES. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (SD3) GUTTER PER ARCHITECTURAL.
 - (SD4) POINT OF CONNECTION TO EXISTING STORM DRAIN SYSTEM PER APWA STD. PLAN 335-2, CASE 1 AND LA COUNTY FLOOD CONTROL DISTRICT PERMIT NO. T201304548. CONNECT TO EXISTING CATCH BASIN. VERIFY IN FIELD INVERT ELEVATION.
 - (SD5) CAST-IN-PLACE CONCRETE CATCH BASIN PER DETAIL 4, SHEET C5.00. SEE PLAN FOR SIZE.
 - (SD6) 6" DIA. PLANTER DRAIN PER DETAIL 5, SHEET C5.00.
 - (SD7) 24" WIDE PARKWAY DRAIN PER APWA STD. PLAN 151-2.
 - (SD8) CUSTOM Poured IN PLACE TRANSITION BOX WITH 24"x24" FRAME AND COVER.
 - (SD9) PERFORATED PVC PIPE, SDR 35. SEE PLAN FOR SIZE AND INVERT ELEVATIONS.
 - (SD10) PROVIDE "NO DUMPING" SYMBOL PER DETAIL 1, HEREON.
 - (SD11) DOWNSPOUT. SEE PLUMBING AND ARCHITECTURAL DRAWINGS.
 - (SD12) INSTALL NDS DURA SLOPE TRENCH DRAINS WITH ADA COMPLIANT/HEEL PROOF GRATING. PROVIDE FLOORGRIP LOPRO TRENCH DRAIN FILTER INSERT FG-TDF4. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
 - (SD13) 2-4" CIP CURB DRAIN PER APWA STD. PLAN 150-3.
- SANITARY SEWER**
- (SS1) VCP SANITARY SEWER PIPE PER DETAIL 1, SHEET C5.00 SIZE AND SLOPE PER PLAN.
 - (SS2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. COORDINATE AND MATCH LOCATION WITH PLUMBING DRAWINGS. PROVIDE REDUCING FITTINGS AS REQUIRED TO MATCH SIZE OF PLUMBING LINES. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (SS3) POINT OF CONNECTION TO EXISTING SEWER MAIN LINE. PROVIDE NEW HOUSE CONNECTION PER DETAIL 2, SHEET C5.00. CONTRACTOR TO OBTAIN A SEWER CONNECTION PERMIT FROM THE CITY OF LA DEPARTMENT OF PUBLIC WORKS.
 - (SS4) CONNECT TO EXISTING SEWER LATERAL OR WYE. CONTRACTOR TO FIELD VERIFY THE ELEVATION AND CONDITION OF EXISTING LATERAL. IF EXISTING LATERAL IS NOT FEASIBLE FOR CONNECTION, EXTEND P.O.C TO SEWER MAIN LINE AND PROVIDE NEW CONNECTION PER CITY OF LOS ANGELES STANDARDS. CONTRACTOR TO OBTAIN A SEWER CONNECTION PERMIT FROM THE CITY OF LA DEPARTMENT OF PUBLIC WORKS.
- DOMESTIC WATER**
- (W1) PVC C-900 DOMESTIC WATER PIPE PER DETAIL 1, SHEET C5.00 SIZE PER PLAN.
 - (W2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (W3) BACKFLOW PREVENTION DEVICE PER PLUMBING DRAWINGS.
 - (W4) WATER METER VAULT. INSTALLATION BY DEPARTMENT OF WATER AND POWER. SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR TO COORDINATE WATER SERVICE CONNECTION WITH LOCAL PROVIDER.
 - (W5) BACKFLOW PREVENTION DEVICE PER IRRIGATION PLANS.
 - (W6) IRRIGATION P.O.C. SEE IRRIGATION PLANS.
- FIRE WATER**
- (F1) PVC C-900 FIRE WATER PIPE PER DETAIL 1, SHEET C5.00 SIZE AND MATERIAL PER PLAN.
 - (F2) POINT OF CONNECTION 5 FEET FROM BUILDING FACE. SEE PLUMBING DRAWINGS FOR CONTINUATION.
 - (F3) BACKFLOW PREVENTION DEVICE PER PLUMBING DRAWINGS.
 - (F4) WATER METER VAULT. INSTALLATION BY DEPARTMENT OF WATER AND POWER. SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR TO COORDINATE FIRE WATER SERVICE CONNECTION WITH LOCAL PROVIDER.
 - (F5) FIRE HYDRANT. INSTALLATION BY DEPARTMENT OF WATER AND POWER. CONTRACTOR TO COORDINATE FIRE SERVICE CONNECTION WITH LOCAL PROVIDER.
- OTHER UTILITIES**
- (U1) ELECTRICAL CONDUIT. SEE ELECTRICAL DRAWINGS FOR DETAILS AND SPECIFICATIONS. SHOWN FOR COORDINATION PURPOSES ONLY.
 - (U2) GAS LINE / METERS. SEE PLUMBING AND GAS COMPANY DRAWINGS FOR DETAILS AND SPECIFICATIONS. SHOWN FOR COORDINATION PURPOSES ONLY.
- LEGEND:**
- EXISTING PROPERTY LINE
 - PROPOSED PROPERTY LINE
 - SHORING LINE
 - FLOW THROUGH PLANTER (SEE C1.51 FOR DETAILS)
 - NON-FLOW THROUGH PLANTER AREA/LANDSCAPE (REFER TO LANDSCAPING PLANS FOR DETAILS)

Utility Trench Sampling Locations

Blossom Plaza Development
900 North Broadway, Los Angeles, California

January 2015	Figure: 1	Geosyntec consultants
--------------	-----------	--------------------------


WORK ORDER NUMBER: 15-01-0618
The difference is service


AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For
Client: Geosyntec Consultants

Client Project Name: Blossom Plaza Utility Trench Sampling /
WR1777-04

Attention: Wendy Key
3043 Gold Canal Drive
Suite 201
Rancho Cordova, CA 95670-6394



 Approved for release on 01/14/2015 by:
Stephen Nowak
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

Client Project Name: Blossom Plaza Utility Trench Sampling / WR1777-04
 Work Order Number: 15-01-0618

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Detections Summary.	5
4	Client Sample Data.	6
	4.1 EPA 8015B (M) C6-C44 (Solid).	6
	4.2 EPA 6010B/7471A CAC Title 22 Metals (Solid).	9
	4.3 EPA 7471A Mercury (Solid).	11
	4.4 EPA 8270C Semi-Volatile Organics (Solid).	12
	4.5 EPA 8260B Volatile Organics (Solid).	18
5	Quality Control Sample Data.	24
	5.1 MS/MSD.	24
	5.2 LCS/LCSD.	29
6	Sample Analysis Summary.	34
7	Glossary of Terms and Qualifiers.	35
8	Chain-of-Custody/Sample Receipt Form.	36

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 01/13/15. They were assigned to Work Order 15-01-0618.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Sample Summary

Client: Geosyntec Consultants	Work Order: 15-01-0618
3043 Gold Canal Drive, Suite 201	Project Name: Blossom Plaza Utility Trench Sampling /
Rancho Cordova, CA 95670-6394	WR1777-04
	PO Number:
	Date/Time Received: 01/13/15 07:30
	Number of Containers: 3

Attn: Wendy Key

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
T1-NW	15-01-0618-1	01/13/15 00:30	1	Solid
T1-SE	15-01-0618-2	01/13/15 02:00	1	Solid
Composite (T1-NW & T1-SE)	15-01-0618-3	01/13/15 00:30	1	Solid

Detections Summary

Client: Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Work Order: 15-01-0618
 Project Name: Blossom Plaza Utility Trench Sampling /
 WR1777-04
 Received: 01/13/15

Attn: Wendy Key

Page 1 of 1

Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
T1-NW (15-01-0618-1)						
C6-C44 Total	8.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Composite (T1-NW & T1-SE) (15-01-0618-3)						
Arsenic	3.60		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	155		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.452		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.71		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	22.7	B	0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	10.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.681		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	18.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	62.3	B	1.00	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-NW	15-01-0618-1-A	01/13/15 00:30	Solid	GC 47	01/13/15	01/13/15 13:05	150113B01A

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	8.2	5.0	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>	
n-Octacosane	91	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-SE	15-01-0618-2-A	01/13/15 02:00	Solid	GC 47	01/13/15	01/13/15 13:22	150113B01A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>	
n-Octacosane	98	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-490-1355	N/A	Solid	GC 47	01/13/15	01/13/15 11:51	150113B01A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>	
n-Octacosane	96	61-145		

[Return to Contents](#)

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T1-NW & T1-SE)	15-01-0618-3-A	01/13/15 00:30	Solid	ICP 7300	01/13/15	01/13/15 18:11	150113L01
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Antimony		ND	0.750		1.00		
Arsenic		3.60	0.750		1.00		
Barium		155	0.500		1.00		
Beryllium		0.452	0.250		1.00		
Cadmium		ND	0.500		1.00		
Chromium		18.2	0.250		1.00		
Cobalt		9.71	0.250		1.00		
Copper		22.7	0.500		1.00		B
Lead		10.9	0.500		1.00		
Molybdenum		0.681	0.250		1.00		
Nickel		18.1	0.250		1.00		
Selenium		ND	0.750		1.00		
Silver		ND	0.250		1.00		
Thallium		ND	0.750		1.00		
Vanadium		38.6	0.250		1.00		
Zinc		62.3	1.00		1.00		B

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-20164	N/A	Solid	ICP 7300	01/13/15	01/13/15 17:58	150113L01

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	0.711	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	1.09	1.00	1.00	



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T1-NW & T1-SE)	15-01-0618-3-A	01/13/15 00:30	Solid	Mercury 05	01/13/15	01/13/15 22:18	150113L07

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0833	1.00	

Method Blank	099-16-272-877	N/A	Solid	Mercury 05	01/13/15	01/13/15 21:21	150113L07
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0833	1.00	

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T1-NW & T1-SE)	15-01-0618-3-A	01/13/15 00:30	Solid	GC/MS TT	01/13/15	01/14/15 13:26	150113L03

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 2 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	71	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	82	25-120	
Nitrobenzene-d5	72	33-123	
p-Terphenyl-d14	71	27-159	
Phenol-d6	83	26-122	
2,4,6-Tribromophenol	95	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-3164	N/A	Solid	GC/MS TT	01/13/15	01/14/15 12:49	150113L03

Parameter	Result	RL	DF	Qualifiers
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 5 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	69	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 6 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	73	25-120	
Nitrobenzene-d5	66	33-123	
p-Terphenyl-d14	68	27-159	
Phenol-d6	72	26-122	
2,4,6-Tribromophenol	83	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-NW	15-01-0618-1-A	01/13/15 00:30	Solid	GC/MS RR	01/13/15	01/13/15 15:12	150113L004

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 2 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	91	60-132	
Dibromofluoromethane	113	63-141	
1,2-Dichloroethane-d4	113	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T1-SE	15-01-0618-2-A	01/13/15 02:00	Solid	GC/MS RR	01/13/15	01/13/15 17:29	150113L004

