NORTH COAST LABORATORIES LTD.

December 20, 2012

City of Eureka
4301 Hilfiker Lane
Eureka, CA 95503

Attn: Water Quality Lab

RE:

Order No.: 1212010
Invoice No.: 106944
PO No.: 113234
ELAP No.1247-Expires July 2014

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01D	Dewatered Biosolid Comp

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

Flag = Explanation in Case Narrative

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

5680 West End Road • Arcata California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Printed on Recycled Paper

B6: The sample was diluted due to the sample matrix.

G1: The sample does not present a peak pattern consistent with that of gasoline. The reported result represents the amount of material in the gasoline range.

EPA 8081A:
The laboratory control sample (LCS) recoveries were below the lower acceptance limits for many analytes and surrogate compounds. The laboratory control sample duplicate recoveries were below the lower acceptance limit for endosulfan I, dieldrin, and 4,4'-DDE. The response of the reporting limit standard was such that the analytes would have been detected even with the low recoveries; therefore, the data were accepted.

EPA 8260:
The bromomethane, chloroethane, and trichlorofluoromethane recoveries for the matrix spike (MS) were below the lower acceptance limit. The recoveries were not significantly outside the acceptance limit therefore the data were approved.

The recoveries of the surrogate compounds dibromofluoromethane and toluene-d8 were above the upper acceptance limit in the laboratory control sample (LCS). The data were approved based on the acceptable recovery of the target analytes in the LCS.

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Printed on Recycled Paper

Date: 20-Dec-2012
WorkOrder: 1212010

ANALYTICAL REPORT

Client Sample ID: Dewatered Biosolid Comp
Lab ID: 1212010-01D

Received: 11/30/2012
Collected: 11/29/2012 13:10

Test Name: EPA 8260B

Reference: EPA 5035/EPA 8260B

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Dichlorodifluoromethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Chloromethane	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
Vinyl chloride	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Bromomethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Chloroethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Trichlorofluoromethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,1-Dichloroethene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Methylene chloride	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
trans-1,2-Dichloroethene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Methyl tert-butyl ether (MTBE)	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Tert-butyl alcohol (TBA)	ND	B6	3.1	mg/kg-dry	2.0	12/4/2012	12/11/2012
Di-isopropyl ether (DIPE)	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,1-Dichloroethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Ethyl tert-butyl ether (ETBE)	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
cis-1,2-Dichloroethene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
2,2-Dichloropropane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Bromochloromethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Chloroform	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Carbon Tetrachloride	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,1,1-Trichloroethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,1-Dichloropropene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Benzene	ND	B6	0.038	mg/kg-dry	2.0	12/4/2012	12/11/2012
Tert-amyl methyl ether (TAME)	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2-Dichloroethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Trichloroethene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Dibromomethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2-Dichloropropane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Bromodichloromethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
cis-1,3-Dichloropropene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Toluene	ND	B6	0.038	mg/kg-dry	2.0	12/4/2012	12/11/2012
Tetrachloroethene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
trans-1,3-Dichloropropene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,1,2-Trichloroethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Dibromochloromethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,3-Dichloropropane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2-Dibromoethane (EDB)	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
Chlorobenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Ethylbenzene	ND	B6	0.038	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,1,1,2-Tetrachloroethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
m,p-Xylene	ND	B6	0.038	mg/kg-dry	2.0	12/4/2012	12/11/2012

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Printed on Recycled Paper

Date: 20-Dec-2012
WorkOrder: 1212010

ANALYTICAL REPORT

Client Sample ID: Dewatered Biosolid Comp
Lab ID: 1212010-01D

Received: 11/30/2012
Collected: 11/29/2012 13:10

o-Xylene	ND	B6	0.038	mg/kg-dry	2.0	12/4/2012	12/11/2012
Bromoform	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Styrene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Isopropylbenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
Bromobenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
n-Propylbenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,1,2,2-Tetrachloroethane	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
2-Chlorotoluene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
4-Chlorotoluene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2,3-Trichloropropane	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,3,5-Trimethylbenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
tert-Butylbenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2,4-Trimethylbenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
sec-Butylbenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
4-Isopropyltoluene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,3-Dichlorobenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,4-Dichlorobenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
n-Butylbenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2-Dichlorobenzene	ND	B6	0.15	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2-Dibromo-3-chloropropane (DBCP)	ND	B6	0.77	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2,4-Trichlorobenzene	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
Hexachlorobutadiene	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
Naphthalene	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
1,2,3-Trichlorobenzene	ND	B6	0.31	mg/kg-dry	2.0	12/4/2012	12/11/2012
Surrogate: 1,2-Dichloroethane-d4	86.4		78.6-120	% Rec	2.0	12/4/2012	12/11/2012
Surrogate: Dibromofluoromethane	99.1		83.8-121	% Rec	2.0	12/4/2012	12/11/2012
Surrogate: Toluene-d8	97.4		85.3-115	% Rec	2.0	12/4/2012	12/11/2012

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Printed on Recycled Paper

Date: 20-Dec-2012
WorkOrder: 1212010

ANALYTICAL REPORT

Client Sample ID: Dewatered Biosolid Comp
Lab ID: 1212010-01D

Received: 11/30/2012
Collected: 11/29/2012 13:10

Test Name: Organochlorine Pesticides **Reference:** EPA 8081A

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
alpha-BHC	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
beta-BHC	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Lindane	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
delta-BHC	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Heptachlor	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Aldrin	ND	B6	1.5	mg/kg-dry	10	12/6/2012	12/12/2012
Heptachlor Epoxide	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Endosulfan I	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Dieldrin	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
4,4'-DDE	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Endrin	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Endosulfan II	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
4,4'-DDD	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Endrin Aldehyde	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Endosulfan sulfate	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
4,4'-DDT	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Methoxychlor	ND	B6	0.77	mg/kg-dry	10	12/6/2012	12/12/2012
Chlordane	ND	B6	38	mg/kg-dry	10	12/6/2012	12/12/2012
Toxaphene	ND	B6	38	mg/kg-dry	10	12/6/2012	12/12/2012
Surrogate: DCB	121		70-130	% Rec	10	12/6/2012	12/12/2012
Surrogate: TCMX	119		70-130	% Rec	10	12/6/2012	12/12/2012

Test Name: Percent Moisture **Reference:** Std. Meth. 20th Ed. 2540G Modified

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Percent Moisture	74		0.10	wt%	1.0		12/12/2012

Test Name: pH **Reference:** EPA 9045D

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
pH	6.2		N/A	pH Units	1.0	12/12/2012	12/12/2012

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	***3.6***	G1	2.0	mg/kg	2.0	12/4/2012	12/10/2012

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Printed on Recycled Paper

North Coast Laboratories, Ltd.

Date: 12/20/2012

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-28427** Batch ID: **28427** Test Code: **8081S** Units: **mg/kg** Analysis Date **12/12/2012 9:10:33 AM** Prep Date: **12/6/2012**

Client ID: Run ID: **ORGC15_121212A** SeqNo: **1059373**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
alpha-BHC	ND	0.020									
beta-BHC	ND	0.020									
Lindane	ND	0.020									
delta-BHC	ND	0.020									
Heptachlor	ND	0.020									
Aldrin	ND	0.020									
Heptachlor Epoxide	ND	0.020									
Endosulfan I	ND	0.020									
Dieldrin	ND	0.020									
4,4'-DDE	ND	0.020									
Endrin	ND	0.020									
Endosulfan II	ND	0.020									
4,4'-DDD	ND	0.020									
Endrin Aldehyde	ND	0.020									
Endosulfan sulfate	ND	0.020									
4,4'-DDT	ND	0.020									
Methoxychlor	ND	0.020									
Chlordane	ND	1.0									
Toxaphene	ND	1.0									
Surrogate: DCB	0.0854	0.010	0.100	0	85.4%	70	130	0			
Surrogate: TCMX	0.0858	0.010	0.100	0	85.8%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

ED_006495_00000841-00006

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-28420** Batch ID: **28420** Test Code: **8260S** Units: **mg/kg** Analysis Date **12/11/2012 8:40:00 PM** Prep Date: **12/4/2012**
Client ID: Run ID: **ORGCMS2_121211A** SeqNo: **1059148**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	0.020									
Chloromethane	ND	0.040									
Vinyl chloride	ND	0.020									
Bromomethane	ND	0.020									
Chloroethane	ND	0.020									
Trichlorofluoromethane	ND	0.020									
1,1-Dichloroethene	ND	0.020									
Methylene chloride	ND	0.040									
trans-1,2-Dichloroethene	ND	0.020									
Methyl tert-butyl ether (MTBE)	ND	0.020									
Tert-butyl alcohol (TBA)	ND	0.40									
Di-isopropyl ether (DIPE)	ND	0.020									
1,1-Dichloroethane	ND	0.020									
Ethyl tert-butyl ether (ETBE)	ND	0.020									
cis-1,2-Dichloroethene	ND	0.020									
2,2-Dichloropropane	ND	0.020									
Bromochloromethane	ND	0.020									
Chloroform	ND	0.020									
Carbon Tetrachloride	ND	0.020									
1,1,1-Trichloroethane	ND	0.020									
1,1-Dichloropropene	ND	0.020									
Benzene	ND	0.0050									
Tert-amyl methyl ether (TAME)	ND	0.020									
1,2-Dichloroethane	ND	0.020									
Trichloroethene	ND	0.020									
Dibromomethane	ND	0.020									
1,2-Dichloropropane	ND	0.020									
Bromodichloromethane	ND	0.020									
cis-1,3-Dichloropropene	ND	0.020									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00007

