ATTACHMENT 4

Certified Laboratory Reports: AOC-1 Soil Vapor

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-87964-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

For:
Pastor, Behling & Wheeler LLC
620 E. Airline
Victoria, Texas 77901

Attn: Mr. Kevin Dworsky

Authorized for release by:
3/18/2014 10:35:30 AM
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Results relate only to the items tested and the sample(s) as received by the laboratory.

Client Sample Results

TestAmerica Job ID: 600-87964-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Lab Sample ID: 600-87964-1
Matrix: Air

Client Sample ID: Sample 1

Date Collected: 02/27/14 16:30
Date Received: 03/01/14 09:09
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1870	U H	12500	1870	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,1,2,2-Tetrachloroethane	3800	U H	12500	3800	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,1,2-Trichloro-1,2,2-trifluoroethane	1930	U H	12500	1930	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,1,2-Trichloroethane	3370	U H	12500	3370	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,1-Dichloroethane	**8590**	**J H**	12500	1620	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,1-Dichloroethene	2120	U H	12500	2120	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,2,4-Trichlorobenzene	6110	U H	62300	6110	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,2,4-Trimethylbenzene	3930	U H	12500	3930	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1990	U H	12500	1990	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,2-Dichlorobenzene	4360	U H	12500	4360	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,2-Dichloroethane	**1100000**	**H**	12500	2930	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,2-Dichloropropane	3240	U H	12500	3240	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,3,5-Trimethylbenzene	4050	U H	12500	4050	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,3-Dichlorobenzene	4050	U H	12500	4050	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,4-Dichlorobenzene	3990	U H	12500	3990	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Benzene	3490	U H	12500	3490	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Benzyl chloride	4860	U H	24900	4860	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Bromomethane	1990	U H	12500	1990	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Carbon tetrachloride	2370	U H	12500	2370	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Chlorobenzene	3050	U H	12500	3050	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Chloroethane	2180	U H	12500	2180	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Chloroform	**91400**	**H**	12500	2370	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Chloromethane	9970	U H	31200	9970	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
cis-1,2-Dichloroethene	3740	U H	12500	3740	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
cis-1,3-Dichloropropene	4610	U H	12500	4610	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Dichlorodifluoromethane	4240	U H	12500	4240	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Ethylbenzene	4240	U H	12500	4240	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
1,2-Dibromoethane (EDB)	2740	U H	12500	2740	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Hexachlorobutadiene	4860	U H	62300	4860	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Methylene Chloride	8100	U H	31200	8100	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
m-Xylene & p-Xylene	7480	U H	12500	7480	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
o-Xylene	3800	U H	12500	3800	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Styrene	3620	U H	12500	3620	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Tetrachloroethene	2490	U H	12500	2490	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Toluene	7480	U H	12500	7480	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
trans-1,3-Dichloropropene	2990	U H	12500	2990	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Trichloroethene	**2770**	**J H**	12500	2240	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Trichlorofluoromethane	1500	U H	12500	1500	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57
Vinyl chloride	**28500**	**H**	12500	4430	ppb v/v		03/07/14 17:44	03/12/14 08:41	3428.57

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*	*03/07/14 17:44*	*03/12/14 08:41*	*3428.57*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87964-1

Client Sample ID: Sample 2
Date Collected: 02/27/14 17:25
Date Received: 03/01/14 09:09
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-87964-2
Matrix: Air

7

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1830	U H	12200	1830	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,1,2,2-Tetrachloroethane	3710	U H	12200	3710	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,1,2-Trichloro-1,2,2-trifluoroethane	1890	U H	12200	1890	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,1,2-Trichloroethane	3290	U H	12200	3290	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,1-Dichloroethane	**10700**	**J H**	12200	1580	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,1-Dichloroethene	**2350**	**J H**	12200	2070	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,2,4-Trichlorobenzene	5960	U H	60900	5960	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,2,4-Trimethylbenzene	3830	U H	12200	3830	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1950	U H	12200	1950	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,2-Dichlorobenzene	4260	U H	12200	4260	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,2-Dichloroethane	**1180000**	**H**	12200	2860	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,2-Dichloropropane	3160	U H	12200	3160	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,3,5-Trimethylbenzene	3960	U H	12200	3960	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,3-Dichlorobenzene	3960	U H	12200	3960	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,4-Dichlorobenzene	3890	U H	12200	3890	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Benzene	3410	U H	12200	3410	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Benzyl chloride	4750	U H	24300	4750	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Bromomethane	1950	U H	12200	1950	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Carbon tetrachloride	2310	U H	12200	2310	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Chlorobenzene	2980	U H	12200	2980	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Chloroethane	2130	U H	12200	2130	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Chloroform	**107000**	**H**	12200	2310	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Chloromethane	9740	U H	30400	9740	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
cis-1,2-Dichloroethene	3650	U H	12200	3650	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
cis-1,3-Dichloropropene	4500	U H	12200	4500	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Dichlorodifluoromethane	4140	U H	12200	4140	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Ethylbenzene	4140	U H	12200	4140	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
1,2-Dibromoethane (EDB)	2680	U H	12200	2680	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Hexachlorobutadiene	4750	U H	60900	4750	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Methylene Chloride	7910	U H	30400	7910	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
m-Xylene & p-Xylene	7300	U H	12200	7300	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
o-Xylene	3710	U H	12200	3710	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Styrene	3530	U H	12200	3530	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Tetrachloroethene	2430	U H	12200	2430	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Toluene	7300	U H	12200	7300	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
trans-1,3-Dichloropropene	2920	U H	12200	2920	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Trichloroethene	**3840**	**J H**	12200	2190	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Trichlorofluoromethane	1460	U H	12200	1460	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94
Vinyl chloride	**35200**	**H**	12200	4320	ppb v/v		03/07/14 17:44	03/11/14 22:27	3346.94

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*	*03/07/14 17:44*	*03/11/14 22:27*	*3346.94*

Client Sample Results

TestAmerica Job ID: 600-87964-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Lab Sample ID: 600-87964-3
Matrix: Air

Client Sample ID: Sample 3

Date Collected: 02/27/14 18:20
Date Received: 03/01/14 09:09
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1850	U H	12300	1850	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,1,2,2-Tetrachloroethane	3760	U H	12300	3760	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,1,2-Trichloro-1,2,2-trifluoroethane	1910	U H	12300	1910	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,1,2-Trichloroethane	3330	U H	12300	3330	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,1-Dichloroethane	**13900**	**H**	12300	1600	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,1-Dichloroethene	**3230**	**J H**	12300	2090	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,2,4-Trichlorobenzene	6040	U H	61600	6040	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,2,4-Trimethylbenzene	3880	U H	12300	3880	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1970	U H	12300	1970	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,2-Dichlorobenzene	4310	U H	12300	4310	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,2-Dichloroethane	**1480000**	**H**	12300	2890	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,2-Dichloropropane	3200	U H	12300	3200	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,3,5-Trimethylbenzene	4000	U H	12300	4000	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,3-Dichlorobenzene	4000	U H	12300	4000	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,4-Dichlorobenzene	3940	U H	12300	3940	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Benzene	3450	U H	12300	3450	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Benzyl chloride	4800	U H	24600	4800	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Bromomethane	1970	U H	12300	1970	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Carbon tetrachloride	2340	U H	12300	2340	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Chlorobenzene	3020	U H	12300	3020	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Chloroethane	2160	U H	12300	2160	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Chloroform	**136000**	**H**	12300	2340	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Chloromethane	9860	U H	30800	9860	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
cis-1,2-Dichloroethene	3700	U H	12300	3700	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
cis-1,3-Dichloropropene	4560	U H	12300	4560	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Dichlorodifluoromethane	4190	U H	12300	4190	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Ethylbenzene	4190	U H	12300	4190	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
1,2-Dibromoethane (EDB)	2710	U H	12300	2710	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Hexachlorobutadiene	4800	U H	61600	4800	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Methylene Chloride	8010	U H	30800	8010	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
m-Xylene & p-Xylene	7390	U H	12300	7390	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
o-Xylene	3760	U H	12300	3760	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Styrene	3570	U H	12300	3570	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Tetrachloroethene	2460	U H	12300	2460	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Toluene	7390	U H	12300	7390	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
trans-1,3-Dichloropropene	2960	U H	12300	2960	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Trichloroethene	**4420**	**J H**	12300	2220	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Trichlorofluoromethane	1480	U H	12300	1480	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76
Vinyl chloride	**45600**	**H**	12300	4370	ppb v/v		03/07/14 17:44	03/11/14 23:12	3387.76

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*	*03/07/14 17:44*	*03/11/14 23:12*	*3387.76*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87964-1

Client Sample ID: Sample 4
Date Collected: 02/27/14 23:30
Date Received: 03/01/14 09:09
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-87964-4
Matrix: Air

7

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1790	U H	11900	1790	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,1,2,2-Tetrachloroethane	3640	U H	11900	3640	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,1,2-Trichloro-1,2,2-trifluoroethane	1850	U H	11900	1850	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,1,2-Trichloroethane	**3420**	**J H**	11900	3230	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,1-Dichloroethane	**13900**	**H**	11900	1550	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,1-Dichloroethene	**3290**	**J H**	11900	2030	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,2,4-Trichlorobenzene	5850	U H	59700	5850	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,2,4-Trimethylbenzene	3760	U H	11900	3760	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1910	U H	11900	1910	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,2-Dichlorobenzene	4180	U H	11900	4180	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,2-Dichloroethane	**1570000**	**H**	11900	2810	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,2-Dichloropropane	3110	U H	11900	3110	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,3,5-Trimethylbenzene	3880	U H	11900	3880	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,3-Dichlorobenzene	3880	U H	11900	3880	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,4-Dichlorobenzene	3820	U H	11900	3820	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Benzene	**3790**	**J H**	11900	3350	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Benzyl chloride	4660	U H	23900	4660	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Bromomethane	1910	U H	11900	1910	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Carbon tetrachloride	2270	U H	11900	2270	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Chlorobenzene	2930	U H	11900	2930	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Chloroethane	2090	U H	11900	2090	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Chloroform	**152000**	**H**	11900	2270	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Chloromethane	9560	U H	29900	9560	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
cis-1,2-Dichloroethene	3580	U H	11900	3580	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
cis-1,3-Dichloropropene	4420	U H	11900	4420	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Dichlorodifluoromethane	4060	U H	11900	4060	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Ethylbenzene	4060	U H	11900	4060	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
1,2-Dibromoethane (EDB)	2630	U H	11900	2630	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Hexachlorobutadiene	4660	U H	59700	4660	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Methylene Chloride	7770	U H	29900	7770	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
m-Xylene & p-Xylene	7170	U H	11900	7170	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
o-Xylene	3640	U H	11900	3640	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Styrene	3460	U H	11900	3460	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Tetrachloroethene	**2690**	**J H**	11900	2390	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Toluene	7170	U H	11900	7170	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
trans-1,3-Dichloropropene	2870	U H	11900	2870	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Trichloroethene	**5090**	**J H**	11900	2150	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Trichlorofluoromethane	1430	U H	11900	1430	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71
Vinyl chloride	**40800**	**H**	11900	4240	ppb v/v		03/07/14 17:44	03/11/14 23:58	3285.71

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*	*03/07/14 17:44*	*03/11/14 23:58*	*3285.71*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87964-1