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	94	60-132		
Dibromofluoromethane	107	63-141		
1,2-Dichloroethane-d4	106	62-146		
Toluene-d8	101	80-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9269	N/A	Solid	GC/MS RR	01/13/15	01/13/15 14:17	150113L004

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 6 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	110	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0532-1	Sample	Solid	GC 47	01/13/15	01/13/15 13:40	150113S01
15-01-0532-1	Matrix Spike	Solid	GC 47	01/13/15	01/13/15 12:28	150113S01
15-01-0532-1	Matrix Spike Duplicate	Solid	GC 47	01/13/15	01/13/15 12:46	150113S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	311.8	78	314.9	79	64-130	1	0-15	



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
Work Order: 15-01-0618
Preparation: EPA 3050B
Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-01-0606-2	Sample	Solid	ICP 7300	01/13/15	01/13/15 18:01	150113S01				
15-01-0606-2	Matrix Spike	Solid	ICP 7300	01/13/15	01/13/15 18:02	150113S01				
15-01-0606-2	Matrix Spike Duplicate	Solid	ICP 7300	01/13/15	01/13/15 18:08	150113S01				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	5.361	21	5.247	21	50-115	2	0-20	3
Arsenic	4.608	25.00	33.47	115	32.84	113	75-125	2	0-20	
Barium	158.1	25.00	200.9	4X	201.4	4X	75-125	4X	0-20	Q
Beryllium	0.4347	25.00	28.24	111	27.72	109	75-125	2	0-20	
Cadmium	ND	25.00	25.85	103	25.99	104	75-125	1	0-20	
Chromium	19.56	25.00	50.14	122	49.81	121	75-125	1	0-20	
Cobalt	11.13	25.00	38.42	109	38.54	110	75-125	0	0-20	
Copper	16.88	25.00	47.20	121	46.47	118	75-125	2	0-20	
Lead	6.831	25.00	32.74	104	34.00	109	75-125	4	0-20	
Molybdenum	ND	25.00	23.37	93	22.93	92	75-125	2	0-20	
Nickel	11.86	25.00	39.35	110	39.55	111	75-125	0	0-20	
Selenium	ND	25.00	24.92	100	24.42	98	75-125	2	0-20	
Silver	ND	12.50	11.11	89	8.329	67	75-125	29	0-20	3,4
Thallium	ND	25.00	9.998	40	9.394	38	75-125	6	0-20	3
Vanadium	45.78	25.00	78.31	130	77.70	128	75-125	1	0-20	3
Zinc	57.78	25.00	89.00	125	91.20	134	75-125	2	0-20	3

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 7471A Total
 Method: EPA 7471A

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0289-26	Sample	Solid	Mercury 05	01/13/15	01/13/15 21:25	150113S07
15-01-0289-26	Matrix Spike	Solid	Mercury 05	01/13/15	01/13/15 21:27	150113S07
15-01-0289-26	Matrix Spike Duplicate	Solid	Mercury 05	01/13/15	01/13/15 21:29	150113S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8950	107	0.9036	108	71-137	1	0-14	

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 3545
 Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0494-62	Sample	Solid	GC/MS TT	01/13/15	01/14/15 13:45	150113S03
15-01-0494-62	Matrix Spike	Solid	GC/MS TT	01/13/15	01/14/15 14:04	150113S03
15-01-0494-62	Matrix Spike Duplicate	Solid	GC/MS TT	01/13/15	01/14/15 14:22	150113S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	9.858	99	9.588	96	34-148	3	0-20	
Acenaphthylene	ND	10.00	9.565	96	9.348	93	53-120	2	0-20	
Butyl Benzyl Phthalate	ND	10.00	9.574	96	9.332	93	15-189	3	0-20	
4-Chloro-3-Methylphenol	ND	10.00	9.178	92	8.970	90	32-120	2	0-20	
2-Chlorophenol	ND	10.00	9.311	93	9.055	91	53-120	3	0-20	
1,4-Dichlorobenzene	ND	10.00	9.336	93	9.063	91	43-120	3	0-26	
Dimethyl Phthalate	ND	10.00	9.553	96	9.232	92	44-122	3	0-20	
2,4-Dinitrotoluene	ND	10.00	9.521	95	9.418	94	28-120	1	0-20	
Fluorene	ND	10.00	10.17	102	9.910	99	12-186	3	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	8.845	88	8.539	85	38-140	4	0-20	
Naphthalene	ND	10.00	9.510	95	9.345	93	20-140	2	0-20	
4-Nitrophenol	ND	10.00	8.361	84	8.426	84	14-128	1	0-59	
Pentachlorophenol	ND	10.00	8.266	83	8.315	83	10-124	1	0-20	
Phenol	ND	10.00	8.843	88	8.585	86	22-124	3	0-20	
Pyrene	ND	10.00	9.231	92	8.831	88	31-169	4	0-20	
1,2,4-Trichlorobenzene	ND	10.00	9.638	96	9.418	94	56-120	2	0-20	



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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
Work Order: 15-01-0618
Preparation: EPA 5030C
Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
T1-NW	Sample	Solid	GC/MS RR	01/13/15	01/13/15 15:12	150113S009				
T1-NW	Matrix Spike	Solid	GC/MS RR	01/13/15	01/13/15 16:07	150113S009				
T1-NW	Matrix Spike Duplicate	Solid	GC/MS RR	01/13/15	01/13/15 16:34	150113S009				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	47.84	96	47.04	94	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	43.91	88	45.85	92	51-135	4	0-29	
Chlorobenzene	ND	50.00	43.64	87	43.08	86	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	40.05	80	42.04	84	64-124	5	0-20	
1,2-Dichlorobenzene	ND	50.00	41.12	82	41.37	83	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	44.41	89	44.19	88	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	40.81	82	41.84	84	47-143	2	0-25	
Ethylbenzene	ND	50.00	44.86	90	44.95	90	57-129	0	0-22	
Toluene	ND	50.00	46.94	94	46.06	92	63-123	2	0-20	
Trichloroethene	ND	50.00	43.49	87	43.40	87	44-158	0	0-20	
Vinyl Chloride	ND	50.00	45.99	92	47.23	94	49-139	3	0-47	
p/m-Xylene	ND	100.0	88.41	88	88.30	88	70-130	0	0-30	
o-Xylene	ND	50.00	45.01	90	44.75	90	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	40.01	80	42.64	85	57-123	6	0-21	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1355	LCS	Solid	GC 47	01/13/15	01/13/15 12:09	150113B01A
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Diesel		400.0	333.3	83	75-123	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
097-01-002-20164	LCS	Solid	ICP 7300	01/13/15	01/13/15 18:00	150113L01	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Antimony		25.00	27.13	109	80-120	73-127	
Arsenic		25.00	27.13	109	80-120	73-127	
Barium		25.00	26.54	106	80-120	73-127	
Beryllium		25.00	25.19	101	80-120	73-127	
Cadmium		25.00	26.08	104	80-120	73-127	
Chromium		25.00	27.74	111	80-120	73-127	
Cobalt		25.00	28.02	112	80-120	73-127	
Copper		25.00	26.83	107	80-120	73-127	
Lead		25.00	27.24	109	80-120	73-127	
Molybdenum		25.00	25.51	102	80-120	73-127	
Nickel		25.00	27.83	111	80-120	73-127	
Selenium		25.00	24.55	98	80-120	73-127	
Silver		12.50	12.53	100	80-120	73-127	
Thallium		25.00	25.25	101	80-120	73-127	
Vanadium		25.00	26.19	105	80-120	73-127	
Zinc		25.00	26.04	104	80-120	73-127	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Quality Control - LCS

Geosyntec Consultants	Date Received:	01/13/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0618
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-877	LCS	Solid	Mercury 05	01/13/15	01/13/15 21:23	150113L07
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury		0.8350	0.8931	107	85-121	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 3545
 Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-549-3164	LCS	Solid	GC/MS TT	01/13/15	01/14/15 13:08	150113L03	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Acenaphthene		10.00	6.614	66	51-123	39-135	
Acenaphthylene		10.00	6.456	65	52-120	41-131	
Butyl Benzyl Phthalate		10.00	6.604	66	43-139	27-155	
4-Chloro-3-Methylphenol		10.00	6.252	63	55-121	44-132	
2-Chlorophenol		10.00	5.725	57	58-124	47-135	ME
1,4-Dichlorobenzene		10.00	5.640	56	42-132	27-147	
Dimethyl Phthalate		10.00	6.626	66	51-123	39-135	
2,4-Dinitrotoluene		10.00	6.691	67	51-129	38-142	
Fluorene		10.00	6.909	69	54-126	42-138	
N-Nitroso-di-n-propylamine		10.00	5.718	57	40-136	24-152	
Naphthalene		10.00	6.093	61	32-146	13-165	
4-Nitrophenol		10.00	5.402	54	24-126	7-143	
Pentachlorophenol		10.00	4.035	40	23-131	5-149	
Phenol		10.00	5.637	56	40-130	25-145	
Pyrene		10.00	6.333	63	47-143	31-159	
1,2,4-Trichlorobenzene		10.00	6.105	61	45-129	31-143	

Total number of LCS compounds: 16

Total number of ME compounds: 1

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



 Return to Contents

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/13/15
 Work Order: 15-01-0618
 Preparation: EPA 5030C
 Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-796-9269	LCS	Solid	GC/MS RR	01/13/15	01/13/15 11:26	150113L004	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Benzene		50.00	57.96	116	78-120	71-127	
Carbon Tetrachloride		50.00	54.56	109	49-139	34-154	
Chlorobenzene		50.00	54.71	109	79-120	72-127	
1,2-Dibromoethane		50.00	51.78	104	80-120	73-127	
1,2-Dichlorobenzene		50.00	50.77	102	75-120	68-128	
1,2-Dichloroethane		50.00	54.78	110	80-120	73-127	
1,1-Dichloroethene		50.00	49.90	100	74-122	66-130	
Ethylbenzene		50.00	55.55	111	76-120	69-127	
Toluene		50.00	56.03	112	77-120	70-127	
Trichloroethene		50.00	52.24	104	80-120	73-127	
Vinyl Chloride		50.00	53.33	107	68-122	59-131	
p/m-Xylene		100.0	111.2	111	75-125	67-133	
o-Xylene		50.00	55.68	111	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		50.00	48.18	96	77-120	70-127	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents 

Sample Analysis Summary Report

Work Order: 15-01-0618

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	771	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8260B	EPA 5030C	796	GC/MS RR	2
EPA 8270C	EPA 3545	923	GC/MS TT	1


Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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WORK ORDER #: 15-01- 0 6 1 8

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: GEOSYNTEC

DATE: 01/13/15

TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Temperature 2.7 °C + 0.2°C (CF) = 2.9 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter

Checked by: 426

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A

Checked by: 426

Sample _____ No (Not Intact) Not Present

Checked by: 426

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Collection date/time, matrix, and/or # of containers logged in based on sample labels.

No analysis requested. Not relinquished. No date/time relinquished.