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Method Blank

Toluene	ND	0.0050
Tetrachloroethene	ND	0.020
trans-1,3-Dichloropropene	ND	0.020
1,1,2-Trichloroethane	ND	0.020
Dibromochloromethane	ND	0.020
1,3-Dichloropropane	ND	0.020
1,2-Dibromoethane (EDB)	ND	0.040
Chlorobenzene	ND	0.020
Ethylbenzene	ND	0.0050
1,1,1,2-Tetrachloroethane	ND	0.020
m,p-Xylene	ND	0.010
o-Xylene	ND	0.0050
Bromoform	ND	0.020
Styrene	ND	0.020
Isopropylbenzene	ND	0.020
Bromobenzene	ND	0.020
n-Propylbenzene	ND	0.020
1,1,2,2-Tetrachloroethane	ND	0.020
2-Chlorotoluene	ND	0.020
4-Chlorotoluene	ND	0.020
1,2,3-Trichloropropane	ND	0.040
1,3,5-Trimethylbenzene	ND	0.020
tert-Butylbenzene	ND	0.020
1,2,4-Trimethylbenzene	ND	0.020
sec-Butylbenzene	ND	0.020
4-Isopropyltoluene	ND	0.020
1,3-Dichlorobenzene	ND	0.020
1,4-Dichlorobenzene	ND	0.020
n-Butylbenzene	ND	0.020
1,2-Dichlorobenzene	ND	0.020
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.10
1,2,4-Trichlorobenzene	ND	0.040
Hexachlorobutadiene	ND	0.040
Naphthalene	ND	0.040

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00008

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Method Blank

1,2,3-Trichlorobenzene	ND	0.040						
Surrogate: 1,2-Dichloroethane-d4	95.0	0.0020	100	0	95.0%	45	146	0
Surrogate: Dibromofluoromethane	109	0.0020	100	0	109%	62	123	0
Surrogate: Toluene-d8	106	0.0020	100	0	105%	91	108	0

Sample ID: **MB-28420** Batch ID: **28420** Test Code: **GASS-MS** Units: **mg/kg** Analysis Date **12/10/2012 5:14:00 PM** Prep Date: **12/4/2012**

Client ID: Run ID: **ORGCMS2_121210A** SeqNo: **1058491**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	ND	1.0									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00009

North Coast Laboratories, Ltd.

Date: 12/20/2012

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **1212010-01DMS** Batch ID: **28420** Test Code: **8260S** Units: **mg/kg-dry** Analysis Date **12/11/2012 7:44:00 PM** Prep Date: **12/4/2012**

Client ID: **Dewatered Biosolid Comp** Run ID: **ORGCMS2_121211A** SeqNo: **1059147**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	1.600	0.15	3.08	0	52.0%	14	149	0			
Chloromethane	1.909	0.31	3.08	0	62.0%	40	145	0			
Vinyl chloride	1.790	0.15	3.08	0	58.2%	54	153	0			
Bromomethane	2.175	0.15	3.08	0	70.7%	74	160	0			S
Chloroethane	1.958	0.15	3.08	0	63.6%	65	138	0			S
Trichlorofluoromethane	2.079	0.15	3.08	0	67.6%	73	151	0			S
1,1-Dichloroethene	2.339	0.15	3.08	0	76.0%	45	154	0			
Methylene chloride	2.342	0.31	3.08	0	76.1%	26	175	0			
trans-1,2-Dichloroethene	2.526	0.15	3.08	0	82.1%	40	156	0			
Methyl tert-butyl ether (MTBE)	2.528	0.15	3.08	0	82.2%	42	135	0			
Tert-butyl alcohol (TBA)	76.41	3.1	61.5	0	124%	49	185	0			
Di-isopropyl ether (DIPE)	2.588	0.15	3.08	0	84.1%	36	159	0			
1,1-Dichloroethane	2.298	0.15	3.08	0	74.7%	35	164	0			
Ethyl tert-butyl ether (ETBE)	2.668	0.15	3.08	0	86.7%	54	128	0			
cis-1,2-Dichloroethene	2.599	0.15	3.08	0	84.5%	34	159	0			
2,2-Dichloropropane	2.664	0.15	3.08	0	86.6%	46	155	0			
Bromochloromethane	2.499	0.15	3.08	0	81.2%	38	154	0			
Chloroform	2.353	0.15	3.08	0	76.5%	31	160	0			
Carbon Tetrachloride	3.207	0.15	3.08	0	104%	65	162	0			
1,1,1-Trichloroethane	2.815	0.15	3.08	0	91.5%	57	148	0			
1,1-Dichloropropene	2.616	0.15	3.08	0	85.0%	61	146	0			
Benzene	2.382	0.038	3.08	0.0150	76.9%	45	145	0			
Tert-amyl methyl ether (TAME)	2.726	0.15	3.08	0	88.6%	55	126	0			
1,2-Dichloroethane	2.420	0.15	3.08	0	78.7%	45	129	0			
Trichloroethene	2.344	0.15	3.08	0	76.2%	63	129	0			
Dibromomethane	2.404	0.15	3.08	0	78.1%	51	135	0			
1,2-Dichloropropane	2.488	0.15	3.08	0	80.9%	62	126	0			
Bromodichloromethane	2.549	0.15	3.08	0	82.8%	57	132	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00010

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Sample Matrix Spike

cis-1,3-Dichloropropene	2.384	0.15	3.08	0	77.5%	48	138	0
Toluene	2.458	0.038	3.08	0.0155	79.4%	42	153	0
Tetrachloroethene	2.545	0.15	3.08	0	82.7%	40	182	0
trans-1,3-Dichloropropene	2.777	0.15	3.08	0	90.2%	59	128	0
1,1,2-Trichloroethane	2.683	0.15	3.08	0	87.2%	67	121	0
Dibromochloromethane	2.650	0.15	3.08	0	86.1%	63	126	0
1,3-Dichloropropane	2.511	0.15	3.08	0	81.6%	68	122	0
1,2-Dibromoethane (EDB)	2.429	0.31	3.08	0	78.9%	63	127	0
Chlorobenzene	2.365	0.15	3.08	0	76.9%	54	145	0
Ethylbenzene	2.554	0.038	3.08	0	83.0%	57	148	0
1,1,1,2-Tetrachloroethane	2.564	0.15	3.08	0	83.3%	65	127	0
m,p-Xylene	4.910	0.077	6.15	0	79.8%	68	126	0
o-Xylene	2.410	0.038	3.08	0	78.3%	59	131	0
Bromoform	2.695	0.15	3.08	0	87.6%	64	127	0
Styrene	2.215	0.15	3.08	0	72.0%	65	139	0
Isopropylbenzene	2.583	0.15	3.08	0	84.0%	76	129	0
Bromobenzene	2.482	0.15	3.08	0	80.7%	57	140	0
n-Propylbenzene	2.717	0.15	3.08	0	88.3%	76	137	0
1,1,2,2-Tetrachloroethane	3.076	0.15	3.08	0	100%	70	124	0
2-Chlorotoluene	2.353	0.15	3.08	0	76.5%	66	125	0
4-Chlorotoluene	2.342	0.15	3.08	0	76.1%	56	142	0
1,2,3-Trichloropropane	2.491	0.31	3.08	0	81.0%	61	130	0
1,3,5-Trimethylbenzene	2.536	0.15	3.08	0	82.4%	58	143	0
tert-Butylbenzene	2.633	0.15	3.08	0	85.6%	70	140	0
1,2,4-Trimethylbenzene	2.581	0.15	3.08	0.0490	82.3%	59	142	0
sec-Butylbenzene	2.657	0.15	3.08	0	86.4%	71	145	0
4-Isopropyltoluene	2.614	0.15	3.08	0	85.0%	63	154	0
1,3-Dichlorobenzene	2.540	0.15	3.08	0	82.6%	48	152	0
1,4-Dichlorobenzene	2.448	0.15	3.08	0.0627	77.5%	49	146	0
n-Butylbenzene	2.541	0.15	3.08	0.0885	79.7%	72	147	0
1,2-Dichlorobenzene	2.551	0.15	3.08	0	82.9%	66	125	0
1,2-Dibromo-3-chloropropane (DBCP)	3.555	0.77	3.08	0	116%	49	136	0
1,2,4-Trichlorobenzene	2.693	0.31	3.08	0.0638	85.4%	52	164	0
Hexachlorobutadiene	2.797	0.31	3.08	0	90.9%	47	173	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00011

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Sample Matrix Spike

Naphthalene	3.462	0.31	3.08	0.0750	110%	39	199	0
1,2,3-Trichlorobenzene	3.391	0.31	3.08	0.0434	109%	33	199	0
Surrogate: 1,2-Dichloroethane-d4	645	0.015	769	0	83.9%	45	146	0
Surrogate: Dibromofluoromethane	748	0.015	769	0	97.3%	62	123	0
Surrogate: Toluene-d8	742	0.015	769	0	96.5%	91	108	0

Sample ID: **1212010-01DMS** Batch ID: **28420** Test Code: **GASS-MS** Units: **mg/kg** Analysis Date **12/10/2012 4:18:00 PM** Prep Date: **12/4/2012**

Client ID: **Dewatered Biosolid Comp** Run ID: **ORGCMS2_121210A** SeqNo: **1058490**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	21.80	2.0	20.0	3.61	90.9%	77	142	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00012

North Coast Laboratories, Ltd.