Client Sample ID: Sample 5

Lab Sample ID: 600-87964-5
Matrix: Air

Date Collected: 02/28/14 07:00
Date Received: 03/01/14 09:09
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1750	U H	11700	1750	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,1,2,2-Tetrachloroethane	3550	U H	11700	3550	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,1,2-Trichloro-1,2,2-trifluoroethane	1810	U H	11700	1810	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,1,2-Trichloroethane	3150	U H	11700	3150	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,1-Dichloroethane	**11100**	**J H**	11700	1510	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,1-Dichloroethene	**2310**	**J H**	11700	1980	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,2,4-Trichlorobenzene	5710	U H	58300	5710	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,2,4-Trimethylbenzene	3670	U H	11700	3670	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1860	U H	11700	1860	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,2-Dichlorobenzene	4080	U H	11700	4080	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,2-Dichloroethane	**1200000**	**H**	11700	2740	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,2-Dichloropropane	3030	U H	11700	3030	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,3,5-Trimethylbenzene	3790	U H	11700	3790	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,3-Dichlorobenzene	3790	U H	11700	3790	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,4-Dichlorobenzene	3730	U H	11700	3730	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Benzene	3260	U H	11700	3260	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Benzyl chloride	4540	U H	23300	4540	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Bromomethane	1860	U H	11700	1860	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Carbon tetrachloride	2210	U H	11700	2210	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Chlorobenzene	2850	U H	11700	2850	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Chloroethane	2040	U H	11700	2040	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Chloroform	**113000**	**H**	11700	2210	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Chloromethane	9320	U H	29100	9320	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
cis-1,2-Dichloroethene	3500	U H	11700	3500	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
cis-1,3-Dichloropropene	4310	U H	11700	4310	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Dichlorodifluoromethane	3960	U H	11700	3960	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Ethylbenzene	3960	U H	11700	3960	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
1,2-Dibromoethane (EDB)	2560	U H	11700	2560	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Hexachlorobutadiene	4540	U H	58300	4540	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Methylene Chloride	7570	U H	29100	7570	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
m-Xylene & p-Xylene	6990	U H	11700	6990	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
o-Xylene	3550	U H	11700	3550	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Styrene	3380	U H	11700	3380	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Tetrachloroethene	**2360**	**J H**	11700	2330	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Toluene	6990	U H	11700	6990	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
trans-1,3-Dichloropropene	2800	U H	11700	2800	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Trichloroethene	**3360**	**J H**	11700	2100	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Trichlorofluoromethane	1400	U H	11700	1400	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08
Vinyl chloride	**34400**	**H**	11700	4140	ppb v/v		03/07/14 17:44	03/12/14 00:43	3204.08

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*	*03/07/14 17:44*	*03/12/14 00:43*	*3204.08*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87964-1

Client Sample ID: Sample 6
Date Collected: 02/28/14 12:00
Date Received: 03/01/14 09:09
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-87964-6
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1770	U H	11800	1770	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,1,2,2-Tetrachloroethane	3600	U H	11800	3600	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,1,2-Trichloro-1,2,2-trifluoroethane	1830	U H	11800	1830	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,1,2-Trichloroethane	**3500**	**J H**	11800	3190	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,1-Dichloroethane	**13700**	**H**	11800	1530	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,1-Dichloroethene	**3920**	**J H**	11800	2010	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,2,4-Trichlorobenzene	5780	U H	59000	5780	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,2,4-Trimethylbenzene	3720	U H	11800	3720	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1890	U H	11800	1890	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,2-Dichlorobenzene	4130	U H	11800	4130	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,2-Dichloroethane	**1410000**	**H**	11800	2770	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,2-Dichloropropane	3070	U H	11800	3070	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,3,5-Trimethylbenzene	3830	U H	11800	3830	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,3-Dichlorobenzene	3830	U H	11800	3830	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,4-Dichlorobenzene	3780	U H	11800	3780	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Benzene	3300	U H	11800	3300	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Benzyl chloride	4600	U H	23600	4600	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Bromomethane	1890	U H	11800	1890	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Carbon tetrachloride	2240	U H	11800	2240	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Chlorobenzene	2890	U H	11800	2890	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Chloroethane	2060	U H	11800	2060	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Chloroform	**146000**	**H**	11800	2240	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Chloromethane	9440	U H	29500	9440	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
cis-1,2-Dichloroethene	3540	U H	11800	3540	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
cis-1,3-Dichloropropene	4370	U H	11800	4370	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Dichlorodifluoromethane	4010	U H	11800	4010	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Ethylbenzene	4010	U H	11800	4010	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
1,2-Dibromoethane (EDB)	2600	U H	11800	2600	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Hexachlorobutadiene	4600	U H	59000	4600	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Methylene Chloride	7670	U H	29500	7670	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
m-Xylene & p-Xylene	7080	U H	11800	7080	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
o-Xylene	3600	U H	11800	3600	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Styrene	3420	U H	11800	3420	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Tetrachloroethene	**2740**	**J H**	11800	2360	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Toluene	7080	U H	11800	7080	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
trans-1,3-Dichloropropene	2830	U H	11800	2830	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Trichloroethene	**5010**	**J H**	11800	2120	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Trichlorofluoromethane	1420	U H	11800	1420	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9
Vinyl chloride	**46900**	**H**	11800	4190	ppb v/v		03/07/14 17:44	03/12/14 01:28	3244.9

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*	*03/07/14 17:44*	*03/12/14 01:28*	*3244.9*

Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87964-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

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

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: Perry / Travis Clawson	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-26712-9288.1
Client Contact: Mr. Kevin Dworsky	Phone: 713-725-1442	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 1
Company: Pastor, Behling & Wheeler LLC				Job #: 3307
Address: 620 E. Airline	Due Date Requested:			
City: Victoria	TAT Requested (days): 10 days			
State, Zip: TX, 77901				
Phone:	PO #: Purchase Order not required			
Email: kevin.dworsky@pbwllc.com	WO #:			
Project Name: Formosa Plastic Pilot Test- Gainco	Project #: 60004994 3307			
Site: Formosa Plastics	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	Moisture - Local Method	TO-15 (TestAmerica Knoxville)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Sample 1	2-27-14	1630	G	A	N	N			X	1	
Sample 2	2-27-14	1725							X	1	
Sample 3	2-27-14	1820							X	1	
Sample 4	2-27-14	2330							X	1	
Sample 5	2-28-14	0700							X	1	
Sample 6	2-28-14	1200							X	1	

600-87964 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Standard RA/QC

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 2-28-14	Company: PBW	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/01/14 0909	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-88118-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

For:
Pastor, Behling & Wheeler LLC
620 E. Airline
Victoria, Texas 77901

Attn: Mr. Kevin Dworsky

Authorized for release by:
3/19/2014 4:17:23 PM
Sophia Shah, Project Management Assistant I
sophia.shah@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88118-1

Client Sample ID: Sample #7
Date Collected: 02/28/14 17:00
Date Received: 03/04/14 11:41
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88118-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1870	U H	12500	1870	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,1,2,2-Tetrachloroethane	3800	U H	12500	3800	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,1,2-Trichloro-1,2,2-trifluoroethane	1930	U H	12500	1930	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,1,2-Trichloroethane	**4400**	**J H**	12500	3370	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,1-Dichloroethane	**15200**	**H**	12500	1620	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,1-Dichloroethene	**3700**	**J H**	12500	2120	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,2,4-Trichlorobenzene	6110	U H	62300	6110	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,2,4-Trimethylbenzene	3930	U H	12500	3930	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1990	U H	12500	1990	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,2-Dichlorobenzene	4360	U H	12500	4360	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,2-Dichloroethane	**1570000**	**H**	12500	2930	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,2-Dichloropropane	3240	U H	12500	3240	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,3,5-Trimethylbenzene	4050	U H	12500	4050	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,3-Dichlorobenzene	4050	U H	12500	4050	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,4-Dichlorobenzene	3990	U H	12500	3990	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Benzene	**4740**	**J H**	12500	3490	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Benzyl chloride	4860	U H	24900	4860	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Bromomethane	1990	U H	12500	1990	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Carbon tetrachloride	2370	U H	12500	2370	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Chlorobenzene	3050	U H	12500	3050	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Chloroethane	2180	U H	12500	2180	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Chloroform	**157000**	**H**	12500	2370	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Chloromethane	9970	U H	31200	9970	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
cis-1,2-Dichloroethene	3740	U H	12500	3740	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
cis-1,3-Dichloropropene	4610	U H	12500	4610	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Dichlorodifluoromethane	4240	U H	12500	4240	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Ethylbenzene	4240	U H	12500	4240	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
1,2-Dibromoethane (EDB)	2740	U H	12500	2740	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Hexachlorobutadiene	4860	U H	62300	4860	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Methylene Chloride	8100	U H	31200	8100	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
m-Xylene & p-Xylene	7480	U H	12500	7480	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
o-Xylene	3800	U H	12500	3800	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Styrene	3620	U H	12500	3620	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Tetrachloroethene	**3800**	**J H**	12500	2490	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Toluene	7480	U H	12500	7480	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
trans-1,3-Dichloropropene	2990	U H	12500	2990	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Trichloroethene	**6330**	**J H**	12500	2240	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Trichlorofluoromethane	1500	U H	12500	1500	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57
Vinyl chloride	**40500**	**H**	12500	4430	ppb v/v		03/07/14 16:50	03/11/14 19:23	3428.57

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*	*03/07/14 16:50*	*03/11/14 19:23*	*3428.57*

Client Sample Results

TestAmerica Job ID: 600-88118-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Lab Sample ID: 600-88118-2
Matrix: Air

Client Sample ID: Sample #8
Date Collected: 02/28/14 22:00
Date Received: 03/04/14 11:41
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1770	U H	11800	1770	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,1,2,2-Tetrachloroethane	3600	U H	11800	3600	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,1,2-Trichloro-1,2,2-trifluoroethane	1830	U H	11800	1830	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,1,2-Trichloroethane	**3240**	**J H**	11800	3190	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,1-Dichloroethane	**11900**	**H**	11800	1530	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,1-Dichloroethene	**2480**	**J H**	11800	2010	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,2,4-Trichlorobenzene	5780	U H	59000	5780	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,2,4-Trimethylbenzene	3720	U H	11800	3720	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1890	U H	11800	1890	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,2-Dichlorobenzene	4130	U H	11800	4130	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,2-Dichloroethane	**1300000**	**H**	11800	2770	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,2-Dichloropropane	3070	U H	11800	3070	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,3,5-Trimethylbenzene	3830	U H	11800	3830	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,3-Dichlorobenzene	3830	U H	11800	3830	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,4-Dichlorobenzene	3780	U H	11800	3780	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Benzene	**3470**	**J H**	11800	3300	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Benzyl chloride	4600	U H	23600	4600	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Bromomethane	1890	U H	11800	1890	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Carbon tetrachloride	2240	U H	11800	2240	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Chlorobenzene	2890	U H	11800	2890	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Chloroethane	2060	U H	11800	2060	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Chloroform	**118000**	**H**	11800	2240	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Chloromethane	9440	U H	29500	9440	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
cis-1,2-Dichloroethene	3540	U H	11800	3540	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
cis-1,3-Dichloropropene	4370	U H	11800	4370	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Dichlorodifluoromethane	4010	U H	11800	4010	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Ethylbenzene	4010	U H	11800	4010	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
1,2-Dibromoethane (EDB)	2600	U H	11800	2600	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Hexachlorobutadiene	4600	U H	59000	4600	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Methylene Chloride	7670	U H	29500	7670	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
m-Xylene & p-Xylene	7080	U H	11800	7080	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
o-Xylene	3600	U H	11800	3600	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Styrene	3420	U H	11800	3420	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Tetrachloroethene	**2580**	**J H**	11800	2360	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Toluene	7080	U H	11800	7080	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
trans-1,3-Dichloropropene	2830	U H	11800	2830	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Trichloroethene	**4720**	**J H**	11800	2120	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Trichlorofluoromethane	1420	U H	11800	1420	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9
Vinyl chloride	**31800**	**H**	11800	4190	ppb v/v		03/07/14 16:50	03/11/14 20:09	3244.9