Sampler's name indicated on COC..... Yes No N/A

Sample container label(s) consistent with COC..... Yes No N/A

Sample container(s) intact and good condition..... Yes No N/A

Proper containers and sufficient volume for analyses requested..... Yes No N/A

Analyses received within holding time..... Yes No N/A

Aqueous samples received within 15-minute holding time

pH Residual Chlorine Dissolved Sulfides Dissolved Oxygen..... Yes No N/A

Proper preservation noted on COC or sample container..... Yes No N/A

Unpreserved vials received for Volatiles analysis

Volatile analysis container(s) free of headspace..... Yes No N/A

Tedlar bag(s) free of condensation..... Yes No N/A

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Aqueous: VOA VOA_h VOAn₂ 125AGB 125AGB_h 125AGB_p 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB

250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Canister **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** 426

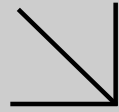
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 826

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered **Scanned by:** 826

Return to Contents



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WORK ORDER NUMBER: 15-01-0737

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Geosyntec Consultants

Client Project Name: Blossom Plaza Utility Trench Sampling /
WR1777-04

Attention: Wendy Key
3043 Gold Canal Drive
Suite 201
Rancho Cordova, CA 95670-6394

Approved for release on 01/19/2015 by:
Stephen Nowak
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

Client Project Name: Blossom Plaza Utility Trench Sampling / WR1777-04
 Work Order Number: 15-01-0737

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Detections Summary.	5
4	Client Sample Data.	6
	4.1 EPA 8015B (M) C6-C44 (Solid).	6
	4.2 EPA 6010B/7471A CAC Title 22 Metals (Solid).	11
	4.3 EPA 7471A Mercury (Solid).	13
	4.4 EPA 8270C Semi-Volatile Organics (Solid).	14
	4.5 EPA 8260B Volatile Organics (Solid).	20
5	Quality Control Sample Data.	30
	5.1 MS/MSD.	30
	5.2 LCS/LCSD.	35
6	Sample Analysis Summary.	40
7	Glossary of Terms and Qualifiers.	41
8	Chain-of-Custody/Sample Receipt Form.	42

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 01/14/15. They were assigned to Work Order 15-01-0737.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

All samples for EPA 8015B(M) Carbon Chain analysis were Silica Gel Treated.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Sample Summary

Client: Geosyntec Consultants 3043 Gold Canal Drive, Suite 201 Rancho Cordova, CA 95670-6394	Work Order: 15-01-0737 Project Name: Blossom Plaza Utility Trench Sampling / WR1777-04 PO Number: Date/Time Received: 01/14/15 14:10 Number of Containers: 5
---	--

Attn: Wendy Key

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
T2-S-1	15-01-0737-1	01/14/15 01:00	1	Solid
T2-S-2	15-01-0737-2	01/14/15 01:15	1	Solid
T2-N-1	15-01-0737-3	01/14/15 01:45	1	Solid
T2-N-2	15-01-0737-4	01/14/15 02:00	1	Solid
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5	01/14/15 00:00	1	Solid

Detections Summary

Client: Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Work Order: 15-01-0737
 Project Name: Blossom Plaza Utility Trench Sampling /
 WR1777-04
 Received: 01/14/15

Attn: Wendy Key

Page 1 of 1

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
T2-S-2 (15-01-0737-2)						
C19-C20	5.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	6.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	38		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	25		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	28		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	140		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
T2-N-1 (15-01-0737-3)						
C25-C28	5.2		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	31		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	32		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	33		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	30		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	130		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
T2-N-2 (15-01-0737-4)						
C29-C32	31		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	37		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	55		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	45		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	170		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2) (15-01-0737-5)						
Arsenic	2.85		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	140		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.405		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.6		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.71		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	17.5		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	10.5		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	15.8		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.0		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.8		0.976	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Analytical Report

Geosyntec Consultants 3043 Gold Canal Drive, Suite 201 Rancho Cordova, CA 95670-6394	Date Received: 01/14/15 Work Order: 15-01-0737 Preparation: EPA 3550B Method: EPA 8015B (M) Units: mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04	Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-1	15-01-0737-1-A	01/14/15 01:00	Solid	GC 48	01/15/15	01/15/15 16:12	150115B02

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	ND	5.1	1.00	
C25-C28	ND	5.1	1.00	
C29-C32	ND	5.1	1.00	
C33-C36	ND	5.1	1.00	
C37-C40	ND	5.1	1.00	
C41-C44	ND	5.1	1.00	
C6-C44 Total	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
n-Octacosane	84	61-145	

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-2	15-01-0737-2-A	01/14/15 01:15	Solid	GC 48	01/15/15	01/15/15 16:29	150115B02

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	5.6	5.0	1.00	
C21-C22	6.3	5.0	1.00	
C23-C24	10	5.0	1.00	
C25-C28	11	5.0	1.00	
C29-C32	38	5.0	1.00	
C33-C36	25	5.0	1.00	
C37-C40	28	5.0	1.00	
C41-C44	16	5.0	1.00	
C6-C44 Total	140	5.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
n-Octacosane	92	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-1	15-01-0737-3-A	01/14/15 01:45	Solid	GC 48	01/15/15	01/15/15 16:44	150115B02

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	ND	5.1	1.00	
C25-C28	5.2	5.1	1.00	
C29-C32	31	5.1	1.00	
C33-C36	32	5.1	1.00	
C37-C40	33	5.1	1.00	
C41-C44	30	5.1	1.00	
C6-C44 Total	130	5.0	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>	
n-Octacosane	95	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-2	15-01-0737-4-A	01/14/15 02:00	Solid	GC 48	01/15/15	01/15/15 17:01	150115B02

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	31	4.9	1.00	
C33-C36	37	4.9	1.00	
C37-C40	55	4.9	1.00	
C41-C44	45	4.9	1.00	
C6-C44 Total	170	5.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
n-Octacosane	101	61-145		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-490-1362	N/A	Solid	GC 48	01/15/15	01/15/15 15:08	150115B02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
C6		ND		5.0		1.00	
C7		ND		5.0		1.00	
C8		ND		5.0		1.00	
C9-C10		ND		5.0		1.00	
C11-C12		ND		5.0		1.00	
C13-C14		ND		5.0		1.00	
C15-C16		ND		5.0		1.00	
C17-C18		ND		5.0		1.00	
C19-C20		ND		5.0		1.00	
C21-C22		ND		5.0		1.00	
C23-C24		ND		5.0		1.00	
C25-C28		ND		5.0		1.00	
C29-C32		ND		5.0		1.00	
C33-C36		ND		5.0		1.00	
C37-C40		ND		5.0		1.00	
C41-C44		ND		5.0		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		72		61-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5-A	01/14/15 00:00	Solid	ICP 7300	01/15/15	01/17/15 16:07	150115L02A
<u>Parameter</u>		<u>Result</u>					<u>Qualifiers</u>
Antimony		ND		0.732		0.976	
Arsenic		2.85		0.732		0.976	
Barium		140		0.488		0.976	
Beryllium		0.405		0.244		0.976	
Cadmium		ND		0.488		0.976	
Chromium		12.6		0.244		0.976	
Cobalt		8.71		0.244		0.976	
Copper		17.5		0.488		0.976	
Lead		10.5		0.488		0.976	
Molybdenum		ND		0.244		0.976	
Nickel		15.8		0.244		0.976	
Selenium		ND		0.732		0.976	
Silver		ND		0.244		0.976	
Thallium		ND		0.732		0.976	
Vanadium		28.0		0.244		0.976	
Zinc		48.8		0.976		0.976	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3050B
	Method:	EPA 6010B
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-20172	N/A	Solid	ICP 7300	01/15/15	01/16/15 16:53	150115L02A
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>
Antimony		ND		0.750	1.00		
Arsenic		ND		0.750	1.00		
Barium		ND		0.500	1.00		
Beryllium		ND		0.250	1.00		
Cadmium		ND		0.500	1.00		
Chromium		ND		0.250	1.00		
Cobalt		ND		0.250	1.00		
Copper		ND		0.500	1.00		
Lead		ND		0.500	1.00		
Molybdenum		ND		0.250	1.00		
Nickel		ND		0.250	1.00		
Selenium		ND		0.750	1.00		
Silver		ND		0.250	1.00		
Thallium		ND		0.750	1.00		
Vanadium		ND		0.250	1.00		
Zinc		ND		1.00	1.00		


 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5-A	01/14/15 00:00	Solid	Mercury 05	01/15/15	01/15/15 15:16	150115L01

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0820	1.00	

Method Blank	099-16-272-883	N/A	Solid	Mercury 05	01/15/15	01/15/15 14:43	150115L01
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0833	1.00	

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (T2-S-1, T2-S-2, T2-N-1, T2-N-2)	15-01-0737-5-A	01/14/15 00:00	Solid	GC/MS TT	01/14/15	01/15/15 16:57	150114L09

Parameter	Result	RL	DF	Qualifiers
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	53	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	79	25-120	
Nitrobenzene-d5	66	33-123	
p-Terphenyl-d14	73	27-159	
Phenol-d6	79	26-122	
2,4,6-Tribromophenol	91	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-3169	N/A	Solid	GC/MS SS	01/14/15	01/14/15 22:32	150114L09

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Aniline	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Azobenzene	ND	0.50	1.00	
Benzidine	ND	10	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Benzoic Acid	ND	2.5	1.00	
Benzyl Alcohol	ND	0.50	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	1.00	
Butyl Benzyl Phthalate	ND	0.50	1.00	
4-Chloro-3-Methylphenol	ND	0.50	1.00	
4-Chloroaniline	ND	0.50	1.00	
2-Chloronaphthalene	ND	0.50	1.00	
2-Chlorophenol	ND	0.50	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Di-n-Butyl Phthalate	ND	0.50	1.00	
Di-n-Octyl Phthalate	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Dibenzofuran	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
3,3'-Dichlorobenzidine	ND	10	1.00	
2,4-Dichlorophenol	ND	0.50	1.00	
Diethyl Phthalate	ND	0.50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 5 of 6

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dimethyl Phthalate	ND	0.50	1.00	
2,4-Dimethylphenol	ND	0.50	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	1.00	
2,4-Dinitrophenol	ND	2.5	1.00	
2,4-Dinitrotoluene	ND	0.50	1.00	
2,6-Dinitrotoluene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	1.00	
Hexachlorobenzene	ND	0.50	1.00	
Hexachlorocyclopentadiene	ND	2.5	1.00	
Hexachloroethane	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
Isophorone	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
2-Methylphenol	ND	0.50	1.00	
3/4-Methylphenol	ND	0.50	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	1.00	
N-Nitrosodimethylamine	ND	0.50	1.00	
N-Nitrosodiphenylamine	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
4-Nitroaniline	ND	0.50	1.00	
3-Nitroaniline	ND	0.50	1.00	
2-Nitroaniline	ND	0.50	1.00	
Nitrobenzene	ND	2.5	1.00	
4-Nitrophenol	ND	0.50	1.00	
2-Nitrophenol	ND	0.50	1.00	
Pentachlorophenol	ND	2.5	1.00	
Phenanthrene	ND	0.50	1.00	
Phenol	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	
Pyridine	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
2,4,6-Trichlorophenol	ND	0.50	1.00	
2,4,5-Trichlorophenol	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	61	27-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 6 of 6