Date: 12/20/2012

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-28427** Batch ID: **28427** Test Code: **8081S** Units: **mg/kg** Analysis Date **12/12/2012 9:59:12 AM** Prep Date: **12/6/2012**

Client ID: Run ID: **ORGC15_121212A** SeqNo: **1059374**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
alpha-BHC	0.06483	0.020	0.100	0	64.8%	70	119	0			S
beta-BHC	0.06078	0.020	0.100	0	60.8%	69	117	0			S
Lindane	0.06218	0.020	0.100	0	62.2%	64	119	0			S
delta-BHC	0.06312	0.020	0.100	0	63.1%	77	118	0			S
Heptachlor	0.06134	0.020	0.100	0	61.3%	72	116	0			S
Aldrin	0.05552	0.020	0.100	0	55.5%	53	122	0			
Heptachlor Epoxide	0.06094	0.020	0.100	0	60.9%	77	114	0			S
Endosulfan I	0.06091	0.020	0.100	0	60.9%	79	114	0			S
Dieldrin	0.06122	0.020	0.100	0	61.2%	80	117	0			S
4,4'-DDE	0.05964	0.020	0.100	0	59.6%	78	113	0			S
Endrin	0.08283	0.020	0.100	0	82.8%	82	149	0			
Endosulfan II	0.05995	0.020	0.100	0	59.9%	72	125	0			S
4,4'-DDD	0.06360	0.020	0.100	0	63.6%	69	126	0			S
Endrin Aldehyde	0.04526	0.020	0.100	0	45.3%	40	122	0			
Endosulfan sulfate	0.06518	0.020	0.100	0	65.2%	69	132	0			S
4,4'-DDT	0.05499	0.020	0.100	0	55.0%	60	134	0			S
Methoxychlor	0.07223	0.020	0.100	0	72.2%	63	144	0			
Surrogate: DCB	0.0588	0.010	0.100	0	58.8%	70	130	0			S
Surrogate: TCMX	0.0611	0.010	0.100	0	61.1%	70	130	0			S

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00013

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-28427** Batch ID: **28427** Test Code: **8081S** Units: **mg/kg** Analysis Date **12/12/2012 10:47:52 A** Prep Date: **12/6/2012**

Client ID: Run ID: **ORGC15_121212A** SeqNo: **1059375**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
alpha-BHC	0.08539	0.020	0.100	0	85.4%	70	119	0.0648	27.4%	30	
beta-BHC	0.07929	0.020	0.100	0	79.3%	69	117	0.0608	26.4%	30	
Lindane	0.08221	0.020	0.100	0	82.2%	64	119	0.0622	27.7%	30	
delta-BHC	0.08286	0.020	0.100	0	82.9%	77	118	0.0631	27.0%	30	
Heptachlor	0.08023	0.020	0.100	0	80.2%	72	116	0.0613	26.7%	30	
Aldrin	0.07096	0.020	0.100	0	71.0%	53	122	0.0555	24.4%	30	
Heptachlor Epoxide	0.07928	0.020	0.100	0	79.3%	77	114	0.0609	26.2%	30	
Endosulfan I	0.07857	0.020	0.100	0	78.6%	79	114	0.0609	25.3%	30	S
Dieldrin	0.07952	0.020	0.100	0	79.5%	80	117	0.0612	26.0%	30	S
4,4'-DDE	0.07647	0.020	0.100	0	76.5%	78	113	0.0596	24.7%	30	S
Endrin	0.1088	0.020	0.100	0	109%	82	149	0.0828	27.1%	30	
Endosulfan II	0.07746	0.020	0.100	0	77.5%	72	125	0.0600	25.5%	30	
4,4'-DDD	0.08406	0.020	0.100	0	84.1%	69	126	0.0636	27.7%	30	
Endrin Aldehyde	0.05208	0.020	0.100	0	52.1%	40	122	0.0453	14.0%	30	
Endosulfan sulfate	0.08340	0.020	0.100	0	83.4%	69	132	0.0652	24.5%	30	
4,4'-DDT	0.07035	0.020	0.100	0	70.4%	60	134	0.0550	24.5%	30	
Methoxychlor	0.09202	0.020	0.100	0	92.0%	63	144	0.0722	24.1%	30	
Surrogate: DCB	0.0738	0.010	0.100	0	73.8%	70	130	0.0588	22.7%	30	
Surrogate: TCMX	0.0783	0.010	0.100	0	78.3%	70	130	0.0611	24.7%	30	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

ED_006495_00000841-00014

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-28420** Batch ID: **28420** Test Code: **8260S** Units: **mg/kg** Analysis Date **12/11/2012 6:48:00 PM** Prep Date: **12/4/2012**

Client ID: Run ID: **ORGCMS2_121211A** SeqNo: **1059145**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	0.3820	0.020	0.400	0	95.5%	7	190	0			
Chloromethane	0.3792	0.040	0.400	0	94.8%	39	153	0			
Vinyl chloride	0.4309	0.020	0.400	0	108%	52	167	0			
Bromomethane	0.4280	0.020	0.400	0	107%	38	176	0			
Chloroethane	0.3730	0.020	0.400	0	93.2%	30	195	0			
Trichlorofluoromethane	0.4678	0.020	0.400	0	117%	22	248	0			
1,1-Dichloroethene	0.3954	0.020	0.400	0	98.8%	62	168	0			
Methylene chloride	0.3814	0.040	0.400	0	95.3%	24	189	0			
trans-1,2-Dichloroethene	0.4144	0.020	0.400	0	104%	80	143	0			
Methyl tert-butyl ether (MTBE)	0.3864	0.020	0.400	0	96.6%	56	153	0			
Tert-butyl alcohol (TBA)	10.31	0.40	8.00	0	129%	56	146	0			
Di-isopropyl ether (DIPE)	0.3998	0.020	0.400	0	100%	69	144	0			
1,1-Dichloroethane	0.3627	0.020	0.400	0	90.7%	67	141	0			
Ethyl tert-butyl ether (ETBE)	0.3964	0.020	0.400	0	99.1%	64	146	0			
cis-1,2-Dichloroethene	0.4099	0.020	0.400	0	102%	82	136	0			
2,2-Dichloropropane	0.4303	0.020	0.400	0	108%	61	166	0			
Bromochloromethane	0.4039	0.020	0.400	0	101%	78	141	0			
Chloroform	0.3724	0.020	0.400	0	93.1%	69	137	0			
Carbon Tetrachloride	0.4998	0.020	0.400	0	125%	59	187	0			
1,1,1-Trichloroethane	0.4446	0.020	0.400	0	111%	70	160	0			
1,1-Dichloropropene	0.4343	0.020	0.400	0	109%	67	161	0			
Benzene	0.3792	0.0050	0.400	0	94.8%	71	136	0			
Tert-amyl methyl ether (TAME)	0.4054	0.020	0.400	0	101%	59	145	0			
1,2-Dichloroethane	0.3851	0.020	0.400	0	96.3%	70	137	0			
Trichloroethene	0.3688	0.020	0.400	0	92.2%	72	144	0			
Dibromomethane	0.3901	0.020	0.400	0	97.5%	77	131	0			
1,2-Dichloropropane	0.3836	0.020	0.400	0	95.9%	68	136	0			
Bromodichloromethane	0.4047	0.020	0.400	0	101%	77	147	0			
cis-1,3-Dichloropropene	0.3878	0.020	0.400	0	96.9%	69	146	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00015