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*	*03/07/14 16:50*	*03/11/14 20:09*	*3244.9*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88118-1

Client Sample ID: Sample #9

Date Collected: 03/01/14 10:30
Date Received: 03/04/14 11:41
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88118-3
Matrix: Air

7

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1790	U H	11900	1790	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,1,2,2-Tetrachloroethane	3640	U H	11900	3640	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,1,2-Trichloro-1,2,2-trifluoroethane	1850	U H	11900	1850	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,1,2-Trichloroethane	**7420**	**J H**	11900	3230	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,1-Dichloroethane	**16800**	**H**	11900	1550	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,1-Dichloroethene	**3760**	**J H**	11900	2030	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,2,4-Trichlorobenzene	5850	U H	59700	5850	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,2,4-Trimethylbenzene	3760	U H	11900	3760	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1910	U H	11900	1910	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,2-Dichlorobenzene	4180	U H	11900	4180	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,2-Dichloroethane	**2190000**	**H**	11900	2810	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,2-Dichloropropane	3110	U H	11900	3110	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,3,5-Trimethylbenzene	3880	U H	11900	3880	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,3-Dichlorobenzene	3880	U H	11900	3880	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,4-Dichlorobenzene	3820	U H	11900	3820	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Benzene	**5560**	**J H**	11900	3350	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Benzyl chloride	4660	U H	23900	4660	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Bromomethane	1910	U H	11900	1910	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Carbon tetrachloride	2270	U H	11900	2270	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Chlorobenzene	2930	U H	11900	2930	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Chloroethane	2090	U H	11900	2090	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Chloroform	**170000**	**H**	11900	2270	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Chloromethane	9560	U H	29900	9560	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
cis-1,2-Dichloroethene	3580	U H	11900	3580	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
cis-1,3-Dichloropropene	4420	U H	11900	4420	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Dichlorodifluoromethane	4060	U H	11900	4060	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Ethylbenzene	4060	U H	11900	4060	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
1,2-Dibromoethane (EDB)	2630	U H	11900	2630	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Hexachlorobutadiene	4660	U H	59700	4660	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Methylene Chloride	7770	U H	29900	7770	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
m-Xylene & p-Xylene	7170	U H	11900	7170	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
o-Xylene	3640	U H	11900	3640	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Styrene	3460	U H	11900	3460	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Tetrachloroethene	**4200**	**J H**	11900	2390	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Toluene	7170	U H	11900	7170	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
trans-1,3-Dichloropropene	2870	U H	11900	2870	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Trichloroethene	**6140**	**J H**	11900	2150	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Trichlorofluoromethane	1430	U H	11900	1430	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71
Vinyl chloride	**36800**	**H**	11900	4240	ppb v/v		03/07/14 16:50	03/11/14 20:55	3285.71

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*	*03/07/14 16:50*	*03/11/14 20:55*	*3285.71*

Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88118-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

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

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

3/19/2014

Client Information	Sampler: Perry / Travis Clausen	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-26712-9288.1
Client Contact: Mr. Kevin Dworsky	Phone: 713-725-1442	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 1
Company: Pastor, Behling & Wheeler LLC				Job #: 3307
Address: 620 E. Airline	Due Date Requested:			
City: Victoria	TAT Requested (days): 10 days			
State, Zip: TX, 77901				
Phone:	PO #: Purchase Order not required			
Email: kevin.dworsky@pbwllc.com	WO #:			
Project Name: Formosa Plastic Pilot Test- Gainco	Project #: 60004994 3307			
Site: Formosa Plastics	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	Moisture - Local Method	TO-15 (TestAmerica Knoxville)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Sample # 7	2-28	1700	G	A	N	N			✓	1	
Sample # 8	2-28	2200	1	1	N	N			✓	1	
Sample # 9	3-1	1030	1	1	N	N			✓	1	

600-88118 Chain of Custody

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify): Standard QA/QC

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by:	Date/Time: ~~2-28-14~~ 3-1-14	Company: PBW	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

ATTACHMENT 5

Certified Laboratory Reports: AOC-2 Soil Vapor

PO Box 309 • Portland, TX 78374 | Tel: 361.643.4378 | Fax: 866.306.0436
tnix@gaincoinc.com | www.gaincoinc.com

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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Tel: (713)690-4444

TestAmerica Job ID: 600-88460-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

For:
Pastor, Behling & Wheeler LLC
620 E. Airline
Victoria, Texas 77901

Attn: Mr. Kevin Dworsky

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

Client Sample Results

TestAmerica Job ID: 600-88460-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Lab Sample ID: 600-88460-1
Matrix: Air

Client Sample ID: Sample #1

Date Collected: 03/05/12 14:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	808	U H	5390	808	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,1,2,2-Tetrachloroethane	1640	U H	5390	1640	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,1,2-Trichloro-1,2,2-trifluoroethane	835	U H	5390	835	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,1,2-Trichloroethane	1450	U H	5390	1450	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,1-Dichloroethane	**1940**	**J H**	5390	700	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,1-Dichloroethene	916	U H	5390	916	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,2,4-Trichlorobenzene	2640	U H	26900	2640	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,2,4-Trimethylbenzene	1700	U H	5390	1700	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	862	U H	5390	862	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,2-Dichlorobenzene	1890	U H	5390	1890	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,2-Dichloroethane	**274000**	**H**	5390	1270	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,2-Dichloropropane	1400	U H	5390	1400	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,3,5-Trimethylbenzene	1750	U H	5390	1750	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,3-Dichlorobenzene	1750	U H	5390	1750	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,4-Dichlorobenzene	1720	U H	5390	1720	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Benzene	1510	U H	5390	1510	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Benzyl chloride	2100	U H	10800	2100	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Bromomethane	862	U H	5390	862	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Carbon tetrachloride	1020	U H	5390	1020	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Chlorobenzene	1320	U H	5390	1320	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Chloroethane	943	U H	5390	943	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Chloroform	**21300**	**H**	5390	1020	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Chloromethane	4310	U H	13500	4310	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
cis-1,2-Dichloroethene	1620	U H	5390	1620	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
cis-1,3-Dichloropropene	1990	U H	5390	1990	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Dichlorodifluoromethane	1830	U H	5390	1830	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Ethylbenzene	1830	U H	5390	1830	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
1,2-Dibromoethane (EDB)	1190	U H	5390	1190	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Hexachlorobutadiene	2100	U H	26900	2100	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Methylene Chloride	3500	U H	13500	3500	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
m-Xylene & p-Xylene	3230	U H	5390	3230	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
o-Xylene	1640	U H	5390	1640	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Styrene	1560	U H	5390	1560	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Tetrachloroethene	1080	U H	5390	1080	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Toluene	3230	U H	5390	3230	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
trans-1,3-Dichloropropene	1290	U H	5390	1290	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Trichloroethene	**1000**	**J H**	5390	970	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Trichlorofluoromethane	647	U H	5390	647	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35
Vinyl chloride	1910	U H	5390	1910	ppb v/v		03/08/14 12:00	03/11/14 14:02	3367.35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*	*03/08/14 12:00*	*03/11/14 14:02*	*3367.35*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88460-1

Client Sample ID: Sample #2

Lab Sample ID: 600-88460-2

Date Collected: 03/05/12 15:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	6.07	U H	40.4	6.07	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,1,2,2-Tetrachloroethane	12.3	U H	40.4	12.3	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,1,2-Trichloro-1,2,2-trifluoroethane	6.27	U H	40.4	6.27	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,1,2-Trichloroethane	**133**	**H**	40.4	10.9	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,1-Dichloroethane	**83.7**	**H**	40.4	5.26	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,1-Dichloroethene	**10.9**	**J H**	40.4	6.87	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,2,4-Trichlorobenzene	19.8	U H	202	19.8	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,2,4-Trimethylbenzene	**31.3**	**J H**	40.4	12.7	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,2-Dichloro-1,1,2,2-tetrafluoroethane	6.47	U H	40.4	6.47	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,2-Dichlorobenzene	14.2	U H	40.4	14.2	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,2-Dichloroethane	**2580**	**H**	40.4	9.50	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,2-Dichloropropane	10.5	U H	40.4	10.5	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,3,5-Trimethylbenzene	13.1	U H	40.4	13.1	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,3-Dichlorobenzene	13.1	U H	40.4	13.1	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,4-Dichlorobenzene	12.9	U H	40.4	12.9	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Benzene	**77.0**	**H**	40.4	11.3	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Benzyl chloride	15.8	U H	80.9	15.8	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Bromomethane	6.47	U H	40.4	6.47	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Carbon tetrachloride	7.68	U H	40.4	7.68	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Chlorobenzene	**28.3**	**J H**	40.4	9.91	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Chloroethane	7.08	U H	40.4	7.08	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Chloroform	**157**	**H**	40.4	7.68	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Chloromethane	32.4	U H	101	32.4	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
cis-1,2-Dichloroethene	**45.4**	**H**	40.4	12.1	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
cis-1,3-Dichloropropene	15.0	U H	40.4	15.0	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Dichlorodifluoromethane	13.7	U H	40.4	13.7	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Ethylbenzene	13.7	U H	40.4	13.7	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
1,2-Dibromoethane (EDB)	8.90	U H	40.4	8.90	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Hexachlorobutadiene	15.8	U H	202	15.8	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Methylene Chloride	26.3	U H	101	26.3	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
m-Xylene & p-Xylene	**31.3**	**J H**	40.4	24.3	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
o-Xylene	**17.7**	**J H**	40.4	12.3	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Styrene	11.7	U H	40.4	11.7	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Tetrachloroethene	**471**	**H**	40.4	8.09	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Toluene	**31.7**	**J H**	40.4	24.3	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
trans-1,3-Dichloropropene	9.71	U H	40.4	9.71	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Trichloroethene	**113**	**H**	40.4	7.28	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Trichlorofluoromethane	4.85	U H	40.4	4.85	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43
Vinyl chloride	**149**	**H**	40.4	14.4	ppb v/v		03/08/14 12:00	03/11/14 14:48	131.43

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*60 - 140*	*03/08/14 12:00*	*03/11/14 14:48*	*131.43*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88460-1