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	75	25-120	
Nitrobenzene-d5	62	33-123	
p-Terphenyl-d14	69	27-159	
Phenol-d6	75	26-122	
2,4,6-Tribromophenol	75	18-138	

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-1	15-01-0737-1-A	01/14/15 01:00	Solid	GC/MS RR	01/14/15	01/15/15 01:55	150114L034

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	90	60-132	
Dibromofluoromethane	106	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-S-2	15-01-0737-2-A	01/14/15 01:15	Solid	GC/MS RR	01/14/15	01/15/15 02:22	150114L034

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	88	60-132		
Dibromofluoromethane	106	63-141		
1,2-Dichloroethane-d4	106	62-146		
Toluene-d8	100	80-120		



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-1	15-01-0737-3-A	01/14/15 01:45	Solid	GC/MS RR	01/14/15	01/15/15 02:49	150114L034

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 6 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	91	60-132	
Dibromofluoromethane	107	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
T2-N-2	15-01-0737-4-A	01/14/15 02:00	Solid	GC/MS RR	01/14/15	01/15/15 03:17	150114L034

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 8 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	89	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04 Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9275	N/A	Solid	GC/MS RR	01/14/15	01/15/15 01:00	150114L034

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/kg

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 10 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	91	60-132		
Dibromofluoromethane	106	63-141		
1,2-Dichloroethane-d4	102	62-146		
Toluene-d8	100	80-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
T2-S-1	Sample	Solid	GC 48	01/15/15	01/15/15 16:12	150115S02
T2-S-1	Matrix Spike	Solid	GC 48	01/15/15	01/15/15 15:40	150115S02
T2-S-1	Matrix Spike Duplicate	Solid	GC 48	01/15/15	01/15/15 15:56	150115S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	430.3	108	454.2	114	64-130	5	0-15	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
Work Order: 15-01-0737
Preparation: EPA 3050B
Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0795-1	Sample	Solid	ICP 7300	01/15/15	01/15/15 19:38	150115S02
15-01-0795-1	Matrix Spike	Solid	ICP 7300	01/15/15	01/15/15 19:39	150115S02
15-01-0795-1	Matrix Spike Duplicate	Solid	ICP 7300	01/15/15	01/15/15 19:40	150115S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.569	26	6.395	26	50-115	3	0-20	3
Arsenic	7.584	25.00	33.50	104	33.29	103	75-125	1	0-20	
Barium	118.5	25.00	139.1	4X	142.0	4X	75-125	4X	0-20	Q
Beryllium	0.3598	25.00	28.13	111	28.34	112	75-125	1	0-20	
Cadmium	ND	25.00	27.48	110	27.40	110	75-125	0	0-20	
Chromium	16.27	25.00	45.67	118	44.64	113	75-125	2	0-20	
Cobalt	11.87	25.00	41.00	117	40.58	115	75-125	1	0-20	
Copper	21.35	25.00	48.36	108	47.55	105	75-125	2	0-20	
Lead	19.01	25.00	49.57	122	51.02	128	75-125	3	0-20	3
Molybdenum	ND	25.00	26.08	104	25.85	103	75-125	1	0-20	
Nickel	14.15	25.00	42.33	113	41.60	110	75-125	2	0-20	
Selenium	ND	25.00	23.91	96	23.50	94	75-125	2	0-20	
Silver	ND	12.50	10.26	82	11.59	93	75-125	12	0-20	
Thallium	ND	25.00	7.466	30	7.260	29	75-125	3	0-20	3
Vanadium	34.37	25.00	60.47	104	59.97	102	75-125	1	0-20	
Zinc	62.01	25.00	87.93	104	87.64	103	75-125	0	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
Work Order: 15-01-0737
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-01-0757-1	Sample	Solid	Mercury 05	01/15/15	01/15/15 14:47	150115S01				
15-01-0757-1	Matrix Spike	Solid	Mercury 05	01/15/15	01/15/15 14:49	150115S01				
15-01-0757-1	Matrix Spike Duplicate	Solid	Mercury 05	01/15/15	01/15/15 14:52	150115S01				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.9837	118	0.9552	114	71-137	3	0-14	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
Work Order: 15-01-0737
Preparation: EPA 3545
Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-01-0580-6	Sample	Solid	GC/MS SS	01/14/15	01/14/15 21:35	150114S09
15-01-0580-6	Matrix Spike	Solid	GC/MS SS	01/14/15	01/14/15 21:54	150114S09
15-01-0580-6	Matrix Spike Duplicate	Solid	GC/MS SS	01/14/15	01/14/15 22:13	150114S09

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	6.796	68	7.838	78	34-148	14	0-20	
Acenaphthylene	ND	10.00	6.840	68	7.748	77	53-120	12	0-20	
Butyl Benzyl Phthalate	ND	10.00	8.038	80	8.918	89	15-189	10	0-20	
4-Chloro-3-Methylphenol	ND	10.00	7.251	73	8.388	84	32-120	15	0-20	
2-Chlorophenol	ND	10.00	7.356	74	8.637	86	53-120	16	0-20	
1,4-Dichlorobenzene	ND	10.00	6.652	67	7.519	75	43-120	12	0-26	
Dimethyl Phthalate	ND	10.00	6.843	68	7.829	78	44-122	13	0-20	
2,4-Dinitrotoluene	ND	10.00	7.535	75	8.884	89	28-120	16	0-20	
Fluorene	ND	10.00	7.072	71	8.072	81	12-186	13	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	6.740	67	7.713	77	38-140	13	0-20	
Naphthalene	ND	10.00	6.698	67	7.582	76	20-140	12	0-20	
4-Nitrophenol	ND	10.00	6.403	64	7.666	77	14-128	18	0-59	
Pentachlorophenol	ND	10.00	6.058	61	7.383	74	10-124	20	0-20	
Phenol	ND	10.00	7.035	70	8.189	82	22-124	15	0-20	
Pyrene	ND	10.00	7.766	78	8.537	85	31-169	9	0-20	
1,2,4-Trichlorobenzene	ND	10.00	6.970	70	7.851	79	56-120	12	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
3043 Gold Canal Drive, Suite 201
Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
Work Order: 15-01-0737
Preparation: EPA 5030C
Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
T2-S-1	Sample	Solid	GC/MS RR	01/14/15	01/15/15 01:55	150114S020				
T2-S-1	Matrix Spike	Solid	GC/MS RR	01/14/15	01/15/15 03:44	150114S020				
T2-S-1	Matrix Spike Duplicate	Solid	GC/MS RR	01/14/15	01/15/15 04:11	150114S020				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	45.89	92	42.82	86	61-127	7	0-20	
Carbon Tetrachloride	ND	50.00	44.54	89	41.72	83	51-135	7	0-29	
Chlorobenzene	ND	50.00	40.15	80	38.91	78	57-123	3	0-20	
1,2-Dibromoethane	ND	50.00	37.68	75	35.81	72	64-124	5	0-20	
1,2-Dichlorobenzene	ND	50.00	32.84	66	32.66	65	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	40.72	81	38.07	76	80-120	7	0-20	3
1,1-Dichloroethene	ND	50.00	39.46	79	36.86	74	47-143	7	0-25	
Ethylbenzene	ND	50.00	41.47	83	39.99	80	57-129	4	0-22	
Toluene	ND	50.00	43.95	88	41.58	83	63-123	6	0-20	
Trichloroethene	ND	50.00	42.34	85	40.15	80	44-158	5	0-20	
Vinyl Chloride	ND	50.00	44.50	89	40.80	82	49-139	9	0-47	
p/m-Xylene	ND	100.0	81.55	82	78.81	79	70-130	3	0-30	
o-Xylene	ND	50.00	40.46	81	39.34	79	70-130	3	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	34.40	69	32.39	65	57-123	6	0-21	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1362	LCS	Solid	GC 48	01/15/15	01/15/15 15:23	150115B02
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Diesel		400.0	374.3	94	75-123	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-20172	LCS	Solid	ICP 7300	01/15/15	01/15/15 18:21	150115L02A
<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Antimony	25.00	23.05	92	80-120	73-127	
Arsenic	25.00	25.08	100	80-120	73-127	
Barium	25.00	24.12	96	80-120	73-127	
Beryllium	25.00	23.06	92	80-120	73-127	
Cadmium	25.00	25.17	101	80-120	73-127	
Chromium	25.00	24.37	97	80-120	73-127	
Cobalt	25.00	24.35	97	80-120	73-127	
Copper	25.00	24.31	97	80-120	73-127	
Lead	25.00	25.04	100	80-120	73-127	
Molybdenum	25.00	23.34	93	80-120	73-127	
Nickel	25.00	24.12	96	80-120	73-127	
Selenium	25.00	22.11	88	80-120	73-127	
Silver	12.50	11.06	88	80-120	73-127	
Thallium	25.00	24.11	96	80-120	73-127	
Vanadium	25.00	23.79	95	80-120	73-127	
Zinc	25.00	23.96	96	80-120	73-127	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



 Return to Contents

Quality Control - LCS

Geosyntec Consultants	Date Received:	01/14/15
3043 Gold Canal Drive, Suite 201	Work Order:	15-01-0737
Rancho Cordova, CA 95670-6394	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: Blossom Plaza Utility Trench Sampling / WR1777-04		Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-883	LCS	Solid	Mercury 05	01/15/15	01/15/15 14:45	150115L01
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury		0.8350	0.9828	118	85-121	

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 3545
 Method: EPA 8270C

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-549-3169	LCS	Solid	GC/MS SS	01/14/15	01/14/15 22:52	150114L09	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Acenaphthene		10.00	6.890	69	51-123	39-135	
Acenaphthylene		10.00	6.847	68	52-120	41-131	
Butyl Benzyl Phthalate		10.00	8.204	82	43-139	27-155	
4-Chloro-3-Methylphenol		10.00	6.994	70	55-121	44-132	
2-Chlorophenol		10.00	7.059	71	58-124	47-135	
1,4-Dichlorobenzene		10.00	6.538	65	42-132	27-147	
Dimethyl Phthalate		10.00	6.698	67	51-123	39-135	
2,4-Dinitrotoluene		10.00	7.486	75	51-129	38-142	
Fluorene		10.00	7.138	71	54-126	42-138	
N-Nitroso-di-n-propylamine		10.00	6.548	65	40-136	24-152	
Naphthalene		10.00	6.551	66	32-146	13-165	
4-Nitrophenol		10.00	6.236	62	24-126	7-143	
Pentachlorophenol		10.00	5.763	58	23-131	5-149	
Phenol		10.00	6.795	68	40-130	25-145	
Pyrene		10.00	7.834	78	47-143	31-159	
1,2,4-Trichlorobenzene		10.00	6.812	68	45-129	31-143	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



 Return to Contents

Quality Control - LCS

Geosyntec Consultants
 3043 Gold Canal Drive, Suite 201
 Rancho Cordova, CA 95670-6394

Date Received: 01/14/15
 Work Order: 15-01-0737
 Preparation: EPA 5030C
 Method: EPA 8260B

Project: Blossom Plaza Utility Trench Sampling / WR1777-04

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-12-796-9275	LCS	Solid	GC/MS RR	01/14/15	01/15/15 00:06	150114L034	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Benzene		50.00	55.98	112	78-120	71-127	
Carbon Tetrachloride		50.00	54.40	109	49-139	34-154	
Chlorobenzene		50.00	53.48	107	79-120	72-127	
1,2-Dibromoethane		50.00	51.61	103	80-120	73-127	
1,2-Dichlorobenzene		50.00	50.38	101	75-120	68-128	
1,2-Dichloroethane		50.00	52.17	104	80-120	73-127	
1,1-Dichloroethene		50.00	45.27	91	74-122	66-130	
Ethylbenzene		50.00	53.68	107	76-120	69-127	
Toluene		50.00	53.87	108	77-120	70-127	
Trichloroethene		50.00	49.89	100	80-120	73-127	
Vinyl Chloride		50.00	50.36	101	68-122	59-131	
p/m-Xylene		100.0	106.4	106	75-125	67-133	
o-Xylene		50.00	54.15	108	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		50.00	47.05	94	77-120	70-127	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

Sample Analysis Summary Report

Work Order: 15-01-0737

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	771	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 48	1
EPA 8260B	EPA 5030C	796	GC/MS RR	2
EPA 8270C	EPA 3545	923	GC/MS TT	1


Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofins.com or call us.