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike

Toluene	0.3940	0.0050	0.400	0	98.5%	81	136	0
Tetrachloroethene	0.4045	0.020	0.400	0	101%	83	153	0
trans-1,3-Dichloropropene	0.4632	0.020	0.400	0	116%	56	152	0
1,1,2-Trichloroethane	0.3790	0.020	0.400	0	94.8%	70	134	0
Dibromochloromethane	0.4406	0.020	0.400	0	110%	75	151	0
1,3-Dichloropropane	0.4057	0.020	0.400	0	101%	70	134	0
1,2-Dibromoethane (EDB)	0.3960	0.040	0.400	0	99.0%	77	135	0
Chlorobenzene	0.3752	0.020	0.400	0	93.8%	80	131	0
Ethylbenzene	0.4028	0.0050	0.400	0	101%	83	142	0
1,1,1,2-Tetrachloroethane	0.4212	0.020	0.400	0	105%	80	141	0
m,p-Xylene	0.7740	0.010	0.800	0	96.7%	86	142	0
o-Xylene	0.3887	0.0050	0.400	0	97.2%	81	140	0
Bromoform	0.4552	0.020	0.400	0	114%	71	158	0
Styrene	0.3618	0.020	0.400	0	90.5%	78	138	0
Isopropylbenzene	0.4060	0.020	0.400	0	102%	78	157	0
Bromobenzene	0.4121	0.020	0.400	0	103%	57	140	0
n-Propylbenzene	0.4362	0.020	0.400	0	109%	85	157	0
1,1,2,2-Tetrachloroethane	0.4509	0.020	0.400	0	113%	70	124	0
2-Chlorotoluene	0.3793	0.020	0.400	0	94.8%	76	142	0
4-Chlorotoluene	0.3871	0.020	0.400	0	96.8%	79	140	0
1,2,3-Trichloropropane	0.3872	0.040	0.400	0	96.8%	62	144	0
1,3,5-Trimethylbenzene	0.4071	0.020	0.400	0	102%	79	155	0
tert-Butylbenzene	0.4166	0.020	0.400	0	104%	82	154	0
1,2,4-Trimethylbenzene	0.4039	0.020	0.400	0	101%	77	151	0
sec-Butylbenzene	0.4124	0.020	0.400	0	103%	78	166	0
4-Isopropyltoluene	0.4186	0.020	0.400	0	105%	75	163	0
1,3-Dichlorobenzene	0.4060	0.020	0.400	0	102%	85	138	0
1,4-Dichlorobenzene	0.3839	0.020	0.400	0	96.0%	80	132	0
n-Butylbenzene	0.4027	0.020	0.400	0	101%	68	168	0
1,2-Dichlorobenzene	0.4022	0.020	0.400	0	101%	78	134	0
1,2-Dibromo-3-chloropropane (DBCP)	0.5012	0.10	0.400	0	125%	18	198	0
1,2,4-Trichlorobenzene	0.3820	0.040	0.400	0	95.5%	36	197	0
Hexachlorobutadiene	0.4501	0.040	0.400	0	113%	27	240	0
Naphthalene	0.4188	0.040	0.400	0	105%	30	196	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00016

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike

1,2,3-Trichlorobenzene	0.4747	0.040	0.400	0	119%	28	199	0	
Surrogate: 1,2-Dichloroethane-d4	108	0.0020	100	0	108%	79	120	0	
Surrogate: Dibromofluoromethane	131	0.0020	100	0	131%	84	121	0	S
Surrogate: Toluene-d8	125	0.0020	100	0	125%	85	115	0	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ED_006495_00000841-00017

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-28420** Batch ID: **28420** Test Code: **8260S** Units: **mg/kg** Analysis Date **12/11/2012 7:16:00 PM** Prep Date: **12/4/2012**

Client ID: Run ID: **ORGCMS2_121211A** SeqNo: **1059146**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	0.3575	0.020	0.400	0	89.4%	7	190	0.382	6.62%	30	
Chloromethane	0.3402	0.040	0.400	0	85.0%	39	153	0.379	10.9%	30	
Vinyl chloride	0.3747	0.020	0.400	0	93.7%	52	167	0.431	14.0%	30	
Bromomethane	0.4031	0.020	0.400	0	101%	38	176	0.428	5.99%	30	
Chloroethane	0.3497	0.020	0.400	0	87.4%	30	195	0.373	6.45%	30	
Trichlorofluoromethane	0.4128	0.020	0.400	0	103%	22	248	0.468	12.5%	30	
1,1-Dichloroethene	0.4029	0.020	0.400	0	101%	62	168	0.395	1.88%	30	
Methylene chloride	0.3924	0.040	0.400	0	98.1%	24	189	0.381	2.86%	30	
trans-1,2-Dichloroethene	0.4203	0.020	0.400	0	105%	80	143	0.414	1.39%	30	
Methyl tert-butyl ether (MTBE)	0.4160	0.020	0.400	0	104%	56	153	0.386	7.37%	30	
Tert-butyl alcohol (TBA)	10.97	0.40	8.00	0	137%	56	146	10.3	6.22%	30	
Di-isopropyl ether (DIPE)	0.4154	0.020	0.400	0	104%	69	144	0.400	3.83%	30	
1,1-Dichloroethane	0.3726	0.020	0.400	0	93.1%	67	141	0.363	2.70%	30	
Ethyl tert-butyl ether (ETBE)	0.4288	0.020	0.400	0	107%	64	146	0.396	7.86%	30	
cis-1,2-Dichloroethene	0.4354	0.020	0.400	0	109%	82	136	0.410	6.02%	30	
2,2-Dichloropropane	0.4338	0.020	0.400	0	108%	61	166	0.430	0.826%	30	
Bromochloromethane	0.4249	0.020	0.400	0	106%	78	141	0.404	5.07%	30	
Chloroform	0.3884	0.020	0.400	0	97.1%	69	137	0.372	4.22%	30	
Carbon Tetrachloride	0.5717	0.020	0.400	0	143%	59	187	0.500	13.4%	30	
1,1,1-Trichloroethane	0.4599	0.020	0.400	0	115%	70	160	0.445	3.38%	30	
1,1-Dichloropropene	0.4350	0.020	0.400	0	109%	67	161	0.434	0.149%	30	
Benzene	0.3949	0.0050	0.400	0	98.7%	71	136	0.379	4.05%	30	
Tert-amyl methyl ether (TAME)	0.4381	0.020	0.400	0	110%	59	145	0.405	7.77%	30	
1,2-Dichloroethane	0.4030	0.020	0.400	0	101%	70	137	0.385	4.54%	30	
Trichloroethene	0.3946	0.020	0.400	0	98.7%	72	144	0.369	6.78%	30	
Dibromomethane	0.4258	0.020	0.400	0	106%	77	131	0.390	8.75%	30	
1,2-Dichloropropane	0.4144	0.020	0.400	0	104%	68	136	0.384	7.72%	30	
Bromodichloromethane	0.4247	0.020	0.400	0	106%	77	147	0.405	4.84%	30	
cis-1,3-Dichloropropene	0.4003	0.020	0.400	0	100%	69	146	0.388	3.18%	30	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

ED_006495_00000841-00018

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Toluene	0.3988	0.0050	0.400	0	99.7%	81	136	0.394	1.22%	30
Tetrachloroethene	0.4196	0.020	0.400	0	105%	83	153	0.404	3.66%	30
trans-1,3-Dichloropropene	0.4607	0.020	0.400	0	115%	56	152	0.463	0.541%	30
1,1,2-Trichloroethane	0.4351	0.020	0.400	0	109%	70	134	0.379	13.8%	30
Dibromochloromethane	0.4434	0.020	0.400	0	111%	75	151	0.441	0.631%	30
1,3-Dichloropropane	0.4193	0.020	0.400	0	105%	70	134	0.406	3.29%	30
1,2-Dibromoethane (EDB)	0.4148	0.040	0.400	0	104%	77	135	0.396	4.65%	30
Chlorobenzene	0.3885	0.020	0.400	0	97.1%	80	131	0.375	3.47%	30
Ethylbenzene	0.4150	0.0050	0.400	0	104%	83	142	0.403	2.99%	30
1,1,1,2-Tetrachloroethane	0.4328	0.020	0.400	0	108%	80	141	0.421	2.72%	30
m,p-Xylene	0.7998	0.010	0.800	0	100%	86	142	0.774	3.28%	30
o-Xylene	0.4016	0.0050	0.400	0	100%	81	140	0.389	3.26%	30
Bromoform	0.4664	0.020	0.400	0	117%	71	158	0.455	2.42%	30
Styrene	0.3826	0.020	0.400	0	95.7%	78	138	0.362	5.58%	30
Isopropylbenzene	0.4194	0.020	0.400	0	105%	78	157	0.406	3.25%	30
Bromobenzene	0.4238	0.020	0.400	0	106%	57	140	0.412	2.80%	30
n-Propylbenzene	0.4422	0.020	0.400	0	111%	85	157	0.436	1.37%	30
1,1,2,2-Tetrachloroethane	0.4838	0.020	0.400	0	121%	70	124	0.451	7.05%	30
2-Chlorotoluene	0.3908	0.020	0.400	0	97.7%	76	142	0.379	2.99%	30
4-Chlorotoluene	0.4015	0.020	0.400	0	100%	79	140	0.387	3.67%	30
1,2,3-Trichloropropane	0.4440	0.040	0.400	0	111%	62	144	0.387	13.7%	30
1,3,5-Trimethylbenzene	0.4276	0.020	0.400	0	107%	79	155	0.407	4.89%	30
tert-Butylbenzene	0.4393	0.020	0.400	0	110%	82	154	0.417	5.31%	30
1,2,4-Trimethylbenzene	0.4275	0.020	0.400	0	107%	77	151	0.404	5.69%	30
sec-Butylbenzene	0.4265	0.020	0.400	0	107%	78	166	0.412	3.35%	30
4-Isopropyltoluene	0.4261	0.020	0.400	0	107%	75	163	0.419	1.79%	30
1,3-Dichlorobenzene	0.4232	0.020	0.400	0	106%	85	138	0.406	4.16%	30
1,4-Dichlorobenzene	0.4018	0.020	0.400	0	100%	80	132	0.384	4.56%	30
n-Butylbenzene	0.4063	0.020	0.400	0	102%	68	168	0.403	0.889%	30
1,2-Dichlorobenzene	0.4231	0.020	0.400	0	106%	78	134	0.402	5.05%	30
1,2-Dibromo-3-chloropropane (DBCP)	0.5130	0.10	0.400	0	128%	18	198	0.501	2.32%	30
1,2,4-Trichlorobenzene	0.4165	0.040	0.400	0	104%	36	197	0.382	8.63%	30
Hexachlorobutadiene	0.4641	0.040	0.400	0	116%	27	240	0.450	3.06%	30
Naphthalene	0.4720	0.040	0.400	0	118%	30	196	0.419	11.9%	30