Client Sample ID: Sample #3

Lab Sample ID: 600-88460-3
Matrix: Air

Date Collected: 03/05/12 16:30
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U H	4.00	0.600	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,1,2,2-Tetrachloroethane	1.22	U H	4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U H	4.00	0.620	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,1,2-Trichloroethane	**17.7**	**H**	4.00	1.08	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,1-Dichloroethane	**41.5**	**H**	4.00	0.520	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,1-Dichloroethene	**5.28**	**H**	4.00	0.680	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,2,4-Trichlorobenzene	1.96	U H	20.0	1.96	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,2,4-Trimethylbenzene	**18.8**	**H**	4.00	1.26	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U H	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,2-Dichlorobenzene	1.40	U H	4.00	1.40	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,2-Dichloroethane	**794**	**H**	4.00	0.940	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,2-Dichloropropane	1.04	U H	4.00	1.04	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,3,5-Trimethylbenzene	**5.75**	**H**	4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,3-Dichlorobenzene	1.30	U H	4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,4-Dichlorobenzene	1.28	U H	4.00	1.28	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Benzene	**40.5**	**H**	4.00	1.12	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Benzyl chloride	1.56	U H	8.00	1.56	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Bromomethane	0.640	U H	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Carbon tetrachloride	0.760	U H	4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Chlorobenzene	**1.90**	**J H**	4.00	0.980	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Chloroethane	**1.33**	**J H**	4.00	0.700	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Chloroform	**75.9**	**H**	4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Chloromethane	3.20	U H	10.0	3.20	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
cis-1,2-Dichloroethene	**23.3**	**H**	4.00	1.20	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
cis-1,3-Dichloropropene	1.48	U H	4.00	1.48	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Dichlorodifluoromethane	1.36	U H	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Ethylbenzene	**4.50**	**H**	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
1,2-Dibromoethane (EDB)	0.880	U H	4.00	0.880	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Hexachlorobutadiene	1.56	U H	20.0	1.56	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Methylene Chloride	**27.7**	**H**	10.0	2.60	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
m-Xylene & p-Xylene	**19.3**	**H**	4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
o-Xylene	**9.84**	**H**	4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Styrene	1.16	U H	4.00	1.16	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Tetrachloroethene	**24.2**	**H**	4.00	0.800	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Toluene	**34.9**	**H**	4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
trans-1,3-Dichloropropene	0.960	U H	4.00	0.960	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Trichloroethene	**47.1**	**H**	4.00	0.720	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Trichlorofluoromethane	0.480	U H	4.00	0.480	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78
Vinyl chloride	**78.4**	**H**	4.00	1.42	ppb v/v		03/08/14 12:00	03/11/14 15:34	6.78

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*	*03/08/14 12:00*	*03/11/14 15:34*	*6.78*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88460-1

Client Sample ID: Sample #4
Date Collected: 03/05/12 22:30
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88460-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U H	4.00	0.600	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,1,2,2-Tetrachloroethane	1.22	U H	4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U H	4.00	0.620	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,1,2-Trichloroethane	**17.2**	**H**	4.00	1.08	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,1-Dichloroethane	**53.6**	**H**	4.00	0.520	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,1-Dichloroethene	**5.92**	**H**	4.00	0.680	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,2,4-Trichlorobenzene	1.96	U H	20.0	1.96	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,2,4-Trimethylbenzene	**9.09**	**H**	4.00	1.26	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U H	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,2-Dichlorobenzene	1.40	U H	4.00	1.40	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,2-Dichloroethane	**358**	**H**	4.00	0.940	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,2-Dichloropropane	1.04	U H	4.00	1.04	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,3,5-Trimethylbenzene	**3.09**	**J H**	4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,3-Dichlorobenzene	1.30	U H	4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,4-Dichlorobenzene	1.28	U H	4.00	1.28	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Benzene	**52.8**	**H**	4.00	1.12	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Benzyl chloride	1.56	U H	8.00	1.56	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Bromomethane	0.640	U H	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Carbon tetrachloride	0.760	U H	4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Chlorobenzene	**1.51**	**J H**	4.00	0.980	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Chloroethane	**1.75**	**J H**	4.00	0.700	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Chloroform	**49.0**	**H**	4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Chloromethane	3.20	U H	10.0	3.20	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
cis-1,2-Dichloroethene	**28.4**	**H**	4.00	1.20	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
cis-1,3-Dichloropropene	1.48	U H	4.00	1.48	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Dichlorodifluoromethane	1.36	U H	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Ethylbenzene	**2.86**	**J H**	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
1,2-Dibromoethane (EDB)	0.880	U H	4.00	0.880	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Hexachlorobutadiene	1.56	U H	20.0	1.56	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Methylene Chloride	**14.0**	**H**	10.0	2.60	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
m-Xylene & p-Xylene	**13.3**	**H**	4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
o-Xylene	**5.72**	**H**	4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Styrene	1.16	U H	4.00	1.16	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Tetrachloroethene	**21.9**	**H**	4.00	0.800	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Toluene	**14.0**	**H**	4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
trans-1,3-Dichloropropene	0.960	U H	4.00	0.960	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Trichloroethene	**52.4**	**H**	4.00	0.720	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Trichlorofluoromethane	0.480	U H	4.00	0.480	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67
Vinyl chloride	**114**	**H**	4.00	1.42	ppb v/v		03/08/14 12:00	03/11/14 16:19	3.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*	*03/08/14 12:00*	*03/11/14 16:19*	*3.67*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88460-1

Client Sample ID: Sample #5

Lab Sample ID: 600-88460-5
Matrix: Air

Date Collected: 03/06/14 09:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U	4.00	0.600	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,1,2,2-Tetrachloroethane	1.22	U	4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U	4.00	0.620	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,1,2-Trichloroethane	**10.0**		4.00	1.08	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,1-Dichloroethane	**33.9**		4.00	0.520	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,1-Dichloroethene	**4.31**		4.00	0.680	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,2,4-Trichlorobenzene	1.96	U	20.0	1.96	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,2,4-Trimethylbenzene	**6.39**		4.00	1.26	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,2-Dichlorobenzene	1.40	U	4.00	1.40	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,2-Dichloroethane	**530**		4.00	0.940	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,2-Dichloropropane	1.04	U	4.00	1.04	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,3,5-Trimethylbenzene	**3.04**	**J**	4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,3-Dichlorobenzene	1.30	U	4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,4-Dichlorobenzene	1.28	U	4.00	1.28	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Benzene	**32.3**		4.00	1.12	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Benzyl chloride	1.56	U	8.00	1.56	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Bromomethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Carbon tetrachloride	0.760	U	4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Chlorobenzene	0.980	U	4.00	0.980	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Chloroethane	**0.972**	**J**	4.00	0.700	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Chloroform	**69.2**		4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Chloromethane	3.20	U	10.0	3.20	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
cis-1,2-Dichloroethene	**14.4**		4.00	1.20	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
cis-1,3-Dichloropropene	1.48	U	4.00	1.48	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Dichlorodifluoromethane	1.36	U	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Ethylbenzene	**2.02**	**J**	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
1,2-Dibromoethane (EDB)	0.880	U	4.00	0.880	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Hexachlorobutadiene	1.56	U	20.0	1.56	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Methylene Chloride	**36.4**		10.0	2.60	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
m-Xylene & p-Xylene	**8.83**		4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
o-Xylene	**3.63**	**J**	4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Styrene	1.16	U	4.00	1.16	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Tetrachloroethene	**11.9**		4.00	0.800	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Toluene	**21.4**		4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
trans-1,3-Dichloropropene	0.960	U	4.00	0.960	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Trichloroethene	**26.9**		4.00	0.720	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Trichlorofluoromethane	0.480	U	4.00	0.480	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05
Vinyl chloride	**68.7**		4.00	1.42	ppb v/v		03/08/14 12:00	03/11/14 17:05	6.05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*	*03/08/14 12:00*	*03/11/14 17:05*	*6.05*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88460-1

Client Sample ID: Sample #6
Date Collected: 03/06/14 12:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88460-6
Matrix: Air

7

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U	4.00	0.600	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,1,2,2-Tetrachloroethane	1.22	U	4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U	4.00	0.620	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,1,2-Trichloroethane	**11.4**		4.00	1.08	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,1-Dichloroethane	**34.3**		4.00	0.520	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,1-Dichloroethene	**4.02**		4.00	0.680	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,2,4-Trichlorobenzene	1.96	U	20.0	1.96	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,2,4-Trimethylbenzene	**18.0**		4.00	1.26	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,2-Dichlorobenzene	1.40	U	4.00	1.40	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,2-Dichloropropane	1.04	U	4.00	1.04	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,3,5-Trimethylbenzene	**5.05**		4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,3-Dichlorobenzene	1.30	U	4.00	1.30	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,4-Dichlorobenzene	1.28	U	4.00	1.28	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Benzene	**31.2**		4.00	1.12	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Benzyl chloride	1.56	U	8.00	1.56	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Bromomethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Carbon tetrachloride	0.760	U	4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Chlorobenzene	0.980	U	4.00	0.980	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Chloroethane	**0.936**	**J**	4.00	0.700	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Chloroform	**118**		4.00	0.760	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Chloromethane	3.20	U	10.0	3.20	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
cis-1,2-Dichloroethene	**12.5**		4.00	1.20	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
cis-1,3-Dichloropropene	1.48	U	4.00	1.48	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Dichlorodifluoromethane	1.36	U	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Ethylbenzene	**3.65**	**J**	4.00	1.36	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
1,2-Dibromoethane (EDB)	0.880	U	4.00	0.880	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Hexachlorobutadiene	1.56	U	20.0	1.56	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Methylene Chloride	**83.0**		10.0	2.60	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
m-Xylene & p-Xylene	**17.4**		4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
o-Xylene	**7.95**		4.00	1.22	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Styrene	1.16	U	4.00	1.16	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Tetrachloroethene	**11.3**		4.00	0.800	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Toluene	**43.3**		4.00	2.40	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
trans-1,3-Dichloropropene	0.960	U	4.00	0.960	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Trichloroethene	**22.7**		4.00	0.720	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Trichlorofluoromethane	0.480	U	4.00	0.480	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29
Vinyl chloride	**45.8**		4.00	1.42	ppb v/v		03/08/14 12:00	03/11/14 18:36	34.29

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*	*03/08/14 12:00*	*03/11/14 18:36*	*34.29*

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**1130**		9.14	2.15	ppb v/v		03/08/14 12:00	03/12/14 06:53	34.29

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*	*03/08/14 12:00*	*03/12/14 06:53*	*34.29*

Definitions/Glossary

TestAmerica Job ID: 600-88460-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

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

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-88460 Chain of Custody

Client Information

Client Contact: Mr. Kevin Dworsky
Company: Pastor, Behling & Wheeler LLC
Address: 620 E. Airline
City: Victoria
State, Zip: TX, 77901
Phone:
Email: kevin.dworsky@pbwllc.com
Project Name: Formosa Plastic Pilot Test / Bauco Area 2
Site: Formosa plastics

Sampler: Perry / Travis Chuvin
Phone: 713-725-1442
Lab PM: Kudchadkar, Sachin G
E-Mail: sachin.kudchadkar@testamericainc.com
Carrier Tracking No(s):
COC No.: 600-26732-9296.1
Page: Page 1 of 1
Job #: 3307

Due Date Requested:
TAT Requested (days): 10 day
PO #: Purchase Order not required
WO #:
Project #: 60005001 3307
SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wastewater, Solid, Oil, Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	SM5310D - Total Organic Carbon	2320B - Alkalinity	300.0_28D, 300_48HR- Sulfate, Nitrate	TO-15 TA Knoxville	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
Sample #1	3-5-14	1400	G	A	N	N					✓	1	Received @ ambient
Sample #2	3-5-14	1500	G	A							✓	1	Custody seal intact
Sample #3	3-5-14	1630	G	A							✓	1	Cooler
Sample #4	3-5-14	2230	G	A							✓	1	KL 3/8/14
Sample #5	3-6-14	0900	G	A							✓	1	Fedex PO
Sample #6	3-6-14	1200	G	A	N	N					✓	1	trk#5948 4116 2700
													6 tedlar

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify): Standard QA/QC

Special Instructions/QC Requirements.