LABORATORY CLIENT:

GEOSINTEC CONSULTANTS

ADDRESS: 3013 Gold Canal Drive, Ste 201

CITY: Rancho Cordova, STATE: CA ZIP: 95670

TEL: 916-637-8326 E-MAIL: wkey@geosintec.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD

EDD: COELT EDF OTHER

SPECIAL INSTRUCTIONS:

For T22 Metals (6010/747X) and SVOCs (8270), composite
T2-S-1, T2-S-2, T2-N-1, T2-N-2
For TPH (8015) and VOCs (8260), analyze samples
discreetly: T2-S-1, T2-S-2, T2-N-1, T2-N-2
Hold samples for composite analysis of PCBs (8082)
and STEL/TEL for lead for T2-S-1, T2-S-2,
T2-N-1, T2-N-2

CHAIN-OF-CUSTODY RECORD

DATE: 1/13/15
PAGE: 1 OF 1

WORK: LAB USE ONLY
15-01-0737

CLIENT PROJECT NAME / NO.: Blossom Plaza Utility Trench Sampling / WR1777/01
P.O. NO.:
LAB CONTRACT OR QUOTE NO.:
PROJECT CONTACT: WENDY KEY
GLOBAL ID:
LOG CODE:
SAMPLER(S): (PRINT) RACHEL RAIGRO

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) □ GRO	TPH (d) □ DRO	TPH □ C6-C36 □ C6-C44	TPH	BTEX / MTBE □ 8260	VOCs (8260)	Oxygenates (8260)	Prep (5035) □ En Core □ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082) [Hold for Analysis]	PAHs □ 8270 □ 8270 SIM	T22 Metals (6010/747X) □ 6020/747X	Cr(VI) □ 7196 □ 7199 □ 218.6
1	T2-S-1	1/11/15	0100	Soil	1	X			X		X			X					X	X	X	X
2	T2-S-2	1/11/15	0115	Soil	1	X			X		X			X					X	X	X	X
3	T2-N-1	1/14/15	0145	Soil	1	X			X		X			X					X	X	X	X
4	T2-N-2	1/14/15	0200	Soil	1	X			X		X			X					X	X	X	X

Received by: (Signature/Affiliation) Amy Meyer
Date: 1/14/15
Time: 05:30 AM
Received by: (Signature/Affiliation) Donny Lee
Date: 1/14/15
Time: 14:10
Received by: (Signature/Affiliation)
Date:
Time:



Calscience

WORK ORDER #: 15-01-0737

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- Sample(s) NOT RECEIVED but listed on COC
- Sample(s) received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- Improper preservative used – list test
- No preservative noted on COC or label – list test & notify lab
- Sample labels illegible – note test/container type
- Sample label(s) do not match COC – Note in comments
 - Sample ID
 - Date and/or Time Collected
 - Project Information
 - # of Container(s)
 - Analysis
- Sample container(s) compromised – Note in comments
 - Water present in sample container
 - Broken
- Sample container(s) not labeled
- Air sample container(s) compromised – Note in comments
 - Flat
 - Very low in volume
 - Leaking (Not transferred - duplicate bag submitted)
 - Leaking (transferred into Calscience Tedlar® Bag*)
 - Leaking (transferred into Client's Tedlar® Bag*)
- Other: _____

(-2) Collection time per label 0100.

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: *8/16* 01/14/15

Stephen Nowak

From: Wendy Key [WKey@Geosyntec.com]
Sent: Thursday, January 15, 2015 8:56 AM
To: Stephen Nowak
Subject: RE: Blossom Plaza Utility Trench Sampling

Hi Stephen,

Per our conversation this morning, can you please add silica gel cleanup to the TPH analyses for the Blossom Plaza Utility Trench samples that were submitted by Rachel Ragoo (Geosyntec) yesterday, January 14 2015?

Thank you!

Wendy

Wendy Key, PG, CEM
Project Geologist

3043 Gold Canal Drive, Suite 201
Rancho Cordova, California 95670
Office: 916.637.8048
Direct: 916.637.8326
Fax: 916.637.8321
Mobile: 916.833.6214
www.Geosyntec.com



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J-31 - William Mead Homes, 1300 Cardinal Street

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Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311



Edmund G. Brown Jr.
Governor

March 2, 2015

Mr. Eric Tellez
Housing Authority of the
City of Los Angeles
2600 Wilshire Boulevard, 4TH Floor
Los Angeles, California 90057

SITE CERTIFICATION, WILLIAM MEAD HOMES, 1300 CARDINAL STREET,
LOS ANGELES, CALIFORNIA

Dear Mr. Tellez:

The Department of Toxic Substances Control (DTSC) certifies implementation and completion of removal activities at the William Mead Homes site. Remediation of the site was conducted in two phases: The first phase was for property located south of Cardinal Street; and the second phase was for property north of Cardinal Street. DTSC approved the Removal Action Work Plan dated April 18, 2000 for Southern Cardinal Street and Remedial Action Plan dated March 28, 2003 for Northern portion of Cardinal Street. The major contaminants of concern were polyaromatic hydrocarbons (PAHs) and metals such as lead. Approximately 39,414 cubic yards of contaminated soil was removed and replaced with clean soil.

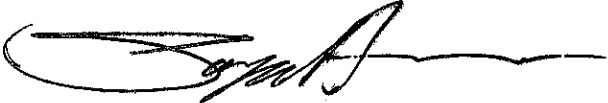
An Operation & Maintenance (O&M) Agreement was signed between the Los Angeles Housing Authority and DTSC on October 8, 2013 because certain monitoring and maintenance of the property are necessary. The O & M Agreement outlines requirements to be complied with during any activities that disturb soils at the Site. Specific restrictions apply to different areas of the property which are described in detail in the land use covenant (LUC) recorded with the Los Angeles County Assessor's Office as Document Number 20131706514 (APN 5409-0120903) dated December 3, 2013.

Please note that the LUC has requirements for submittal of Annual Inspection Reports due on August 1st of each year and a Five Year Review that is due every five years after the date of the LUC. By this letter DTSC hereby certifies that the remedial actions for the Site known as William Mead Homes have been properly implemented. As with any remediation, if previously unidentified contamination is discovered on the property, additional assessment, investigation, and/or remediation may be required.

Mr. Eric Tellez
March 2, 2015
Page 2

DTSC appreciates the cooperation and efforts that the Housing Authority of the City of Los Angeles and their consultants made in completing the Site-related remediation activities described above.

If you have any questions regarding this letter please contact me at (818) 717-6534, or William Jeffers, Project Manager at (818) 717-6586.



Sayareh Amir
Branch Chief
Brownfields and Environmental Restoration Program- Chatsworth Office

cc: Mr. Ravi Subramanian, P.E.
Project Manager
Camp Dresser & McKee Inc.
18881 Von Karman Avenue, Suite 650
Irvine, California 92612

David Reilly, R.E.A., C.E.M.
Senior Project Manager
Bureau Veritas North America, Inc.
1665 Scenic Avenue
Costa Mesa, California 92626

Andrea Kopecky
Attorney
Department of Toxic Substances Control
1001 I Street, MS-23A
Sacramento, California 95814

Soil Management, Implementation and Enforcement Plan

William Mead Homes
Playground and Other Parcels
1300 Cardinal Street
Los Angeles, California

November 16, 2012
Bureau Veritas Project Number 25012-012057.00

Prepared for
Housing Authority of the City of Los Angeles
2500 Wilshire Boulevard, 13th Floor, Suite A
Los Angeles, California, 90057




For the benefit of business and people

Bureau Veritas North America, Inc.
1565 MacArthur Boulevard
Costa Mesa, California 92626
714.431.4100
www.us.bureauveritas.com



Bureau Veritas North America, Inc. (Bureau Veritas) is submitting this Soil Management and Enforcement Plan for the William Mead Homes Playground and Other Parcels located in Los Angeles, California. Bureau Veritas accepts responsibility for the competent performance of its duties in executing the assignment and preparing this report in accordance with the normal standards of our profession.

This report prepared by: _____


Gustavo Valdivia, P.E. #C57702
Director, Health, Safety & Environmental
Southwest Regional Office



This report reviewed by: _____


David Reilly
Senior Project Manager
Southwest Regional Office

November 16, 2012
Bureau Veritas Project No. 25012-012057.00



CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 BACKGROUND	2
2.1 SUMMARY OF PREVIOUS INVESTIGATION AND REMEDIATION..2	
2.2 RESIDUAL CONTAMINATION – RESTRICTED AREAS	4
2.3 5-YEAR REVIEW	5
3.0 SOIL MANAGEMENT MEASURES	5
3.1 GENERAL WORKER HEALTH AND SAFETY PROCEDURES.....	7
3.2 DUST CONTROL	7
3.3 STORMWATER AND EROSION CONTROL	8
3.4 SOIL PILE MANAGEMENT	8
3.5 SOIL DISPOSAL.....	8
3.6 DISCOVERY OF AFFECTED SOIL AND DEBRIS DURING CONSTRUCTION	9
3.7 PROHIBITED USES.....	9
3.8 PROHIBITED ACTIVITIES	9
3.9 SITE ACCESS	10
4.0 DOCUMENTATION AND REPORTING	10
5.0 IMPLEMENTATION AND HACLA CONTACT INFORMATION	10

Figures

- 1 Site Location Map
- 2 Site Plan Showing Restricted Areas

Appendix

Legal Description of Site Location



1.0 INTRODUCTION

Bureau Veritas North America (Bureau Veritas), on behalf of the Housing Authority of the City of Los Angeles (HACLA) and the Department of Toxic Substances Control (DTSC) prepared this Soil Management, Implementation and Enforcement Plan (SMIEP) for the William Mead Homes Playground and Other Parcels (Site), located at 1300 Cardinal Street, City of Los Angeles, County of Los Angeles, California (Figure 1). This SMIEP will be referred to in the Covenant to Restrict Use of Property - Environmental Restriction (hereinafter referred to as Land Use Covenant) between the HACLA and the DTSC. The Land Use Covenant prohibits, among other restrictions, certain land uses at the Site. The SMIEP is intended to supplement the Land Use Covenant by providing instructions for the safe handling and disposal of known and potentially impacted soils currently remaining at the Site, and describing measures necessary to implement and enforce this SMIEP.