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

ED_006495_00000841-00019

CLIENT: City of Eureka
Work Order: 1212010
Project:

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

1,2,3-Trichlorobenzene	0.5192	0.040	0.400	0	130%	28	199	0.475	8.96%	30
Surrogate: 1,2-Dichloroethane-d4	94.0	0.0020	100	0	94.0%	79	120	108	13.8%	30
Surrogate: Dibromofluoromethane	111	0.0020	100	0	111%	84	121	131	16.6%	30
Surrogate: Toluene-d8	104	0.0020	100	0	104%	85	115	125	18.3%	30

Sample ID: **LCSG-28420** Batch ID: **28420** Test Code: **GASS-MS** Units: **mg/kg** Analysis Date **12/10/2012 3:22:00 PM** Prep Date: **12/4/2012**
Client ID: Run ID: **ORGCMS2_121210A** SeqNo: **1058488**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	21.69	1.0	20.0	0	108%	77	142	0			

Sample ID: **LCSDG-28420** Batch ID: **28420** Test Code: **GASS-MS** Units: **mg/kg** Analysis Date **12/10/2012 3:50:00 PM** Prep Date: **12/4/2012**
Client ID: Run ID: **ORGCMS2_121210A** SeqNo: **1058489**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	21.02	1.0	20.0	0	105%	77	142	21.7	3.14%	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

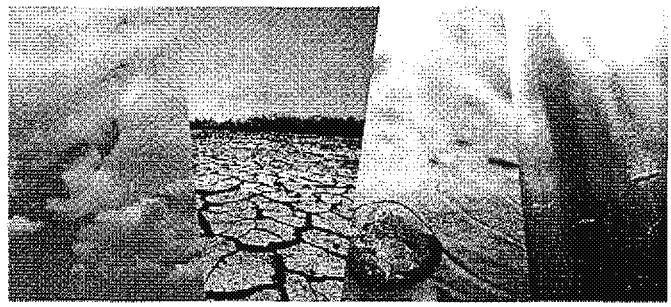
ED_006495_00000841-00020

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-12-0153

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: North Coast Laboratories, Ltd.

Client Project Name: 1212010

Attention: Trudie Blasi
5680 West End Road
Arcata, CA 95521-9202

Approved for release on 12/13/2012 by:
Don Burley
Project Manager

ResultLink ▸

Email your PM ▸

Calscience Environmental Laboratories, 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.

7440 Lincoln Way, Garden Grove, CA 92841-1427 | TEL (714) 895-5494 | FAX (714) 894-7501 | www.calscience.com

NELAP ID: 03220CA | DoD-ELAP ID: L10-41 | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 1212010
Work Order Number: 12-12-0153

1 Client Sample Data 3
1.1 EPA 8082 PCB Aroclors (Solid) 3
1.2 EPA 8270C Semi-Volatile Organics (Solid) 4
1.3 EPA 6010B/7471A CAC Title 22 Metals / EPA 7471A Mercury (Solid) . 6
1.4 EPA 6010B STLC ICP Metals / EPA 7470A STLC Mercury (Aqueous) 7
1.5 Combined Inorganic Tests 8

2 Quality Control Sample Data 9
2.1 MS/MSD and/or Duplicate 9
2.2 LCS/LCSD 18

3 Glossary of Terms and Qualifiers 27

4 Chain of Custody/Sample Receipt Form 28

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.		Date Received:	12/04/12
5680 West End Road		Work Order No:	12-12-0153
Arcata, CA 95521-9202		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: 1212010			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1212010-01B / Dewatered Biosolid Comp	**12-12-0153-2-A**	**11/29/12 13:10**	**Solid**	**GC 31**	**12/06/12**	**12/10/12 16:53**	**121206L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	210	1		Aroclor-1248	ND	210	1	
Aroclor-1221	ND	210	1		Aroclor-1254	ND	210	1	
Aroclor-1232	ND	210	1		Aroclor-1260	ND	210	1	
Aroclor-1242	ND	210	1		Aroclor-1262	ND	210	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	299	50-130	2	2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

Method Blank	**099-12-535-1,733**	**N/A**	**Solid**	**GC 31**	**12/06/12**	**12/07/12 15:11**	**121206L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	ND	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	94	50-130		2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.		Date Received:	12/04/12
5680 West End Road		Work Order No:	12-12-0153
Arcata, CA 95521-9202		Preparation:	EPA 3545
		Method:	EPA 8270C
		Units:	mg/kg
Project: 1212010			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1212010-01B / Dewatered Biosolid Comp	**12-12-0153-2-A**	**11/29/12 13:10**	**Solid**	**GC/MS CCC**	**12/06/12**	**12/10/12 14:18**	**121206L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	10	5		2,4-Dimethylphenol	ND	10	5	
Acenaphthylene	ND	10	5		4,6-Dinitro-2-Methylphenol	ND	52	5	
Aniline	ND	10	5		2,4-Dinitrophenol	ND	52	5	
Anthracene	ND	10	5		2,4-Dinitrotoluene	ND	10	5	
Azobenzene	ND	10	5		2,6-Dinitrotoluene	ND	10	5	
Benzidine	ND	210	5		Fluoranthene	ND	10	5	
Benzo (a) Anthracene	ND	10	5		Fluorene	ND	10	5	
Benzo (a) Pyrene	ND	10	5		Hexachloro-1,3-Butadiene	ND	10	5	
Benzo (b) Fluoranthene	ND	10	5		Hexachlorobenzene	ND	10	5	
Benzo (g,h,i) Perylene	ND	10	5		Hexachlorocyclopentadiene	ND	52	5	
Benzo (k) Fluoranthene	ND	10	5		Hexachloroethane	ND	10	5	
Benzoic Acid	ND	52	5		Indeno (1,2,3-c,d) Pyrene	ND	10	5	
Benzyl Alcohol	ND	10	5		Isophorone	ND	10	5	
Bis(2-Chloroethoxy) Methane	ND	10	5		2-Methylnaphthalene	ND	10	5	
Bis(2-Chloroethyl) Ether	ND	52	5		1-Methylnaphthalene	ND	10	5	
Bis(2-Chloroisopropyl) Ether	ND	10	5		2-Methylphenol	ND	10	5	
Bis(2-Ethylhexyl) Phthalate	19	10	5		3/4-Methylphenol	ND	10	5	
4-Bromophenyl-Phenyl Ether	ND	10	5		N-Nitroso-di-n-propylamine	ND	10	5	
Butyl Benzyl Phthalate	ND	10	5		N-Nitrosodimethylamine	ND	10	5	
4-Chloro-3-Methylphenol	ND	10	5		N-Nitrosodiphenylamine	ND	10	5	
4-Chloroaniline	ND	10	5		Naphthalene	ND	10	5	
2-Chloronaphthalene	ND	10	5		4-Nitroaniline	ND	10	5	
2-Chlorophenol	ND	10	5		3-Nitroaniline	ND	10	5	
4-Chlorophenyl-Phenyl Ether	ND	10	5		2-Nitroaniline	ND	10	5	
Chrysene	ND	10	5		Nitrobenzene	ND	52	5	
Di-n-Butyl Phthalate	ND	10	5		4-Nitrophenol	ND	10	5	
Di-n-Octyl Phthalate	ND	10	5		2-Nitrophenol	ND	10	5	
Dibenz (a,h) Anthracene	ND	10	5		Pentachlorophenol	ND	52	5	
Dibenzofuran	ND	10	5		Phenanthrene	ND	10	5	
1,2-Dichlorobenzene	ND	10	5		Phenol	ND	10	5	
1,3-Dichlorobenzene	ND	10	5		Pyrene	ND	10	5	
1,4-Dichlorobenzene	ND	10	5		Pyridine	ND	10	5	
3,3'-Dichlorobenzidine	ND	210	5		1,2,4-Trichlorobenzene	ND	10	5	
2,4-Dichlorophenol	ND	10	5		2,4,6-Trichlorophenol	ND	10	5	
Diethyl Phthalate	ND	10	5		2,4,5-Trichlorophenol	ND	10	5	
Dimethyl Phthalate	ND	10	5						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	91	38-134		2-Fluorophenol	80	42-120	
Nitrobenzene-d5	85	42-150		p-Terphenyl-d14	96	35-167	
Phenol-d6	86	46-118		2,4,6-Tribromophenol	97	36-132	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.		Date Received:	12/04/12
5680 West End Road		Work Order No:	12-12-0153
Arcata, CA 95521-9202		Preparation:	EPA 3545
		Method:	EPA 8270C
		Units:	mg/kg
Project: 1212010			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	**099-12-549-2,348**	**N/A**	**Solid**	**GC/MS CCC**	**12/06/12**	**12/07/12 14:39**	**121206L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	81	38-134		2-Fluorophenol	82	42-120	
Nitrobenzene-d5	79	42-150		p-Terphenyl-d14	91	35-167	
Phenol-d6	87	46-118		2,4,6-Tribromophenol	82	36-132	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 12/04/12
Work Order No: 12-12-0153
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6010B / EPA 7471A
Units: mg/kg