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	3-6-14 1700	PBW	[signature]	3/8/14 0930	
[signature]	3-7-14 13:01		Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-88461-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

For:
Pastor, Behling & Wheeler LLC
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Results relate only to the items tested and the sample(s) as received by the laboratory.

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88461-1

Client Sample ID: Sample #7
Date Collected: 03/06/14 17:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88461-1
Matrix: Air

7

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U	4.00	0.600	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,1,2,2-Tetrachloroethane	1.22	U	4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U	4.00	0.620	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,1,2-Trichloroethane	**18.2**		4.00	1.08	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,1-Dichloroethane	**48.5**		4.00	0.520	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,1-Dichloroethene	**4.51**		4.00	0.680	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,2,4-Trichlorobenzene	1.96	U	20.0	1.96	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,2,4-Trimethylbenzene	**18.4**		4.00	1.26	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,2-Dichlorobenzene	1.40	U	4.00	1.40	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,2-Dichloroethane	**337**		4.00	0.940	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,2-Dichloropropane	1.04	U	4.00	1.04	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,3,5-Trimethylbenzene	**4.86**		4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,3-Dichlorobenzene	1.30	U	4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,4-Dichlorobenzene	1.28	U	4.00	1.28	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Benzene	**62.1**		4.00	1.12	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Benzyl chloride	1.56	U	8.00	1.56	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Bromomethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Carbon tetrachloride	0.760	U	4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Chlorobenzene	**1.31**	**J**	4.00	0.980	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Chloroethane	**1.32**	**J**	4.00	0.700	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Chloroform	**48.3**		4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Chloromethane	3.20	U	10.0	3.20	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
cis-1,2-Dichloroethene	**23.9**		4.00	1.20	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
cis-1,3-Dichloropropene	1.48	U	4.00	1.48	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Dichlorodifluoromethane	1.36	U	4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Ethylbenzene	**3.59**	**J**	4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
1,2-Dibromoethane (EDB)	0.880	U	4.00	0.880	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Hexachlorobutadiene	1.56	U	20.0	1.56	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Methylene Chloride	**10.6**		10.0	2.60	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
m-Xylene & p-Xylene	**18.1**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
o-Xylene	**7.73**		4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Styrene	1.16	U	4.00	1.16	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Tetrachloroethene	**17.3**		4.00	0.800	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Toluene	**14.0**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
trans-1,3-Dichloropropene	0.960	U	4.00	0.960	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Trichloroethene	**46.9**		4.00	0.720	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Trichlorofluoromethane	0.480	U	4.00	0.480	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69
Vinyl chloride	**88.6**		4.00	1.42	ppb v/v		03/08/14 12:00	03/12/14 18:14	34.69

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*	*03/08/14 12:00*	*03/12/14 18:14*	*34.69*

Client Sample Results

TestAmerica Job ID: 600-88461-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Lab Sample ID: 600-88461-2
Matrix: Air

Client Sample ID: Sample #8
Date Collected: 03/06/14 22:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U	4.00	0.600	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,1,2,2-Tetrachloroethane	1.22	U	4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U	4.00	0.620	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,1,2-Trichloroethane	**18.7**		4.00	1.08	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,1-Dichloroethane	**48.2**		4.00	0.520	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,1-Dichloroethene	**4.84**		4.00	0.680	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,2,4-Trichlorobenzene	1.96	U	20.0	1.96	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,2,4-Trimethylbenzene	**41.2**		4.00	1.26	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,2-Dichlorobenzene	1.40	U	4.00	1.40	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,2-Dichloroethane	**372**		4.00	0.940	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,2-Dichloropropane	1.04	U	4.00	1.04	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,3,5-Trimethylbenzene	**11.5**		4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,3-Dichlorobenzene	1.30	U	4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,4-Dichlorobenzene	1.28	U	4.00	1.28	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Benzene	**63.2**		4.00	1.12	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Benzyl chloride	1.56	U	8.00	1.56	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Bromomethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Carbon tetrachloride	0.760	U	4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Chlorobenzene	**1.73**	**J**	4.00	0.980	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Chloroethane	**1.14**	**J**	4.00	0.700	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Chloroform	**49.5**		4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Chloromethane	3.20	U	10.0	3.20	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
cis-1,2-Dichloroethene	**24.1**		4.00	1.20	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
cis-1,3-Dichloropropene	1.48	U	4.00	1.48	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Dichlorodifluoromethane	1.36	U	4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Ethylbenzene	**7.54**		4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
1,2-Dibromoethane (EDB)	0.880	U	4.00	0.880	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Hexachlorobutadiene	1.56	U	20.0	1.56	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Methylene Chloride	**11.3**		10.0	2.60	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
m-Xylene & p-Xylene	**35.2**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
o-Xylene	**15.4**		4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Styrene	1.16	U	4.00	1.16	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Tetrachloroethene	**31.7**		4.00	0.800	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Toluene	**27.2**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
trans-1,3-Dichloropropene	0.960	U	4.00	0.960	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Trichloroethene	**49.3**		4.00	0.720	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Trichlorofluoromethane	**0.492**	**J**	4.00	0.480	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69
Vinyl chloride	**88.5**		4.00	1.42	ppb v/v		03/08/14 12:00	03/12/14 19:00	34.69

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*	*03/08/14 12:00*	*03/12/14 19:00*	*34.69*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88461-1

Client Sample ID: Sample #9
Date Collected: 03/07/14 07:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88461-3
Matrix: Air

7

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U	4.00	0.600	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,1,2,2-Tetrachloroethane	1.22	U	4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U	4.00	0.620	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,1,2-Trichloroethane	**19.1**		4.00	1.08	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,1-Dichloroethane	**47.4**		4.00	0.520	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,1-Dichloroethene	**4.20**		4.00	0.680	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,2,4-Trichlorobenzene	1.96	U	20.0	1.96	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,2,4-Trimethylbenzene	**62.4**		4.00	1.26	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,2-Dichlorobenzene	1.40	U	4.00	1.40	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,2-Dichloroethane	**359**		4.00	0.940	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,2-Dichloropropane	1.04	U	4.00	1.04	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,3,5-Trimethylbenzene	**17.7**		4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,3-Dichlorobenzene	1.30	U	4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,4-Dichlorobenzene	1.28	U	4.00	1.28	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Benzene	**59.9**		4.00	1.12	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Benzyl chloride	1.56	U	8.00	1.56	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Bromomethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Carbon tetrachloride	0.760	U	4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Chlorobenzene	**1.43**	**J**	4.00	0.980	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Chloroethane	**1.29**	**J**	4.00	0.700	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Chloroform	**48.6**		4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Chloromethane	**3.36**	**J**	10.0	3.20	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
cis-1,2-Dichloroethene	**23.2**		4.00	1.20	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
cis-1,3-Dichloropropene	1.48	U	4.00	1.48	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Dichlorodifluoromethane	1.36	U	4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Ethylbenzene	**9.90**		4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
1,2-Dibromoethane (EDB)	0.880	U	4.00	0.880	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Hexachlorobutadiene	1.56	U	20.0	1.56	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Methylene Chloride	**2.93**	**J**	10.0	2.60	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
m-Xylene & p-Xylene	**44.1**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
o-Xylene	**22.9**		4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Styrene	1.16	U	4.00	1.16	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Tetrachloroethene	**17.6**		4.00	0.800	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Toluene	**30.5**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
trans-1,3-Dichloropropene	0.960	U	4.00	0.960	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Trichloroethene	**42.5**		4.00	0.720	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Trichlorofluoromethane	0.480	U	4.00	0.480	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08
Vinyl chloride	**83.1**		4.00	1.42	ppb v/v		03/08/14 12:00	03/12/14 20:26	34.08

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*	*03/08/14 12:00*	*03/12/14 20:26*	*34.08*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88461-1

Client Sample ID: Sample #10
Date Collected: 03/07/14 12:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88461-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U	4.00	0.600	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,1,2,2-Tetrachloroethane	1.22	U	4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U	4.00	0.620	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,1,2-Trichloroethane	**8.72**		4.00	1.08	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,1-Dichloroethane	**21.7**		4.00	0.520	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,1-Dichloroethene	**2.20**	**J**	4.00	0.680	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,2,4-Trichlorobenzene	1.96	U	20.0	1.96	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,2,4-Trimethylbenzene	**36.7**		4.00	1.26	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,2-Dichlorobenzene	1.40	U	4.00	1.40	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,2-Dichloroethane	**167**		4.00	0.940	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,2-Dichloropropane	1.04	U	4.00	1.04	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,3,5-Trimethylbenzene	**12.6**		4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,3-Dichlorobenzene	1.30	U	4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,4-Dichlorobenzene	**2.44**	**J**	4.00	1.28	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Benzene	**28.7**		4.00	1.12	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Benzyl chloride	1.56	U	8.00	1.56	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Bromomethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Carbon tetrachloride	0.760	U	4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Chlorobenzene	0.980	U	4.00	0.980	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Chloroethane	**1.03**	**J**	4.00	0.700	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Chloroform	**22.4**		4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Chloromethane	3.20	U	10.0	3.20	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
cis-1,2-Dichloroethene	**10.8**		4.00	1.20	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
cis-1,3-Dichloropropene	1.48	U	4.00	1.48	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Dichlorodifluoromethane	1.36	U	4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Ethylbenzene	**4.17**		4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
1,2-Dibromoethane (EDB)	0.880	U	4.00	0.880	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Hexachlorobutadiene	1.56	U	20.0	1.56	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Methylene Chloride	**7.79**	**J**	10.0	2.60	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
m-Xylene & p-Xylene	**20.0**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
o-Xylene	**12.4**		4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Styrene	1.16	U	4.00	1.16	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Tetrachloroethene	**8.53**		4.00	0.800	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Toluene	**68.0**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
trans-1,3-Dichloropropene	0.960	U	4.00	0.960	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Trichloroethene	**20.8**		4.00	0.720	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Trichlorofluoromethane	0.480	U	4.00	0.480	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31
Vinyl chloride	**37.0**		4.00	1.42	ppb v/v		03/08/14 12:00	03/12/14 21:12	35.31

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*	*03/08/14 12:00*	*03/12/14 21:12*	*35.31*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88461-1

Client Sample ID: Sample #11
Date Collected: 03/07/14 14:00
Date Received: 03/08/14 13:01
Sample Container: Tedlar Bag 1L