The areas subject to the requirements of the SMIEP are referred to as the "Restricted Areas" and are generally limited to soils in the areas shown on Figure 2. The Los Angeles County Assessor's Parcel Numbers for the property are 5409-011-900 (Lots 1 and 2), 5409-011-901 (Lot 3), 5409-012-902 (Lots 4 and 6) and 5409-012-903 (Lot 5). Parcel 5409-011-900 (Lots 1 and 2) is approximately 2 acres in size while Parcel 5409-011-901 (Lot 3) is 2.49 acres in size. The size of Parcel 5409-012-902 (Lots 4 and 6) is approximately 7 acres and Parcel 5409-012-903 (Lot 5) is 6.91 acres. Legal descriptions and survey plats of all the parcels that comprise the Site are included in the attached Appendix.

This SMIEP provides a framework to manage residual concentrations of chemicals in soil remaining within the Restricted Areas in a manner that is: (1) consistent with the human health risk assessment; and (2) consistent with DTSC requirements for the Site. The SMIEP contains a description of the site background, a summary of environmental investigations and remedial activities, a description of the soil management measures that make up the SMIEP, and methods to implement and enforce this SMIEP.

Protocols specified in this SMIEP are based on a current understanding of environmental conditions at the Site. If environmental conditions are found to differ from those described herein, then the management protocols may have to be modified to accommodate those differing conditions. If differing environmental conditions are encountered, DTSC and other involved agencies should be notified and appropriate adjustments to the protocols specified herein would then be made. The SMIEP applies to anyone who may conduct activities that are otherwise restricted and/or prohibited. Such person(s) shall be required to comply with the SMIEP when performing work.



2.0 **BACKGROUND**

The Site is located at 1300 Cardinal Street in the City of Los Angeles, County of Los Angeles, California (Figure 1). The Site is currently a multi-story, low-income residential development, and a playground with a community center. The property is generally bounded by North Main Street to the north, Leroy Street to the east, Santa Fe Railroad tracks to the south, and Elmyra Street and various industrial facilities to the west. Ann Street Elementary School is located within the north central portion of this area but is not considered part of the Site.

The Site was formerly developed as an oil refinery and petroleum products tank farm from the early 1900s to about 1920 and subsequently occupied by iron and steel companies until 1942 when all the Site areas were deeded to HACLA. The Site has been occupied by multi-residential structures since 1942. The primary chemicals associated with the Site are polynuclear aromatic hydrocarbons (PAHs) and lead.

For the purpose of Site investigation and remediation activities, the Site was divided into two areas referred to as William Mead Homes – South of Cardinal Street and William Mead Homes II – North of Cardinal Street. The Parcel associated with the portion of the Site South of Cardinal Street is Parcel 5409-012-903 (Lot 5). The Parcels associated with the portions of the Site North of Cardinal Street include Parcels 5409-011-900 (Lots 1 and 2), 5409-011-901 (Lot 3) and 5409-012-902 (Lots 4 and 6).

2.1 **SUMMARY OF PREVIOUS INVESTIGATION AND REMEDIATION**

Extensive site investigations were conducted by various consultants. A chronology of key environmental events and regulatory approvals is listed and summarized below.

- **William Mead Homes – South of Cardinal Street (Parcel 5409-012-903 [Lot 5])**
 - Dames & Moore conducted a site evaluation in November 1994 indicating that the Site was previously developed as an oil refinery from the early 1900s to about 1920 and subsequently occupied by iron and steel companies until 1942. Based on the site evaluation HACLA entered into the Voluntary Cleanup Agreement with the DTSC to perform a Preliminary Endangerment Assessment (PEA).
 - Camp Dresser & McGee (CDM) performed a PEA in January 1996. Visibly stained/discolored soil with strong odors containing PAHs, volatile organic compounds (VOCs), and metals were identified in soil at the Site. The results of the Human Health Screening Evaluation conducted as part of the PEA suggested an unacceptable human health risk may exist from direct and prolonged exposure to site soil containing seven PAHs and four metals.



- CDM conducted a Supplemental Investigation and Baseline Risk Assessment in 1996 and 1997 in accordance with a DTSC-approved Project Workplan. This phase of work identified elevated concentrations of PAHs and metals in soil throughout the Site. Potential human health risks due to exposure to carcinogenic PAHs and lead were estimated to exceed acceptable levels.
- CDM prepared a Removal Action Workplan (RAW) in 1998 and the RAW was approved by the DTSC in April 2000. The cleanup levels developed in the RAW for PAHs and lead in soil at the Site were 0.9 milligrams per kilogram (mg/kg) and 657 mg/kg, respectively. The clean-up level for lead was later reduced to 300 mg/kg. The RAW specified contaminated soil at the Site to generally be excavated to a minimum depth of 2 feet below ground surface (bgs) and a maximum depth of 5 feet bgs.
- CDM implemented the approved RAW by completing soil excavations at the Site from May 2000 through May 2001. A total of 32,191 cubic yards of soil were removed from the three Site areas. Several areas of soil containing lead and PAHs above the clean-up levels were not excavated due to various Site constraints and are discussed in Section 2.2.
- **William Mead Homes II – North of Cardinal Street (Parcels 5409-011-900/901 [Lots 1, 2 and 3] and 5409-012-902 [Lots 4 and 6])**
 - Tetra Tech Inc. (Tetra Tech) conducted site investigations in August 2000 through October 2001. Lead and PAHs were detected at concentrations exceeding the clean-up levels established for the southern area of William Mead Homes. Based on the results of the site investigation HACLA entered into a Consent Order with the DTSC to perform an additional evaluation and remedial action to address the impacted soils at the north area (William Mead Homes II).
 - CDM conducted a Supplemental Investigation and Baseline Risk Assessment in 1996 and 1997 in accordance with a DTSC-approved Project Workplan. This phase of work identified elevated concentrations of PAHs and metals in soil throughout the Site. Potential human health risks due to exposure to carcinogenic PAHs and lead were estimated to exceed acceptable levels.
 - CDM prepared a Human Health Risk Assessment as part of the Remedial Investigation/Feasibility Study (RI/FS) for the Site in 2002. Lead, tetrachloroethene (PCE), and trichloroethene (TCE) were identified as chemicals of concern. The RI/FS concluded that excavation and offsite disposal of lead and PAH impacted soil was the preferred remedial action alternative.
 - CDM prepared a Removal Action Plan (RAP) in June 2002 and the RAP was approved by the DTSC in March 2003. The cleanup levels approved in the RAP for PAHs and lead in soil at the Site were 0.9 mg/kg and 300 mg/kg,



respectively. The RAP specified contaminated soil at the Site to generally be excavated to a minimum depth of 2 feet bgs and a maximum depth of 5 feet bgs.

- CDM implemented the approved RAP by completing soil excavations at the Site from August 2004 through June 2005. A total of 7,223 cubic yards of soil were removed from the Site. Several areas of soil containing lead and PAHs above the clean-up levels were not excavated due to various Site constraints and are discussed in Section 2.2.

2.2 RESIDUAL CONTAMINATION – RESTRICTED AREAS

Areas containing lead and PAHs at concentrations above clean-up levels that were excavated during the remedial actions performed at the Property are considered Restricted Areas as shown in Exhibits D and E and further described as the Restricted Areas.

Soil excavation was conducted in accordance with the approved RAW and the approved RAP, which required that contaminated soil at the Site be excavated to a minimum depth of 2 feet bgs and a maximum depth of 5 feet bgs.

Soil excavation in the upper 5 feet of the site with known lead and PAHs contamination was continued vertically until lead and PAHs in the confirmatory samples were below the clean-up levels, except in the areas listed below. The lateral extent of the excavation was either dictated by the achievement of clean-up levels and/or presence of buildings or other structures; hardscape areas, including concrete and pavement; certain trees and power poles; and Property boundaries; which all prevented further excavation or otherwise did not require additional excavation. Based on the characteristics above, specific restricted areas are listed below and shall be defined as Restricted Areas:

- Entire Property below 4 feet 6 inches bgs to allow for a 6-inch buffer zone to ensure contaminated soil is not contacted.
- Areas beneath existing buildings; all hardscapes, including porches, concrete walkways and surfaces, and asphalt paved areas, including parking areas and streets.
- Entire Property within 5 feet of site buildings where excavation only extended to 2 feet bgs.
- Three-foot buffer zone along the Property western boundary from Bolero Lane to Cardinal Street and the entire width of the western alleyway between the Community Center and adjacent building on the former Witco facility (GPS coordinates identified in Exhibit B of the O&M Plan and Figure 2).
- Six-foot diameter circular areas around the large trees left in place (GPS coordinates identified in Exhibit B of the O&M Plan and Figure 2).
- Area beneath the Head Start Pre-School Playground, which was capped with resilient play surface (GPS coordinates identified in Exhibit B of the O&M Plan and Figure 2).



All areas identified above are considered Restricted Areas and are identified in Section 4.02 and Exhibits D and E of the LUC and on Figure 2. The requirement for DTSC notification prior to excavation is only for these areas and is described in Section 4.02 of the LUC.

The SMIEP was prepared and is intended to identify standard safety precautions that should be followed for handling soils located within the Restricted Areas.

2.3 5-YEAR REVIEW

A 5-year review shall be conducted every 5 years to ensure the protectiveness of the remedy. The 5-year review report shall be prepared in accordance with the requirements of US EPA's guidance document entitled "Comprehensive Five-Year Review Guidance" (EPA 540-R-01-007, June 2001).

3.0 SOIL MANAGEMENT MEASURES

The following sections of this SMIEP describe the soil management measures that should be implemented if and when soils within the Restricted Areas identified in Section 2.2 and shown on Figure 2 are disturbed. HACLA should be contacted prior to the start of work.

No activities that will disturb soils in the restricted areas shall be conducted without the prior written approval of DTSC. In the event of emergency or exigent circumstances, notice may be provided to DTSC within seven (7) days after such necessary action is taken. All contaminated soils brought to the surface by grading, excavation, trenching, or any other activity shall be managed in accordance with all applicable provisions of local, state or federal law.

Soil management measures and reporting guidelines outlined in this document shall be conducted under the direction of HACLA. Prior to any activities that may result in the exposure or disturbance of soils in Restricted Areas; the following designated HACLA representative shall be contacted:

- Eric Tellez
213.252.4920

The designated HACLA representative will then direct the soil management measures and reporting events outlined in this document. Under no circumstances shall any soils in the Restricted Areas be disturbed without prior notification of HACLA.



HACLA shall provide DTSC written notice of any activities that HACLA knows about or has been given notice of pursuant to Section 4.02 of the LUC (building, filling, grading, mining or excavating) that may result in exposure to soils in Restricted Areas. Such activities shall not be permitted without prior notification to DTSC as described in the LUC.