Project: 1212010

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1212010-01A / Dewatered Biosolid Comp	**12-12-0153-1-A**	**11/29/12 13:10**	**Solid**	**ICP 7300**	**12/05/12**	**12/06/12 15:14**	**121205L02**

Comment(s): -Results are reported on a dry weight basis.
-Mercury analysis was performed on 12/05/12 19:35 with batch 121205L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	3.01	1		Mercury	0.674	0.0835	1	
Arsenic	5.31	3.01	1		Molybdenum	14.6	1.00	1	
Barium	1060	2.01	1		Nickel	32.5	1.00	1	
Beryllium	ND	1.00	1		Selenium	6.69	3.01	1	
Cadmium	7.57	2.01	1		Silver	17.2	1.00	1	
Chromium	40.1	1.00	1		Thallium	ND	3.01	1	
Cobalt	4.52	1.00	1		Vanadium	19.4	1.00	1	
Copper	1120	2.01	1		Zinc	1440	4.02	1	
Lead	65.3	2.01	1						

Method Blank	**099-04-007-9,018**	**N/A**	**Solid**	**Mercury**	**12/05/12**	**12/05/12 14:42**	**121205L03**

Comment(s): -Preparation/analysis for Mercury was performed by EPA 7471A.

Parameter	Result	RL	DF	Qual
Mercury	ND	0.0835	1	

Method Blank	**097-01-002-16,391**	**N/A**	**Solid**	**ICP 7300**	**12/05/12**	**12/05/12 19:30**	**121205L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.750	1		Lead	ND	0.500	1	
Arsenic	ND	0.750	1		Molybdenum	ND	0.250	1	
Barium	ND	0.500	1		Nickel	ND	0.250	1	
Beryllium	ND	0.250	1		Selenium	ND	0.750	1	
Cadmium	ND	0.500	1		Silver	ND	0.250	1	
Chromium	ND	0.250	1		Thallium	ND	0.750	1	
Cobalt	ND	0.250	1		Vanadium	ND	0.250	1	
Copper	ND	0.500	1		Zinc	ND	1.00	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

North Coast Laboratories, Ltd.		Date Received:	12/04/12
5680 West End Road		Work Order No:	12-12-0153
Arcata, CA 95521-9202		Preparation:	T22.11.5. All / T22.11.5. All
		Method:	EPA 6010B / EPA 7470A
		Units:	mg/L
Project: 1212010			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1212010-01A / Dewatered Biosolid Comp	**12-12-0153-1-A**	**11/29/12 13:10**	**Solid**	**ICP 7300**	**12/05/12**	**12/07/12 18:46**	**121207LA1**

Comment(s): -The analysis was performed on a STLC extract of the sample.
-Results are reported on a dry weight basis.
-Mercury analysis was performed on 12/07/12 18:19 with batch 121207L04.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.602	1		Mercury	ND	0.00500	1	
Arsenic	ND	0.602	1		Molybdenum	ND	0.402	1	
Barium	87.5	0.402	1		Nickel	1.59	0.402	1	
Beryllium	ND	0.402	1		Selenium	ND	0.602	1	
Cadmium	ND	0.402	1		Silver	ND	0.201	1	
Chromium	2.04	0.402	1		Thallium	ND	0.602	1	
Cobalt	ND	0.402	1		Vanadium	0.906	0.402	1	
Copper	0.526	0.402	1		Zinc	78.7	0.402	1	
Lead	0.888	0.402	1						

Method Blank	**099-04-004-357**	**N/A**	**Aqueous**	**Mercury**	**12/05/12**	**12/07/12 17:52**	**121207L04**

Comment(s): -Preparation/analysis for Mercury was performed by EPA 7470A.

Parameter	Result	RL	DF	Qual
Mercury	ND	0.00500	1	

Method Blank	**097-05-006-6,504-A**	**N/A**	**Aqueous**	**ICP 7300**	**12/05/12**	**12/07/12 12:24**	**121207LA1**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.150	1		Lead	ND	0.100	1	
Arsenic	ND	0.150	1		Molybdenum	ND	0.100	1	
Barium	ND	0.100	1		Nickel	ND	0.100	1	
Beryllium	ND	0.100	1		Selenium	ND	0.150	1	
Cadmium	ND	0.100	1		Silver	ND	0.0500	1	
Chromium	ND	0.100	1		Thallium	ND	0.150	1	
Cobalt	ND	0.100	1		Vanadium	ND	0.100	1	
Copper	ND	0.100	1		Zinc	ND	0.100	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 12/04/12
Work Order No: 12-12-0153

Project: 1212010

Client Sample Number	Lab Sample Number	Date Collected	Matrix
1212010-01A / Dewatered Biosolid Comp	**12-12-0153-1**	**11/29/12**	**Solid**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Moisture	75.1	0.100	1		%	12/06/12	12/06/12	ASTM D-2216 (M)

1212010-01B / Dewatered Biosolid Comp	**12-12-0153-2**	**11/29/12**	**Solid**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Moisture	75.8	0.100	1		%	12/06/12	12/06/12	ASTM D-2216 (M)

1212010-01C / Dewatered Biosolid Comp	**12-12-0153-3**	**11/29/12**	**Solid**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Total Kjeldahl Nitrogen	11000	200	20		mg/kg	12/12/12	12/12/12	SM 4500 N Org B (M)
Phosphorus, Total	1600	250	500		mg/kg	12/11/12	12/11/12	SM 4500 P B/E (M)
Ammonia (as N)	1700	100	20		mg/kg	12/11/12	12/11/12	SM 4500-NH3 B/C (M)
Nitrate-Nitrite (as N)	6.7	2.5	5		mg/kg	12/05/12	12/05/12	SM 4500-NO3 E (M)
Salinity	2.6	2.0	1		SU	12/10/12	12/10/12	SM2520B (M)

Method Blank	**N/A**	**Solid**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Moisture	ND	0.100	1		%	12/06/12	12/06/12	ASTM D-2216 (M)
Total Kjeldahl Nitrogen	ND	10	1		mg/kg	12/12/12	12/12/12	SM 4500 N Org B (M)
Phosphorus, Total	ND	0.50	1		mg/kg	12/11/12	12/11/12	SM 4500 P B/E (M)
Ammonia (as N)	ND	5.0	1		mg/kg	12/11/12	12/11/12	SM 4500-NH3 B/C (M)
Nitrate-Nitrite (as N)	ND	0.50	1		mg/kg	12/05/12	12/05/12	SM 4500-NO3 E (M)

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 12/04/12
Work Order No: 12-12-0153
Preparation: EPA 3050B
Method: EPA 6010B

Project 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-11-2001-3	Solid	ICP 7300	12/05/12	12/05/12	121205S02

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	10.13	41	10.13	41	50-115	0	0-20	3
Arsenic	2.117	25.00	26.86	99	26.69	98	75-125	1	0-20	
Barium	15.75	25.00	43.07	109	41.61	103	75-125	3	0-20	
Beryllium	ND	25.00	25.40	102	25.24	101	75-125	1	0-20	
Cadmium	ND	25.00	24.95	100	25.18	101	75-125	1	0-20	
Chromium	14.18	25.00	39.19	100	38.94	99	75-125	1	0-20	
Cobalt	3.175	25.00	28.50	101	28.59	102	75-125	0	0-20	
Copper	4.533	25.00	29.47	100	29.36	99	75-125	0	0-20	
Lead	1.287	25.00	26.58	101	26.67	102	75-125	0	0-20	
Molybdenum	ND	25.00	24.49	98	24.73	99	75-125	1	0-20	
Nickel	8.734	25.00	33.74	100	33.69	100	75-125	0	0-20	
Selenium	ND	25.00	24.32	97	24.41	98	75-125	0	0-20	
Silver	ND	12.50	12.75	102	12.57	101	75-125	1	0-20	
Thallium	ND	25.00	24.62	98	25.01	100	75-125	2	0-20	
Vanadium	14.09	25.00	38.29	97	38.02	96	75-125	1	0-20	
Zinc	11.75	25.00	37.09	101	38.24	106	75-125	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received	12/04/12
Work Order No:	12-12-0153
Preparation:	EPA 3050B
Method:	EPA 6010B