Lab Sample ID: 600-88461-5
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.600	U	4.00	0.600	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,1,2,2-Tetrachloroethane	1.22	U	4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,1,2-Trichloro-1,2,2-trifluoroethane	0.620	U	4.00	0.620	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,1,2-Trichloroethane	**19.5**		4.00	1.08	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,1-Dichloroethane	**47.9**		4.00	0.520	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,1-Dichloroethene	**4.37**		4.00	0.680	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,2,4-Trichlorobenzene	1.96	U	20.0	1.96	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,2,4-Trimethylbenzene	**40.9**		4.00	1.26	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,2-Dichlorobenzene	1.40	U	4.00	1.40	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,2-Dichloroethane	**380**		4.00	0.940	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,2-Dichloropropane	1.04	U	4.00	1.04	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,3,5-Trimethylbenzene	**10.7**		4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,3-Dichlorobenzene	1.30	U	4.00	1.30	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,4-Dichlorobenzene	1.28	U	4.00	1.28	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Benzene	**63.7**		4.00	1.12	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Benzyl chloride	1.56	U	8.00	1.56	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Bromomethane	0.640	U	4.00	0.640	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Carbon tetrachloride	0.760	U	4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Chlorobenzene	**1.46**	**J**	4.00	0.980	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Chloroethane	**1.31**	**J**	4.00	0.700	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Chloroform	**49.7**		4.00	0.760	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Chloromethane	**4.06**	**J**	10.0	3.20	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
cis-1,2-Dichloroethene	**24.2**		4.00	1.20	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
cis-1,3-Dichloropropene	1.48	U	4.00	1.48	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Dichlorodifluoromethane	1.36	U	4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Ethylbenzene	**7.10**		4.00	1.36	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
1,2-Dibromoethane (EDB)	0.880	U	4.00	0.880	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Hexachlorobutadiene	1.56	U	20.0	1.56	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Methylene Chloride	**9.88**	**J**	10.0	2.60	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
m-Xylene & p-Xylene	**33.9**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
o-Xylene	**16.1**		4.00	1.22	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Styrene	1.16	U	4.00	1.16	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Tetrachloroethene	**18.8**		4.00	0.800	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Toluene	**25.2**		4.00	2.40	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
trans-1,3-Dichloropropene	0.960	U	4.00	0.960	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Trichloroethene	**49.6**		4.00	0.720	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Trichlorofluoromethane	0.480	U	4.00	0.480	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49
Vinyl chloride	**86.6**		4.00	1.42	ppb v/v		03/08/14 12:00	03/12/14 21:57	34.49

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*	*03/08/14 12:00*	*03/12/14 21:57*	*34.49*

Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88461-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

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

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-88461 Chain of Custody

Client Information	Sampler: Perry / Travis Chandler	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):
Client Contact: Mr Kevin Dworsky	Phone: 713-725-1442	E-Mail: sachin.kudchadkar@testamericainc.com	COC No: 600-26732-9296.1
Company: Pastor, Behling & Wheeler LLC			Page: Page 1 1
Address: 620 E Airline	Due Date Requested:		Job #: 3307
City: Victoria	TAT Requested (days): 10 days		
State, Zip: TX, 77901			
Phone:	PO #: Purchase Order not required		
Email: kevin.dworsky@pbwllc.com	WO #:		
Project Name: Formosa Plastic Pilot Test	Project #: 60005001 3307		
Site: Formosa Plastics	SSOW#:		

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=soil, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	SM5310D - Total Organic Carbon	2320B - Alkalinity	300.0_28Dy, 300_48Hr-Sulfate, Nitrate	TO-15 TA Knoxville	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
Sample #7	3-6-14	1700	G	A	N	N					✓	1	Received @ ambient
#8	3-6-14	2200	G	A	N	N					✓	1	No custody seal
#9	3-7-14	0700	G	A	N	N					✓	1	Lx
#10	3-7-14	1200	G	A	N	N					✓	1	KL 3/8/14
#11	3-7-14	1400	G	A	N	N					✓	1	fedex PO
													tr #8729 7529 8056
													Stedlars

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify): Standard QA/QC

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 3-7-14 1700	Company: PBW	Received by: [signature]	Date/Time: 3/8/14 0930	Company:	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:	

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

3/25/2014

ATTACHMENT 6

Certified Laboratory Reports
Soil and Groundwater Sampling

PO Box 309 • Portland, TX 78374 | Tel: 361.643.4378 | Fax: 866.306.0436
tnix@gaincoinc.com | www.gaincoinc.com

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-87928-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

For:
Pastor, Behling & Wheeler LLC
620 E. Airline
Victoria, Texas 77901

Attn: Mr. Kevin Dworsky

Authorized for release by:
3/18/2014 10:27:17 AM
Sophia Shah, Project Management Assistant I
sophia.shah@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Sample Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-87928-1	A1-EP1-1-2'	Solid	02/26/14 16:15	02/28/14 10:14
600-87928-2	A1-EP1-5-6'	Solid	02/26/14 16:20	02/28/14 10:14
600-87928-3	A1-EP1-10-11'	Solid	02/26/14 16:25	02/28/14 10:14
600-87928-4	A1-EP2-1-2'	Solid	02/26/14 16:35	02/28/14 10:14
600-87928-5	A1-EP2-5-6'	Solid	02/26/14 16:40	02/28/14 10:14
600-87928-6	A1-EP2-10-11'	Solid	02/26/14 16:45	02/28/14 10:14
600-87928-7	Trip Blank	Water	02/26/14 00:00	02/28/14 10:14

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Client Sample ID: A1-EP1-1-2'
Date Collected: 02/26/14 16:15
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87928-1
Matrix: Solid
Percent Solids: 82.2

7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00174	U	0.0105	0.00174	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Benzene	0.000662	U	0.00525	0.000662	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Chlorobromomethane	0.00187	U	0.00525	0.00187	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Bromoform	0.00144	U	0.00525	0.00144	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Bromomethane	0.000872	U	0.0105	0.000872	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
2-Butanone (MEK)	0.00200	U	0.0105	0.00200	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Carbon disulfide	0.000578	U	0.0105	0.000578	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Carbon tetrachloride	0.00119	U	0.00525	0.00119	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Dibromochloromethane	0.000987	U	0.00525	0.000987	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Chlorobenzene	0.00101	U	0.00525	0.00101	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Chloroethane	0.00147	U	0.0105	0.00147	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Chloroform	**0.0617**		0.00525	0.000693	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Chloromethane	0.00174	U	0.0105	0.00174	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,1-Dichloroethane	**0.00463**	**J**	0.00525	0.000914	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,2-Dichloroethane	**0.0165**		0.00525	0.000945	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,1-Dichloroethene	0.00128	U	0.00525	0.00128	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
cis-1,2-Dichloroethene	0.000872	U	0.00525	0.000872	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
trans-1,2-Dichloroethene	0.00120	U	0.00525	0.00120	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,2-Dichloropropane	0.000746	U	0.00525	0.000746	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
cis-1,3-Dichloropropene	0.000567	U	0.00525	0.000567	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
trans-1,3-Dichloropropene	0.000609	U	0.00525	0.000609	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Ethylbenzene	0.00107	U	0.00525	0.00107	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
2-Hexanone	0.00106	U	0.0105	0.00106	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Methylene Chloride	0.00230	U	0.0105	0.00230	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
4-Methyl-2-pentanone (MIBK)	0.00154	U	0.0105	0.00154	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Styrene	0.000746	U	0.00525	0.000746	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,1,2,2-Tetrachloroethane	0.000914	U	0.00525	0.000914	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Tetrachloroethene	**0.00416**	**J**	0.00525	0.000746	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Toluene	0.00145	U	0.00525	0.00145	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,1,1-Trichloroethane	0.000777	U	0.00525	0.000777	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,1,2-Trichloroethane	**0.00922**	**J**	0.0420	0.000767	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Trichloroethene	**0.00298**	**J**	0.00525	0.00147	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Vinyl acetate	0.000977	U	0.0105	0.000977	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Vinyl chloride	0.000945	U	0.0105	0.000945	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
o-Xylene	0.00119	U	0.00525	0.00119	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
m-Xylene & p-Xylene	0.00160	U	0.0105	0.00160	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Xylenes, Total	0.00119	U	0.00525	0.00119	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
Bromodichloromethane	**0.00706**		0.00525	0.000693	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1
1,2-Dichloroethene, Total	0.00200	U	0.0105	0.00200	mg/Kg	☼	03/02/14 10:00	03/03/14 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*114*		*50 - 130*	*03/02/14 10:00*	*03/03/14 18:01*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*03/02/14 10:00*	*03/03/14 18:01*	*1*
4-Bromofluorobenzene	*134*		*57 - 140*	*03/02/14 10:00*	*03/03/14 18:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*61 - 130*	*03/02/14 10:00*	*03/03/14 18:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18**		1.0	1.0	%			02/28/14 13:45	1
Percent Solids	**82**		1.0	1.0	%			02/28/14 13:45	1

Client Sample Results

TestAmerica Job ID: 600-87928-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Client Sample ID: A1-EP1-5-6'
Date Collected: 02/26/14 16:20
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87928-2
Matrix: Solid
Percent Solids: 82.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00185	U	0.0111	0.00185	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Benzene	0.000701	U	0.00557	0.000701	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Chlorobromomethane	0.00198	U	0.00557	0.00198	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Bromoform	0.00153	U	0.00557	0.00153	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Bromomethane	0.000924	U	0.0111	0.000924	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
2-Butanone (MEK)	0.00212	U	0.0111	0.00212	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Carbon disulfide	0.000612	U	0.0111	0.000612	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Carbon tetrachloride	0.00126	U	0.00557	0.00126	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Dibromochloromethane	0.00105	U	0.00557	0.00105	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Chlorobenzene	0.00107	U	0.00557	0.00107	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Chloroethane	0.00156	U	0.0111	0.00156	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Chloroform	**0.0611**		0.00557	0.000735	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Chloromethane	0.00185	U	0.0111	0.00185	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,1-Dichloroethane	**0.00501**	**J**	0.00557	0.000969	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,2-Dichloroethane	**0.0546**		0.00557	0.00100	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,1-Dichloroethene	0.00136	U	0.00557	0.00136	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
cis-1,2-Dichloroethene	0.000924	U	0.00557	0.000924	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
trans-1,2-Dichloroethene	**0.00196**	**J**	0.00557	0.00127	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,2-Dichloropropane	0.000790	U	0.00557	0.000790	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
cis-1,3-Dichloropropene	0.000601	U	0.00557	0.000601	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
trans-1,3-Dichloropropene	0.000646	U	0.00557	0.000646	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Ethylbenzene	0.00114	U	0.00557	0.00114	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
2-Hexanone	0.00112	U	0.0111	0.00112	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Methylene Chloride	0.00244	U	0.0111	0.00244	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
4-Methyl-2-pentanone (MIBK)	0.00164	U	0.0111	0.00164	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Styrene	0.000790	U	0.00557	0.000790	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,1,2,2-Tetrachloroethane	0.000969	U	0.00557	0.000969	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Tetrachloroethene	**0.00248**	**J**	0.00557	0.000790	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Toluene	0.00154	U	0.00557	0.00154	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,1,1-Trichloroethane	0.000824	U	0.00557	0.000824	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,1,2-Trichloroethane	**0.00880**	**J**	0.0445	0.000813	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Trichloroethene	**0.00257**	**J**	0.00557	0.00156	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Vinyl acetate	0.00104	U	0.0111	0.00104	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Vinyl chloride	0.00100	U	0.0111	0.00100	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
o-Xylene	0.00126	U	0.00557	0.00126	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
m-Xylene & p-Xylene	0.00169	U	0.0111	0.00169	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Xylenes, Total	0.00126	U	0.00557	0.00126	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
Bromodichloromethane	**0.00702**		0.00557	0.000735	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1
1,2-Dichloroethene, Total	0.00212	U	0.0111	0.00212	mg/Kg	☼	03/02/14 10:00	03/03/14 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*121*		*50 - 130*	*03/02/14 10:00*	*03/03/14 18:25*	*1*
Dibromofluoromethane	*108*		*68 - 140*	*03/02/14 10:00*	*03/03/14 18:25*	*1*
4-Bromofluorobenzene	*135*		*57 - 140*	*03/02/14 10:00*	*03/03/14 18:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*61 - 130*	*03/02/14 10:00*	*03/03/14 18:25*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17**		1.0	1.0	%			02/28/14 13:45	1
Percent Solids	**83**		1.0	1.0	%			02/28/14 13:45	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Client Sample ID: A1-EP1-10-11'
Date Collected: 02/26/14 16:25
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87928-3
Matrix: Solid
Percent Solids: 77.8