All uses and development of the Restricted Areas shall preserve the integrity of all hardscape areas including the existing building foundations. All hardscape areas including building foundations (Restricted Areas) shall not be altered without prior notification and approval of DTSC. HACLA shall notify DTSC of the following:

- The type, cause, location and date of any damage to all hardscapes, including porches, concrete walkways and surfaces, and asphalt paved areas including parking areas and street.
- The type and date of repair of such damage.

Notification to DTSC shall be made within 2 working days of both the discovery of any such disturbance and completion of any repairs. Timely and accurate notification by HACLA or any owner or occupant shall satisfy this requirement on behalf of all other owners and occupants.

If soil within the Restricted Areas shown on Figure 2 is to be disturbed, HACLA should be notified prior to the start of work. HACLA will be responsible to ensure that the handling and final disposition of the soil occurs in a manner that is protective of human health and the environment, in compliance with applicable hazardous waste laws and regulations, and in accordance with the procedures set forth in this SMIEP. Potential exposures to soil should be minimized by implementing soil management controls that restrict access to, and contact with potentially impacted soil remaining in the Restricted Areas. General soil management controls to be implemented by HACLA at the Site should include the following actions:

- General Worker Health and Safety Procedures
- Dust Control
- Management of Soil Stockpiles
- Traffic Control
- Stormwater Erosion Control using Best Management Practices (BMPs)
- Soil Disposal Protocols
- Protocols Governing the Discovery of Unknowns

These actions are discussed in detail in the following sections.



3.1 GENERAL WORKER HEALTH AND SAFETY PROCEDURES

During intrusive activities within the Restricted Areas shown on Figure 2, workers should use basic health and safety precautions when handling or disturbing soil. Workers should be Hazardous Waste Operations and Emergency Response (HAZWOPER) certified with current training that meets the requirements of 29 CFR 1910.120 and 8 CCR 5192.

Precautions should include:

- Wear gloves when handling soil.
- Wash face and hands before eating, drinking, or smoking after conducting subsurface intrusive work.
- Make sure equipment that may have come into contact with potentially impacted soil within the Restricted Areas has been decontaminated.

Workers will conduct all activities in accordance with California Occupational Safety and Health Administration (Cal/OSHA) applicable rules and regulations

3.2 DUST CONTROL

During activities which could result in the exposure of soils located in Restricted Areas, measures should be implemented to prevent the generation of dust. Soils within the Restricted Areas could become exposed during activities such as building demolition/renovation, or during the repair of subsurface utilities. The recommended dust control measures described below generally correspond to the PM₁₀ control measures recommended by the South Coast Air Quality Management District (SCAQMD) in their California Environmental Quality Act Guidelines. Relevant dust control measures to be implemented consist of the following:

- Exposed soils shall be lightly sprayed with water to minimize the generation of dust. Spraying should occur as necessary to prevent dust particles from becoming airborne and migrating outside of the Site's limits.
- In general, exposed soil stockpiles should be covered with heavy plastic and secured or containerized in drums or bins. Placement and temporary storage and/or transportation of soils should be conducted in strict accordance with all applicable protocols and regulations.
- Exposed soil surfaces should be covered with heavy secured plastic or paved over. Access to such exposed areas by pedestrian or vehicular traffic should be prohibited until such time that permanent covers (i.e., new paving) are in place.



3.3 STORMWATER AND EROSION CONTROL

Stormwater pollution controls should be implemented to minimize offsite sediment transport during storm events. As appropriate, an Erosion Control Plan should be developed by the contractor or authorized agent prior to initiating construction activities at the Site that details procedures for minimizing erosion. The Erosion Control Plan should be based on appropriate best management practices (BMPs), such as silt traps and fiber rolls to prevent sediment-laden water runoff during construction, berms to control site runoff, and covering soil piles during rain events to minimize erosion potential. Site-specific BMPs should be described in the Erosion Control Plan and must be approved by HACLA.

3.4 SOIL PILE MANAGEMENT

Temporary piling of soil from within the Restricted Areas may be necessary during building renovation, demolition, or certain subsurface repair activities at the Site. Soil located in Restricted Areas may have residual concentrations of chemicals and should be handled appropriately. Soil from Restricted Areas that is piled at the Site should be placed on plastic sheeting or other impervious material and lightly sprayed with water as needed to minimize dust, as described in Section 3.2. The soil piles should be covered with plastic sheeting when not being used. Soil piles should be surrounded by fiber rolls and/or silt traps to minimize sediment runoff during times of precipitation and/or during rain events.

3.5 SOIL DISPOSAL

Soil from Restricted Areas that is disturbed during the course of Site activities shall be considered and managed as hazardous waste, unless determined otherwise by analysis and profiling. Soil currently located in Restricted Areas that becomes exposed from any activity should be segregated, placed on plastic sheeting or other impervious material, and stored apart from other site activities. These soil piles should be managed as outlined in Section 3.4 and Section 3.5. Soils excavated from Restricted Areas should not be reused onsite and should not be removed from the Site until it has been sampled and tested for the presence of hazardous materials according to the profiling requirements of the facility where the soil will be disposed.

Soil sampling and analysis should be conducted under the direction of HACLA and in accordance with DTSC written approval. HACLA should make the determination for appropriate soil disposal options. Initial field screening using a photoionization detector or flame-ionization detector should be conducted to assess if VOCs are present in the soil. Analytical tests for soil samples may include, but not be limited to, one or more of the following EPA Methods:

- EPA Method 8015 for total petroleum hydrocarbons
- EPA Methods 5035 and 8260B for VOCs
- EPA Methods 6010/7000 for metals
- EPA Method 8270C for PAHs



The DTSC shall be notified in writing at least 5 days prior to offsite shipment of any soil excavated from Restricted Areas of the Site. Soil analytical data shall be provided to the DTSC with each written notification.

3.6 DISCOVERY OF AFFECTED SOIL AND DEBRIS DURING CONSTRUCTION

It is possible, during the disturbance of soil in the Restricted Areas, that chemicals, affected soil, and debris could be unexpectedly encountered. The contractor is required to immediately notify HACLA when objects such as those listed below are encountered during excavation:

- Drums
- Chemical-appearing substances
- Unusual colored soil or odors
- Other debris

Upon being notified of the finding of any of the above-listed items, HACLA will notify the DTSC project manager of any new findings (previously unknown) at the Site. All excavation and construction-related activities should be stopped immediately and the area should be covered with plastic sheeting and access restricted until an evaluation of site conditions can be made by HACLA and/or their qualified environmental professional. No further work should be conducted without written approval from the HACLA and DTSC project managers.

3.7 PROHIBITED USES

The Restricted Areas shall not be used for any of the following purposes:

- New residential use, including any mobile home or factory built housing constructed or installed for use as residential human habitation.
- A hospital for humans.
- A public or private school for persons under 21 years of age.
- A daycare center for children.
- A convalescent home.

3.8 PROHIBITED ACTIVITIES

No activities that will disturb the soil at or below the Restricted Areas shall be allowed without following this SMIEP and a Health and Safety Plan and DTSC written approval. Activities that may disturb the Restricted Areas (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining) shall not be permitted without prior review and approval by HACLA and the DTSC.



3.9 SITE ACCESS

DTSC shall have reasonable right of entry and access to the Site including Restricted Areas for inspection, monitoring, and other activities deemed necessary in order to protect public health or safety, or the environment. Access to the Site, including Restricted Areas, will be provided by the Owner at all reasonable times to employees, contractors and consultants of DTSC. DTSC must notify HACLA prior to entering the Site.

Similarly, HACLA shall have reasonable right of entry and access to the site including Restricted Areas for inspection, monitoring, and other activities deemed necessary in order to protect public health or safety, or the environment. Access to the Site, including Restricted Areas, will be provided by the Owner at all reasonable times to employees, contractors and consultants of HACLA.

4.0 DOCUMENTATION AND REPORTING

Following the conclusion of any activities that result in the disturbance and/or contact with soils located in the Restricted Areas, a report will be prepared by HACLA and submitted to DTSC that describes the activities conducted, the soil removed, and the residual environmental conditions that remain in the Restricted Areas, if any. The report will provide an update to Figure 2 presented in this SMIEP identifying the areas of the Site that still may contain soils that require appropriate management and are still subject to this SMIEP. The revised figure will then be submitted to DTSC and HACLA to be incorporated as an addendum to this SMIEP. All the above activities shall only be conducted with the prior approval of DTSC. All submittals and notifications shall be sent to:

- Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311
Attention: Allan Plaza, Unit Supervisor

5.0 IMPLEMENTATION AND HACLA CONTACT INFORMATION

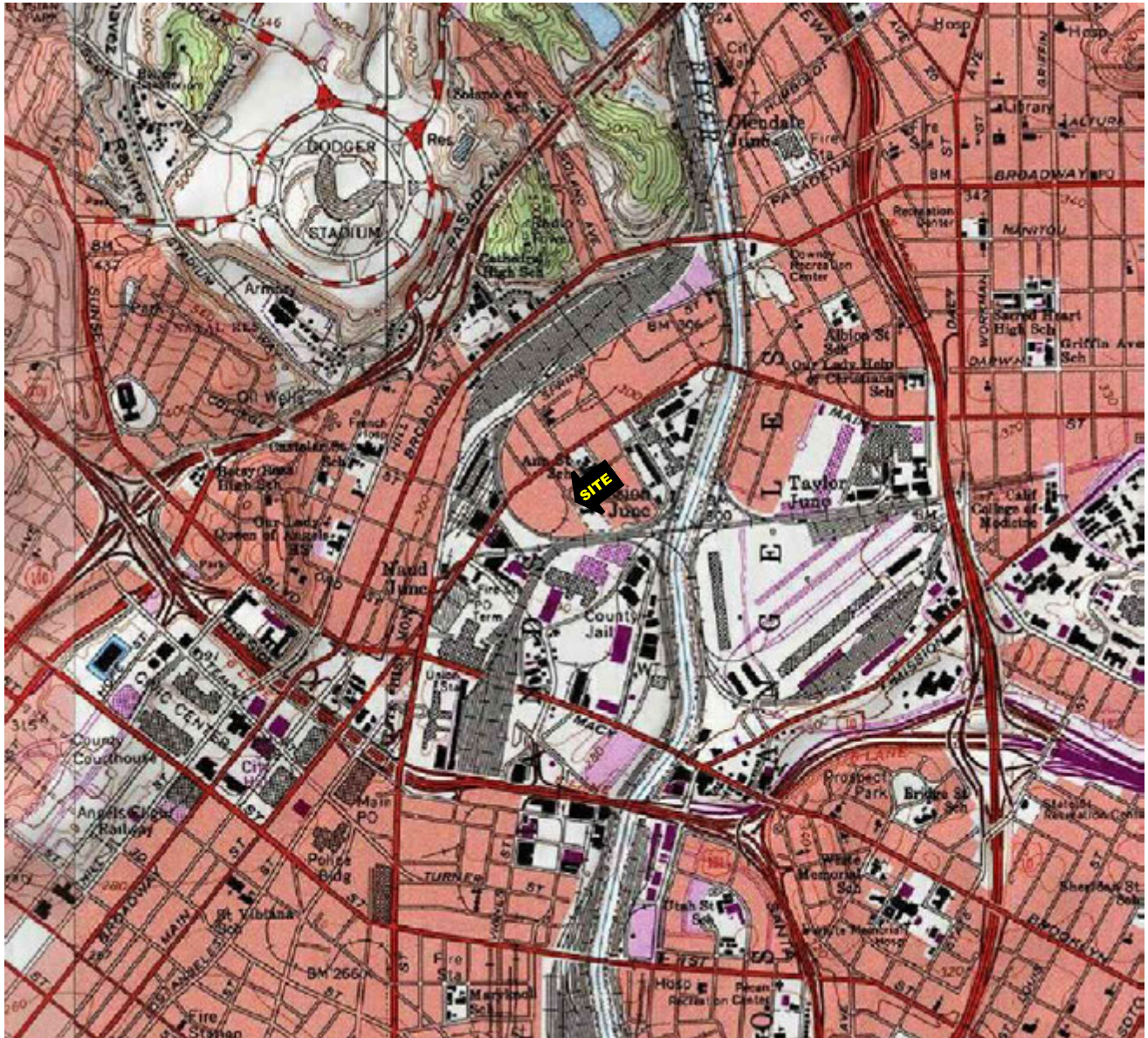
Any questions regarding the implementation of this SMIEP should be directed to HACLA at the address and telephone number listed below:

- Eric Tellez
2600 Wilshire Boulevard, 4th Floor
Los Angeles, California 90057
213.252.4920

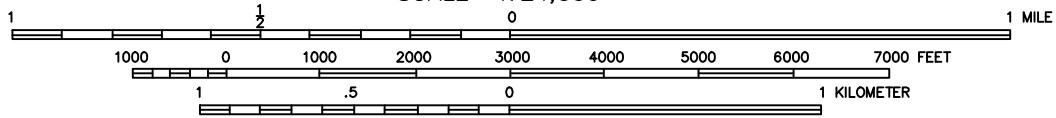
In the event that there is a change in the HACLA contact, HACLA shall notify DTSC and the current owner. The new contact information will be incorporated into the SMIEP as an addendum.



FIGURES



SCALE 1:24,000



Portion of 7.5-minute Series (Topographic) Map
 United States Department of the Interior
 Geological Survey
 Los Angeles, California Quadrangle 1994



QUADRANGLE LOCATION

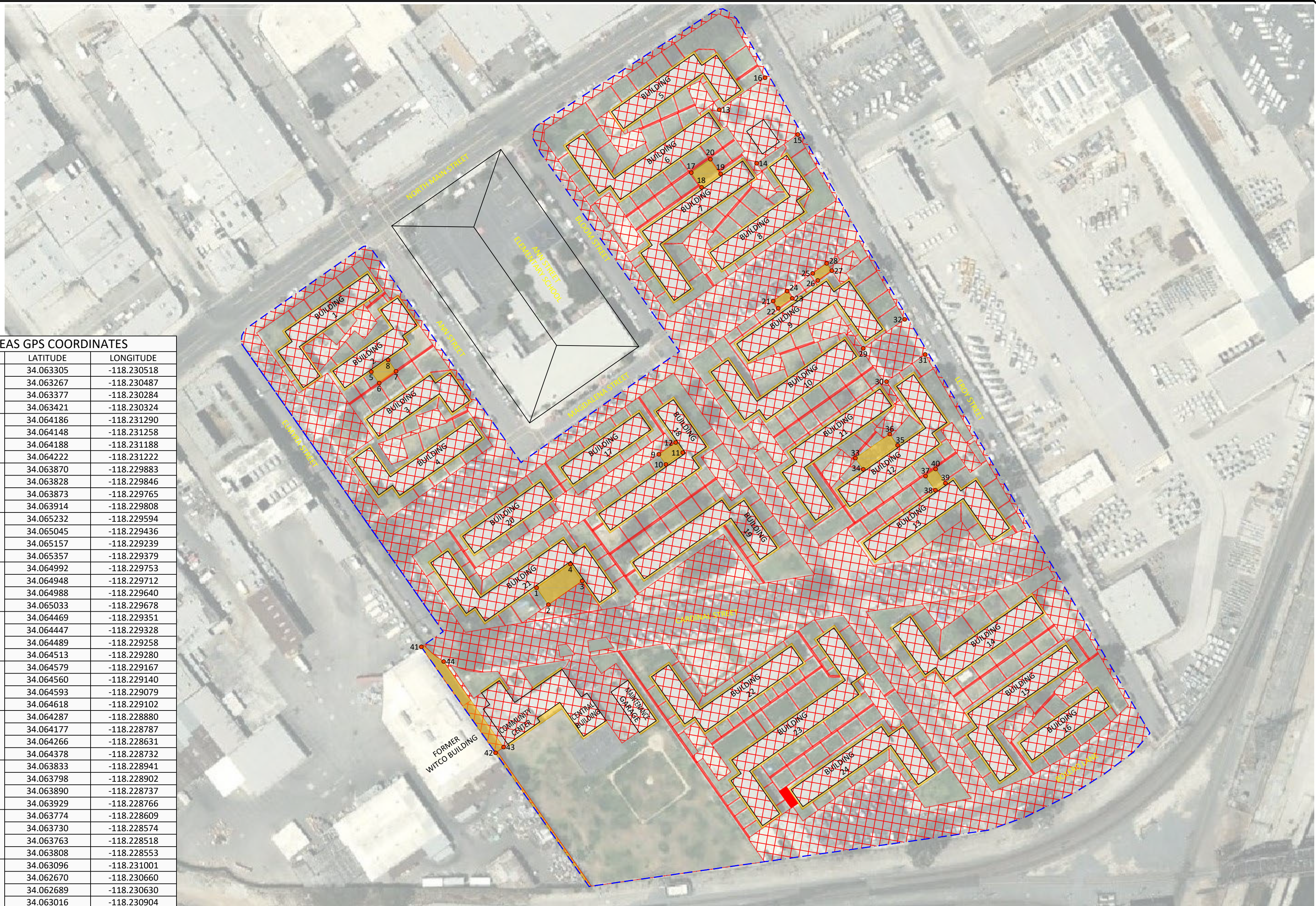
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	Bureau Veritas North America, Inc. <i>Health, Safety, and Environmental Services</i> 1565 MacArthur Boulevard Costa Mesa, CA 92626
	Main: (714) 431-4100 Fax: (714) 825-0685 www.us.bureauveritas.com
	BUREAU VERITAS

DATE:	08/17/12
DRAWN BY:	BJH
CHECKED BY:	DJR
PROJECT NO.:	25012-012057.00
CAD NO.:	01205700-01

SITE LOCATION MAP
HACLA/WILLIAM MEAD HOMES LOS ANGELES, CALIFORNIA

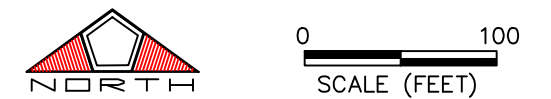
FIGURE
1



RESTRICTED AREAS GPS COORDINATES			
POINT NUMBER	FEATURE	LATITUDE	LONGITUDE
1		34.063305	-118.230518
2	TREE	34.063267	-118.230487
3		34.063377	-118.230284
4		34.063421	-118.230324
5	TREE	34.064186	-118.231290
6		34.064148	-118.231258
7		34.064188	-118.231188
8		34.064222	-118.231222
9		34.063870	-118.229883
10	TREE	34.063828	-118.229846
11		34.063873	-118.229765
12		34.063914	-118.229808
13		34.065232	-118.229594
14	HEADSTART SCHOOL	34.065045	-118.229436
15		34.065157	-118.229239
16		34.065357	-118.229379
17		34.064992	-118.229753
18	TREE	34.064948	-118.229712
19		34.064988	-118.229640
20		34.065033	-118.229678
21		34.064469	-118.229351
22	TREE	34.064447	-118.229328
23		34.064489	-118.229258
24		34.064513	-118.229280
25		34.064579	-118.229167
26	TREE	34.064560	-118.229140
27		34.064593	-118.229079
28		34.064618	-118.229102
29		34.064287	-118.228880
30	PLAYGROUND	34.064177	-118.228787
31		34.064266	-118.228631
32		34.064378	-118.228732
33		34.063833	-118.228941
34	TREE	34.063798	-118.228902
35		34.063890	-118.228737
36		34.063929	-118.228766
37		34.063774	-118.228609
38	TREE	34.063730	-118.228574
39		34.063763	-118.228518
40		34.063808	-118.228553
41	WESTERN ALLEYWAY	34.063096	-118.231001
42		34.062670	-118.230660
43		34.062689	-118.230630
44		34.063016	-118.230904

NOTE: ENTIRE PROPERTY BELOW 4.5 FEET IS A RESTRICTED AREA. SOIL BELOW ALL BUILDINGS, PORCHES, CONCRETE WALKWAYS, AND STREETS ARE RESTRICTED AREAS.

- LEGEND**
- APPROXIMATE PROPERTY BOUNDARY
 - RESTRICTED AREAS
 - RESTRICTED AREAS
 - RESTRICTED AREAS
 - RESTRICTED AREAS GPS POINT (SEE DESCRIPTION ON TABLE ABOVE)



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<p>Bureau Veritas North America, Inc. Health, Safety, and Environmental Services 1565 MacArthur Boulevard Costa Mesa, CA 92626</p> <p>Main: (714) 431-4100 Fax: (714) 825-0685 www.us.bureauveritas.com</p>	DATE:	06/06/12	<p>RESTRICTED AREAS PARCELS 5409-011-900 AND 5409-011-901 (LOTS 1, 2, & 3) PARCEL 5409-012-902 (LOTS 4 & 6) PARCEL 5409-012-903 (LOT 5)</p> <p>HACLA/WILLIAM MEAD HOMES LOS ANGELES, CALIFORNIA</p>	<p>FIGURE 2</p>
	DRAWN BY:	BJH		
	CHECKED BY:	ES		
	PROJECT NO.:	25012-012057.00		
	CAD NO:	00800200-10		



APPENDIX

LEGAL DESCRIPTION OF SITE LOCATION

Schedule A and Exhibit A from Title Report

Tract 12992

Parcels 5409-011-900 (Lots 1 and 2)

Parcel 5409-011-901 (Lot 3)

Parcel 5409-012-902 (Lots 4 and 6)

Parcel 5409-012-903 (Lot 5)

SCHEDULE A

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

A FEE

2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

HOUSING AUTHORITY OF THE CITY OF LOS ANGELES, CALIFORNIA, A PUBLIC BODY, CORPORATE AND POLITIC

3. THE LAND REFERRED TO IN THIS REPORT IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF **LOS ANGELES** AND IS DESCRIBED AS FOLLOWS:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

ORDER NO 20600531-9

EXHIBIT "A"

LOTS 1, 2, 3, 4 AND 5 OF TRACT NO. 12992, IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 309 PAGE (S) 17-18 OF OFFICIAL RECORDS OF SAID COUNTY.