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
12-11-2001-3	Solid	ICP 7300	12/05/12	12/05/12	121205S02

Parameter	SAMPLE CONC	SPIKE ADDED	PDS CONC	PDS %REC	PDSD CONC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	23.61	94	23.90	96	75-125	1	0-20	
Arsenic	2.117	25.00	27.35	101	27.85	103	75-125	2	0-20	
Barium	15.75	25.00	42.12	105	41.35	102	75-125	2	0-20	
Beryllium	ND	25.00	24.95	100	24.44	98	75-125	2	0-20	
Cadmium	ND	25.00	24.93	100	24.49	98	75-125	2	0-20	
Chromium	14.18	25.00	38.84	99	37.97	95	75-125	2	0-20	
Cobalt	3.175	25.00	28.78	102	28.43	101	75-125	1	0-20	
Copper	4.533	25.00	29.40	99	28.92	98	75-125	2	0-20	
Lead	1.287	25.00	26.55	101	26.36	100	75-125	1	0-20	
Molybdenum	ND	25.00	25.19	101	24.87	99	75-125	1	0-20	
Nickel	8.734	25.00	34.03	101	33.78	100	75-125	1	0-20	
Selenium	ND	25.00	25.13	101	24.96	100	75-125	1	0-20	
Silver	ND	12.50	11.93	95	11.60	93	75-125	3	0-20	
Thallium	ND	25.00	24.96	100	24.81	99	75-125	1	0-20	
Vanadium	14.09	25.00	38.29	97	37.43	93	75-125	2	0-20	
Zinc	11.75	25.00	37.94	105	37.25	102	75-125	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 12/04/12
Work Order No: 12-12-0153
Preparation: T22.11.5. All
Method: EPA 6010B

Project 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-11-1195-1	Solid	ICP 7300	12/05/12	12/07/12	121207SA1

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	ND	5.000	5.328	107	5.449	109	50-115	2	0-20	
Arsenic	ND	5.000	4.865	97	4.842	97	75-125	0	0-20	
Barium	10.44	5.000	15.54	102	15.72	106	75-125	1	0-20	
Beryllium	ND	5.000	5.179	104	5.228	105	75-125	1	0-20	
Cadmium	ND	5.000	5.128	103	5.071	101	75-125	1	0-20	
Chromium	0.7140	5.000	5.823	102	5.829	102	75-125	0	0-20	
Cobalt	1.134	5.000	6.356	104	6.341	104	75-125	0	0-20	
Copper	0.3141	5.000	5.556	105	5.505	104	75-125	1	0-20	
Lead	ND	5.000	5.203	104	5.108	102	75-125	2	0-20	
Molybdenum	ND	5.000	5.313	106	5.233	105	75-125	2	0-20	
Nickel	3.807	5.000	8.824	100	8.875	101	75-125	1	0-20	
Selenium	ND	5.000	5.091	102	5.119	102	75-125	1	0-20	
Silver	ND	2.500	2.496	100	2.502	100	75-125	0	0-20	
Thallium	ND	5.000	5.099	102	5.024	100	75-125	1	0-20	
Vanadium	0.1568	5.000	5.306	103	5.283	103	75-125	0	0-20	
Zinc	0.1669	5.000	5.802	113	5.737	111	75-125	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received:	12/04/12
Work Order No:	12-12-0153
Preparation:	N/A
Method:	SM 4500 P B/E (M)

Project 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-12-0317-1	Solid	UV 8	12/11/12	12/11/12	C1211TPS2

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phosphorus, Total	1200	2000	3400	111	3400	111	70-130	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 12/04/12
Work Order No: 12-12-0153
Preparation: EPA 7471A Total
Method: EPA 7471A

Project 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-11-2001-3	Solid	Mercury	12/05/12	12/05/12	121205S03

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8408	101	0.8341	100	71-137	1	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received:	12/04/12
Work Order No:	12-12-0153
Preparation:	T22.11.5. All
Method:	EPA 7470A

Project 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-12-0253-3	Solid	Mercury	12/05/12	12/07/12	121207S04

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.05000	0.03860	77	0.02992	60	71-134	25	0-14	4,3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received:	12/04/12
Work Order No:	12-12-0153
Preparation:	EPA 3545
Method:	EPA 8082

Project 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-12-0222-3	Solid	GC 31	12/06/12	12/07/12	121206S08

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	78.00	78	91.50	92	50-135	16	0-20	
Aroclor-1260	ND	100.0	74.50	74	76.50	76	50-135	3	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 12/04/12
Work Order No: 12-12-0153
Preparation: EPA 3545
Method: EPA 8270C

Project 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-12-0220-1	Solid	GC/MS CCC	12/06/12	12/07/12	121206S07

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	6.306	63	6.788	68	49-133	7	0-18	
Acenaphthylene	ND	10.00	6.053	61	6.513	65	50-150	7	0-20	
Butyl Benzyl Phthalate	ND	10.00	6.748	67	7.115	71	50-150	5	0-20	
4-Chloro-3-Methylphenol	ND	10.00	5.515	55	5.833	58	50-128	6	0-17	
2-Chlorophenol	ND	10.00	6.331	63	6.655	67	57-111	5	0-17	
1,4-Dichlorobenzene	ND	10.00	6.293	63	6.836	68	49-127	8	0-20	
Dimethyl Phthalate	ND	10.00	6.268	63	6.698	67	50-150	7	0-20	
2,4-Dinitrotoluene	ND	10.00	5.127	51	5.487	55	50-128	7	0-18	
Fluorene	ND	10.00	5.585	56	6.032	60	50-150	8	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	6.307	63	6.715	67	54-144	6	0-17	
Naphthalene	ND	10.00	5.988	60	6.371	64	50-150	6	0-20	
4-Nitrophenol	ND	10.00	2.953	30	3.255	33	30-144	10	0-21	
Pentachlorophenol	ND	10.00	2.507	25	2.785	28	29-113	11	0-22	3
Phenol	ND	10.00	5.868	59	6.406	64	57-123	9	0-16	
Pyrene	ND	10.00	7.284	73	8.042	80	47-149	10	0-20	
1,2,4-Trichlorobenzene	ND	10.00	6.050	61	6.502	65	42-132	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153

Project: 1212010

Matrix: Aqueous or Solid

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Salinity	SM2520B (M)	1212010-01C / Dewatered Biosolid Comp	12/10/12	2.6	2.6	0	0-25	
Total Kjeldahl Nitrogen	SM 4500 N Org B (M)	12-12-0214-1	12/12/12	10000	11000	1	0-25	
Moisture	ASTM D-2216 (M)	12-12-0194-5	12/06/12	4.30	4.30	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153
Preparation: EPA 3050B
Method: EPA 6010B

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-16,391	Solid	ICP 7300	12/05/12	12/05/12	121205L02

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Antimony	25.00	24.49	98	24.19	97	80-120	73-127	1	0-20	
Arsenic	25.00	25.90	104	25.45	102	80-120	73-127	2	0-20	
Barium	25.00	26.68	107	26.06	104	80-120	73-127	2	0-20	
Beryllium	25.00	24.48	98	24.86	99	80-120	73-127	2	0-20	
Cadmium	25.00	25.96	104	25.59	102	80-120	73-127	1	0-20	
Chromium	25.00	25.26	101	25.04	100	80-120	73-127	1	0-20	
Cobalt	25.00	26.58	106	26.40	106	80-120	73-127	1	0-20	
Copper	25.00	24.69	99	24.38	98	80-120	73-127	1	0-20	
Lead	25.00	26.74	107	26.34	105	80-120	73-127	1	0-20	
Molybdenum	25.00	25.52	102	25.05	100	80-120	73-127	2	0-20	
Nickel	25.00	26.72	107	26.34	105	80-120	73-127	1	0-20	
Selenium	25.00	24.56	98	24.38	98	80-120	73-127	1	0-20	
Silver	12.50	12.39	99	12.34	99	80-120	73-127	0	0-20	
Thallium	25.00	27.17	109	26.73	107	80-120	73-127	2	0-20	
Vanadium	25.00	24.45	98	24.22	97	80-120	73-127	1	0-20	
Zinc	25.00	27.12	108	26.90	108	80-120	73-127	1	0-20	

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

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153
Preparation: T22.11.5. All
Method: EPA 6010B

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-05-006-6,504	Aqueous	ICP 7300	12/05/12	12/07/12	121207LA1