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Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00155	U *	0.00936	0.00155	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Benzene	**0.00200**	**J ***	0.00468	0.000589	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Chlorobromomethane	0.00167	U *	0.00468	0.00167	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Bromoform	0.00128	U	0.00468	0.00128	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Bromomethane	0.000777	U *	0.00936	0.000777	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
2-Butanone (MEK)	0.00178	U *	0.00936	0.00178	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Carbon disulfide	0.000515	U *	0.00936	0.000515	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Carbon tetrachloride	0.00106	U *	0.00468	0.00106	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Dibromochloromethane	0.000879	U *	0.00468	0.000879	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Chlorobenzene	**0.00172**	**J ***	0.00468	0.000898	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Chloroethane	0.00131	U *	0.00936	0.00131	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Chloromethane	0.00155	U *	0.00936	0.00155	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
1,2-Dichloroethane	**0.0593**	*	0.00468	0.000842	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
1,1-Dichloroethene	**0.0121**	*	0.00468	0.00114	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
1,2-Dichloropropane	0.000664	U *	0.00468	0.000664	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
cis-1,3-Dichloropropene	0.000505	U *	0.00468	0.000505	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
trans-1,3-Dichloropropene	0.000543	U *	0.00468	0.000543	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Ethylbenzene	0.000954	U *	0.00468	0.000954	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
2-Hexanone	0.000945	U *	0.00936	0.000945	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Methylene Chloride	**0.0194**	*	0.00936	0.00205	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
4-Methyl-2-pentanone (MIBK)	0.00138	U *	0.00936	0.00138	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Styrene	0.000664	U *	0.00468	0.000664	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
1,1,2,2-Tetrachloroethane	0.000814	U *	0.00468	0.000814	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Tetrachloroethene	**0.0432**	*	0.00468	0.000664	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Toluene	**0.00133**	**J ***	0.00468	0.00129	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
1,1,1-Trichloroethane	0.000692	U *	0.00468	0.000692	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Vinyl acetate	0.000870	U *	0.00936	0.000870	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Vinyl chloride	**0.0280**	*	0.00936	0.000842	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
o-Xylene	0.00106	U *	0.00468	0.00106	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
m-Xylene & p-Xylene	0.00142	U *	0.00936	0.00142	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Xylenes, Total	0.00106	U *	0.00468	0.00106	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1
Bromodichloromethane	**0.338**	**E ***	0.00468	0.000618	mg/Kg	☼	03/02/14 10:00	03/03/14 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*123*	*	*50 - 130*	*03/02/14 10:00*	*03/03/14 18:50*	*1*
Dibromofluoromethane	*105*	*	*68 - 140*	*03/02/14 10:00*	*03/03/14 18:50*	*1*
4-Bromofluorobenzene	*135*		*57 - 140*	*03/02/14 10:00*	*03/03/14 18:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*	*	*61 - 130*	*03/02/14 10:00*	*03/03/14 18:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	**3.68**		0.255	0.0336	mg/Kg	☼	03/02/14 12:00	03/04/14 17:45	1
1,1-Dichloroethane	**0.591**		0.255	0.0443	mg/Kg	☼	03/02/14 12:00	03/04/14 17:45	1
cis-1,2-Dichloroethene	**0.404**		0.255	0.0423	mg/Kg	☼	03/02/14 12:00	03/04/14 17:45	1
trans-1,2-Dichloroethene	**0.500**		0.255	0.0581	mg/Kg	☼	03/02/14 12:00	03/04/14 17:45	1
1,1,2-Trichloroethane	**0.461**	**J**	2.04	0.0372	mg/Kg	☼	03/02/14 12:00	03/04/14 17:45	1
Trichloroethene	**0.460**		0.255	0.0713	mg/Kg	☼	03/02/14 12:00	03/04/14 17:45	1
1,2-Dichloroethene, Total	**0.904**		0.509	0.0968	mg/Kg	☼	03/02/14 12:00	03/04/14 17:45	1

Client Sample Results

TestAmerica Job ID: 600-87928-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Client Sample ID: A1-EP1-10-11'

Lab Sample ID: 600-87928-3
Matrix: Solid
Percent Solids: 77.8

Date Collected: 02/26/14 16:25
Date Received: 02/28/14 10:14

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	85		50 - 130	03/02/14 12:00	03/04/14 17:45	1
Dibromofluoromethane	93		68 - 140	03/02/14 12:00	03/04/14 17:45	1
4-Bromofluorobenzene	95		57 - 140	03/02/14 12:00	03/04/14 17:45	1
1,2-Dichloroethane-d4 (Surr)	106		61 - 130	03/02/14 12:00	03/04/14 17:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			02/28/14 13:45	1
Percent Solids	78		1.0	1.0	%			02/28/14 13:45	1

Client Sample ID: A1-EP2-1-2'

Lab Sample ID: 600-87928-4
Matrix: Solid
Percent Solids: 83.8

Date Collected: 02/26/14 16:35
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0226**		0.0112	0.00185	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Benzene	0.000703	U	0.00558	0.000703	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Chlorobromomethane	0.00199	U	0.00558	0.00199	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Bromoform	0.00153	U	0.00558	0.00153	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Bromomethane	0.000926	U	0.0112	0.000926	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
2-Butanone (MEK)	0.00212	U	0.0112	0.00212	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Carbon disulfide	0.000614	U	0.0112	0.000614	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Carbon tetrachloride	0.00126	U	0.00558	0.00126	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Dibromochloromethane	0.00105	U	0.00558	0.00105	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Chlorobenzene	0.00107	U	0.00558	0.00107	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Chloroethane	0.00156	U	0.0112	0.00156	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Chloroform	**0.00803**		0.00558	0.000736	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Chloromethane	0.00185	U	0.0112	0.00185	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,1-Dichloroethane	0.000971	U	0.00558	0.000971	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,2-Dichloroethane	**0.0765**		0.00558	0.00100	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,1-Dichloroethene	0.00136	U	0.00558	0.00136	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
cis-1,2-Dichloroethene	0.000926	U	0.00558	0.000926	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
trans-1,2-Dichloroethene	0.00127	U	0.00558	0.00127	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,2-Dichloropropane	0.000792	U	0.00558	0.000792	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
cis-1,3-Dichloropropene	0.000602	U	0.00558	0.000602	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
trans-1,3-Dichloropropene	0.000647	U	0.00558	0.000647	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Ethylbenzene	0.00114	U	0.00558	0.00114	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
2-Hexanone	0.00113	U	0.0112	0.00113	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Methylene Chloride	0.00244	U	0.0112	0.00244	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
4-Methyl-2-pentanone (MIBK)	0.00164	U	0.0112	0.00164	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Styrene	0.000792	U	0.00558	0.000792	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,1,2,2-Tetrachloroethane	0.000971	U	0.00558	0.000971	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Tetrachloroethene	0.000792	U	0.00558	0.000792	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Toluene	0.00154	U	0.00558	0.00154	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,1,1-Trichloroethane	0.000826	U	0.00558	0.000826	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,1,2-Trichloroethane	0.000814	U	0.0446	0.000814	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Trichloroethene	0.00156	U	0.00558	0.00156	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Vinyl acetate	0.00104	U	0.0112	0.00104	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Vinyl chloride	0.00100	U	0.0112	0.00100	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Client Sample ID: A1-EP2-1-2'

Date Collected: 02/26/14 16:35
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87928-4
Matrix: Solid
Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	0.00126	U	0.00558	0.00126	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
m-Xylene & p-Xylene	0.00170	U	0.0112	0.00170	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Xylenes, Total	0.00126	U	0.00558	0.00126	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
Bromodichloromethane	0.000736	U	0.00558	0.000736	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1
1,2-Dichloroethene, Total	0.00212	U	0.0112	0.00212	mg/Kg	☼	03/02/14 10:00	03/03/14 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*121*		*50 - 130*	*03/02/14 10:00*	*03/03/14 19:14*	*1*
Dibromofluoromethane	*109*		*68 - 140*	*03/02/14 10:00*	*03/03/14 19:14*	*1*
4-Bromofluorobenzene	*138*		*57 - 140*	*03/02/14 10:00*	*03/03/14 19:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*61 - 130*	*03/02/14 10:00*	*03/03/14 19:14*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16**		1.0	1.0	%			02/28/14 13:45	1
Percent Solids	**84**		1.0	1.0	%			02/28/14 13:45	1

Client Sample ID: A1-EP2-5-6'

Date Collected: 02/26/14 16:40
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87928-5
Matrix: Solid
Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00154	U	0.00930	0.00154	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Benzene	0.000586	U	0.00465	0.000586	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Chlorobromomethane	0.00166	U	0.00465	0.00166	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Bromoform	0.00127	U	0.00465	0.00127	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Bromomethane	0.000772	U	0.00930	0.000772	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
2-Butanone (MEK)	0.00177	U	0.00930	0.00177	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Carbon disulfide	0.000512	U	0.00930	0.000512	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Carbon tetrachloride	0.00105	U	0.00465	0.00105	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Dibromochloromethane	0.000875	U	0.00465	0.000875	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Chlorobenzene	0.000893	U	0.00465	0.000893	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Chloroethane	0.00130	U	0.00930	0.00130	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Chloroform	**0.160**		0.00465	0.000614	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Chloromethane	0.00154	U	0.00930	0.00154	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,1-Dichloroethane	**0.0106**		0.00465	0.000809	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,2-Dichloroethane	**0.0192**		0.00465	0.000837	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,1-Dichloroethene	0.00114	U	0.00465	0.00114	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
cis-1,2-Dichloroethene	0.000772	U	0.00465	0.000772	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
trans-1,2-Dichloroethene	**0.00363**	**J**	0.00465	0.00106	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,2-Dichloropropane	0.000661	U	0.00465	0.000661	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
cis-1,3-Dichloropropene	0.000502	U	0.00465	0.000502	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
trans-1,3-Dichloropropene	0.000540	U	0.00465	0.000540	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Ethylbenzene	0.000949	U	0.00465	0.000949	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
2-Hexanone	0.000940	U	0.00930	0.000940	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Methylene Chloride	0.00204	U	0.00930	0.00204	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
4-Methyl-2-pentanone (MIBK)	0.00137	U	0.00930	0.00137	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Styrene	0.000661	U	0.00465	0.000661	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,1,2,2-Tetrachloroethane	0.000809	U	0.00465	0.000809	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1

Client Sample Results

TestAmerica Job ID: 600-87928-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Client Sample ID: A1-EP2-5-6'