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Antimony	5.000	5.786	116	5.799	116	80-120	73-127	0	0-20	
Arsenic	5.000	5.009	100	5.029	101	80-120	73-127	0	0-20	
Barium	5.000	5.464	109	5.415	108	80-120	73-127	1	0-20	
Beryllium	5.000	4.942	99	4.993	100	80-120	73-127	1	0-20	
Cadmium	5.000	5.193	104	5.145	103	80-120	73-127	1	0-20	
Chromium	5.000	4.995	100	5.021	100	80-120	73-127	1	0-20	
Cobalt	5.000	5.362	107	5.334	107	80-120	73-127	1	0-20	
Copper	5.000	5.010	100	5.036	101	80-120	73-127	1	0-20	
Lead	5.000	5.220	104	5.228	105	80-120	73-127	0	0-20	
Molybdenum	5.000	5.065	101	5.099	102	80-120	73-127	1	0-20	
Nickel	5.000	5.264	105	5.235	105	80-120	73-127	1	0-20	
Selenium	5.000	4.763	95	4.796	96	80-120	73-127	1	0-20	
Silver	2.500	2.510	100	2.523	101	80-120	73-127	0	0-20	
Thallium	5.000	5.312	106	5.361	107	80-120	73-127	1	0-20	
Vanadium	5.000	4.891	98	4.910	98	80-120	73-127	0	0-20	
Zinc	5.000	5.474	109	5.438	109	80-120	73-127	1	0-20	

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

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.		Date Received:	N/A
5680 West End Road		Work Order No:	12-12-0153
Arcata, CA 95521-9202		Preparation:	N/A
		Method:	SM 4500 P B/E (M)

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-001-4,561	Solid	UV 8	12/11/12	12/11/12	C1211TPL2

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phosphorus, Total	2.0	2.0	100	2.0	99	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153
Preparation: N/A
Method: SM 4500-NO3 E (M)

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-001-4,562	Solid	UV 7	12/05/12	12/05/12	C1205NO3L3

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-Nitrite (as N)	2.5	2.4	95	2.4	94	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153
Preparation: N/A
Method: SM 4500-NH3 B/C (M)

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-812-475	Solid	BUR05	12/11/12	12/11/12	C1211NH3L2

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Ammonia (as N)	250	240	94	230	92	80-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-007-9,018	Solid	Mercury	12/05/12	12/05/12	121205L03

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8686	104	0.8654	104	85-121	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received:	N/A
Work Order No:	12-12-0153
Preparation:	T22.11.5. All
Method:	EPA 7470A

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-004-357	Aqueous	Mercury	12/05/12	12/07/12	121207L04

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	0.05000	0.05040	101	0.05066	101	90-122	1	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153
Preparation: EPA 3545
Method: EPA 8082

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-535-1,733	Solid	GC 31	12/06/12	12/07/12	121206L08

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	100.0	96.50	96	102.5	102	50-135	6	0-20	
Aroclor-1260	100.0	96.50	96	101.5	102	50-135	5	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-12-0153
Preparation: EPA 3545
Method: EPA 8270C

Project: 1212010

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-549-2,348	Solid	GC/MS CCC	12/06/12	12/07/12	121206L07

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Acenaphthene	10.00	9.281	93	9.145	91	59-125	48-136	1	0-15	
Acenaphthylene	10.00	8.881	89	8.844	88	33-145	14-164	0	0-20	
Butyl Benzyl Phthalate	10.00	9.527	95	9.570	96	0-152	0-177	0	0-20	
4-Chloro-3-Methylphenol	10.00	8.569	86	8.556	86	61-121	51-131	0	0-14	
2-Chlorophenol	10.00	9.812	98	9.639	96	60-114	51-123	2	0-15	
1,4-Dichlorobenzene	10.00	9.223	92	9.064	91	61-121	51-131	2	0-21	
Dimethyl Phthalate	10.00	8.985	90	8.855	89	0-112	0-131	1	0-20	
2,4-Dinitrotoluene	10.00	8.350	84	8.339	83	51-141	36-156	0	0-16	
Fluorene	10.00	8.597	86	8.529	85	59-121	49-131	1	0-20	
N-Nitroso-di-n-propylamine	10.00	8.997	90	8.728	87	64-136	52-148	3	0-15	
Naphthalene	10.00	9.206	92	9.149	91	21-133	2-152	1	0-20	
4-Nitrophenol	10.00	7.206	72	7.133	71	38-152	19-171	1	0-31	
Pentachlorophenol	10.00	7.556	76	7.578	76	38-116	25-129	0	0-20	
Phenol	10.00	9.551	96	9.368	94	59-125	48-136	2	0-15	
Pyrene	10.00	10.34	103	10.50	105	51-141	36-156	1	0-14	
1,2,4-Trichlorobenzene	10.00	9.278	93	9.202	92	58-118	48-128	1	0-18	

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

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 12-12-0153

Qualifier	Definition
*	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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
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.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
MPN - Most Probable Number

NORTH COAST LABORATORIES LTD.

Sub-Contract Chain of Custody Record

Date Shipped: 12/3/2012
PO #: 1212010

Subcontractor: Calscience Enironmental Labs
7440 Lincoln Way
Garden Grove, CA 92841

Attn: SAMPLE RECEIVING 714 895-5494

Send Results to: North Coast Labs
5680 West End Road
Arcata, CA 95521
(707) 822-4649

Attn: Trudie Blasi, tblasi@northcoastlabs.com

12-12-0153

NCL Sample # / Sample ID	Collection Date / Bottle	Matrix	State Form System / Source	Sampler / Employer	Analysis / Remarks
1 **1212010-01A** Dewatered Biosolid Comp	11/29/2012 01:10 pm 9-oz soil jar	Soil			Subcontract Metals CAM 17 METALS STLC & TTLC-Report on Dry Wt. Basis
2 **1212010-01B** Dewatered Biosolid Comp	11/29/2012 01:10 pm 4-oz clear glass, unpreserved	Soil			EPA 8270 - Soil EPA 8082 Report on a Dry Wt. Basis
3 **1212010-01C** Dewatered Biosolid Comp	11/29/2012 01:10 pm 9-oz soil jar	Soil			Subcontracted Analysis TKN, Total Phos, NH3, NO2,NO3, & Salinity

		Date/Time			Date/Time
Relinquished by:	[signature]	12/3/12 1500	**Received by:**		
Relinquished by:	GSO	12/4/12 15:15	**Received by:**	Damayle Ozc	

Special Instructions: Please include NCL Sample #, Sample ID, and QC data on all analytical work; include PO # on invoice.

ED_006495_00000841-00048

Return to Contents

GSO GOLDEN STATE OVERNIGHT

< WebShip > > > > >

800-322-5555 www.gso.com

0153

Ship From:
SAMPLE CONTROL
NORTH COAST LABORATORIES
5680 WEST END RD
ARCATA, CA 95521

Ship To:
SAMPLE RECEIVING
CALSCIENCE
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
$0.00

Reference:

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 520562815

PDS

ORC

A

GARDEN GROVE

D92841A

7060253

Print Date : 12/03/12 13:44 PM

1 of 1

Send Label To Printer | Print All | Edit Shipment | Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.

STEP 2 - Fold this page in half.

STEP 3 - Securely attach this label to your package, do not cover the barcode.

STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email | Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section.
Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-12-0153

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: North Coast Labs

DATE: 12/04/12

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

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °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 Initial: B.L

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: B.L

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: AH

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ 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	☐	☑	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: (2) ☑4ozCGJ ☑8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOAh ☐VOAna$_2$ ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna$_2$ ☐_____ ☐_____ ☐_____

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

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

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** YL

SOP T100_090 (11/20/12)

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 121210

Attention: WATER QUALITY LAB
Results & Invoice to: CITY OF EUREKA
Address: 4301 HILFIKER LN
EUREKA, CA 95503
Phone: 707-441-4363
Copies of Report to:
Sampler (Sign & Print): MICHAEL HANSEN Michael Hansen

PROJECT INFORMATION
Project Number:
Project Name:
Purchase Order Number: 113234

TAT: ☒ STD (2-3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH SAMPLES.

REPORTING REQUIREMENTS:
☐ State Forms
☐ Geotracker ☐ SWAMP ☐ Other EDD:
☒ Final Report PDF ☐ FAX By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—40 ml VOA; 9—60 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other
PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	PRESERVATIVE	CONTAINER	STLC+TTLC ON CAM17	% MOISTURE, FECAL COLIFORM	TPH, Phosphorus, NH_3	TKN, NO_3, NO_2	8260, 8270	Salinity, pH	EPA 8082, 8081
	DEWATERED BIOSOLID COMP	11-29-12	1310	O									

SPECIAL INSTRUCTIONS	SAMPLE CONDITION
	Temperature 5.6 °C
	Received On Ice? Y / N
	Samples Intact? Y / N
	Preserved? Y / N
	Preserved @ NCL?
Michael will resample for Fecal Coliform. RC 12/3/12	Y / N / NA

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
MICHAEL HANSEN Michael Hansen	11-30-12 1425		
		11/30/12	1425

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Fed-Ex Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; WW=Waste Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

ED_006495_00000841-00051