Lab Sample ID: 600-87928-5
Matrix: Solid
Percent Solids: 82.9

Date Collected: 02/26/14 16:40
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.00943**		0.00465	0.000661	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Toluene	0.00128	U	0.00465	0.00128	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,1,1-Trichloroethane	0.000689	U	0.00465	0.000689	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,1,2-Trichloroethane	**0.0617**		0.0372	0.000679	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Trichloroethene	**0.00767**		0.00465	0.00130	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Vinyl acetate	0.000865	U	0.00930	0.000865	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Vinyl chloride	0.000837	U	0.00930	0.000837	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
o-Xylene	0.00105	U	0.00465	0.00105	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
m-Xylene & p-Xylene	0.00141	U	0.00930	0.00141	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Xylenes, Total	0.00105	U	0.00465	0.00105	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
Bromodichloromethane	**0.0517**		0.00465	0.000614	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1
1,2-Dichloroethene, Total	**0.00363**	**J**	0.00930	0.00177	mg/Kg	☼	03/02/14 10:00	03/03/14 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*119*		*50 - 130*	*03/02/14 10:00*	*03/03/14 19:39*	*1*
Dibromofluoromethane	*108*		*68 - 140*	*03/02/14 10:00*	*03/03/14 19:39*	*1*
4-Bromofluorobenzene	*139*		*57 - 140*	*03/02/14 10:00*	*03/03/14 19:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*61 - 130*	*03/02/14 10:00*	*03/03/14 19:39*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17**		1.0	1.0	%			02/28/14 13:45	1
Percent Solids	**83**		1.0	1.0	%			02/28/14 13:45	1

Client Sample ID: A1-EP2-10-11'

Lab Sample ID: 600-87928-6
Matrix: Solid
Percent Solids: 81.7

Date Collected: 02/26/14 16:45
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00161	U	0.00969	0.00161	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Benzene	**0.00191**	**J**	0.00485	0.000611	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Chlorobromomethane	0.00173	U	0.00485	0.00173	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Bromoform	0.00133	U	0.00485	0.00133	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Bromomethane	0.000805	U	0.00969	0.000805	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
2-Butanone (MEK)	0.00184	U	0.00969	0.00184	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Carbon disulfide	0.000533	U	0.00969	0.000533	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Carbon tetrachloride	0.00110	U	0.00485	0.00110	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Dibromochloromethane	0.000911	U	0.00485	0.000911	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Chlorobenzene	0.000931	U	0.00485	0.000931	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Chloroethane	0.00136	U	0.00969	0.00136	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Chloromethane	0.00161	U	0.00969	0.00161	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
1,1-Dichloroethene	**0.00780**		0.00485	0.00118	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
1,2-Dichloropropane	0.000688	U	0.00485	0.000688	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
cis-1,3-Dichloropropene	0.000523	U	0.00485	0.000523	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
trans-1,3-Dichloropropene	0.000562	U	0.00485	0.000562	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Ethylbenzene	0.000989	U	0.00485	0.000989	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
2-Hexanone	0.000979	U	0.00969	0.000979	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Methylene Chloride	**0.0172**		0.00969	0.00212	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
4-Methyl-2-pentanone (MIBK)	0.00142	U	0.00969	0.00142	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Client Sample ID: A1-EP2-10-11'
Date Collected: 02/26/14 16:45
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87928-6
Matrix: Solid
Percent Solids: 81.7

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Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.000688	U	0.00485	0.000688	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
1,1,2,2-Tetrachloroethane	0.000843	U	0.00485	0.000843	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Tetrachloroethene	**0.0431**		0.00485	0.000688	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Toluene	0.00134	U	0.00485	0.00134	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
1,1,1-Trichloroethane	0.000717	U	0.00485	0.000717	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Vinyl acetate	0.000901	U	0.00969	0.000901	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Vinyl chloride	**0.0244**		0.00969	0.000872	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
o-Xylene	0.00110	U	0.00485	0.00110	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
m-Xylene & p-Xylene	0.00147	U	0.00969	0.00147	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Xylenes, Total	0.00110	U	0.00485	0.00110	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
Bromodichloromethane	**0.488**	E	0.00485	0.000640	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1
1,2-Dichloroethene, Total	**0.0735**		0.00969	0.00184	mg/Kg	☼	03/03/14 16:18	03/03/14 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*123*		*50 - 130*	*03/03/14 16:18*	*03/03/14 20:03*	*1*
Dibromofluoromethane	*104*		*68 - 140*	*03/03/14 16:18*	*03/03/14 20:03*	*1*
4-Bromofluorobenzene	*137*		*57 - 140*	*03/03/14 16:18*	*03/03/14 20:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*61 - 130*	*03/03/14 16:18*	*03/03/14 20:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	**2.35**		0.248	0.0328	mg/Kg	☼	03/02/14 12:00	03/04/14 18:09	1
1,1-Dichloroethane	**0.456**		0.248	0.0432	mg/Kg	☼	03/02/14 12:00	03/04/14 18:09	1
cis-1,2-Dichloroethene	**0.367**		0.248	0.0412	mg/Kg	☼	03/02/14 12:00	03/04/14 18:09	1
trans-1,2-Dichloroethene	**0.427**		0.248	0.0566	mg/Kg	☼	03/02/14 12:00	03/04/14 18:09	1
1,1,2-Trichloroethane	**0.584**	J	1.99	0.0362	mg/Kg	☼	03/02/14 12:00	03/04/14 18:09	1
Trichloroethene	**0.425**		0.248	0.0695	mg/Kg	☼	03/02/14 12:00	03/04/14 18:09	1
1,2-Dichloroethene, Total	**0.794**		0.496	0.0943	mg/Kg	☼	03/02/14 12:00	03/04/14 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*84*		*50 - 130*	*03/02/14 12:00*	*03/04/14 18:09*	*1*
Dibromofluoromethane	*94*		*68 - 140*	*03/02/14 12:00*	*03/04/14 18:09*	*1*
4-Bromofluorobenzene	*93*		*57 - 140*	*03/02/14 12:00*	*03/04/14 18:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*61 - 130*	*03/02/14 12:00*	*03/04/14 18:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**30.6**		2.48	0.447	mg/Kg	☼	03/02/14 12:00	03/05/14 18:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*847*	*X*	*50 - 130*	*03/02/14 12:00*	*03/05/14 18:19*	*10*
Dibromofluoromethane	*772*	*X*	*68 - 140*	*03/02/14 12:00*	*03/05/14 18:19*	*10*
4-Bromofluorobenzene	*953*	*X*	*57 - 140*	*03/02/14 12:00*	*03/05/14 18:19*	*10*
1,2-Dichloroethane-d4 (Surr)	*1150*	*X*	*61 - 130*	*03/02/14 12:00*	*03/05/14 18:19*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18**		1.0	1.0	%			02/28/14 13:45	1
Percent Solids	**82**		1.0	1.0	%			02/28/14 13:45	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Client Sample ID: Trip Blank

Lab Sample ID: 600-87928-7

Date Collected: 02/26/14 00:00
Matrix: Water
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.000990	U	0.00500	0.000990	mg/L			03/02/14 15:53	1
Benzene	0.0000800	U	0.00100	0.0000800	mg/L			03/02/14 15:53	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/02/14 15:53	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/02/14 15:53	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/02/14 15:53	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/02/14 15:53	1
Carbon disulfide	**0.000612**	**J b**	0.00200	0.000240	mg/L			03/02/14 15:53	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/02/14 15:53	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/02/14 15:53	1
Chlorobenzene	0.000120	U	0.00100	0.000120	mg/L			03/02/14 15:53	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/02/14 15:53	1
Chloroform	0.000130	U	0.00100	0.000130	mg/L			03/02/14 15:53	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/02/14 15:53	1
1,1-Dichloroethane	0.000110	U	0.00100	0.000110	mg/L			03/02/14 15:53	1
1,2-Dichloroethane	0.000140	U	0.00100	0.000140	mg/L			03/02/14 15:53	1
1,1-Dichloroethene	0.000190	U	0.00100	0.000190	mg/L			03/02/14 15:53	1
trans-1,2-Dichloroethene	0.0000900	U	0.00100	0.0000900	mg/L			03/02/14 15:53	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/02/14 15:53	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/02/14 15:53	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/02/14 15:53	1
Ethylbenzene	0.000110	U	0.00100	0.000110	mg/L			03/02/14 15:53	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/02/14 15:53	1
Methylene Chloride	**0.00257**	**J**	0.00500	0.000150	mg/L			03/02/14 15:53	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/02/14 15:53	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/02/14 15:53	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/02/14 15:53	1
Tetrachloroethene	0.000130	U	0.00100	0.000130	mg/L			03/02/14 15:53	1
Toluene	0.000150	U	0.00100	0.000150	mg/L			03/02/14 15:53	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/02/14 15:53	1
1,1,2-Trichloroethane	0.000280	U	0.00100	0.000280	mg/L			03/02/14 15:53	1
Trichloroethene	0.000180	U	0.00100	0.000180	mg/L			03/02/14 15:53	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/02/14 15:53	1
Vinyl chloride	0.000110	U	0.00200	0.000110	mg/L			03/02/14 15:53	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/02/14 15:53	1
m-Xylene & p-Xylene	0.000170	U	0.00100	0.000170	mg/L			03/02/14 15:53	1
Xylenes, Total	0.000260	U	0.00100	0.000260	mg/L			03/02/14 15:53	1
cis-1,2-Dichloroethene	0.0000600	U	0.00100	0.0000600	mg/L			03/02/14 15:53	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/02/14 15:53	1
1,2-Dichloroethene, Total	0.000300	U	0.00100	0.000300	mg/L			03/02/14 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*70 - 130*		*03/02/14 15:53*	*1*
Dibromofluoromethane	*100*		*62 - 130*		*03/02/14 15:53*	*1*
4-Bromofluorobenzene	*91*		*67 - 139*		*03/02/14 15:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*50 - 134*		*03/02/14 15:53*	*1*

Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
*	ISTD response or retention time outside acceptable limits
E	Result is greater then the UQL and the concentration is an estimated value.
X	Surrogate is outside control limits
b	The compound was found in the blank and sample

8

Glossary

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

Surrogate Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(50-130)	(68-140)	(57-140)	(61-130)
600-87928-1	A1-EP1-1-2'	114	102	134	107
600-87928-2	A1-EP1-5-6'	121	108	135	115
600-87928-3	A1-EP1-10-11'	123 *	105 *	135	113 *
600-87928-3 - DL	A1-EP1-10-11'	85	93	95	106
600-87928-4	A1-EP2-1-2'	121	109	138	116
600-87928-5	A1-EP2-5-6'	119	108	139	116
600-87928-6	A1-EP2-10-11'	123	104	137	117
600-87928-6 - DL	A1-EP2-10-11'	84	94	93	105
600-87928-6 - DL2	A1-EP2-10-11'	847 X	772 X	953 X	1150 X
LCS 600-128581/4	Lab Control Sample	112	91	120	83
LCS 600-128646/1-A	Lab Control Sample	87	96	93	98
LCSD 600-128581/5	Lab Control Sample Dup	116	94	128	87
LCSD 600-128646/2-A	Lab Control Sample Dup	88	86	93	90
MB 600-128581/3	Method Blank	110	87	124	76
MB 600-128646/3-A	Method Blank	107	111	107	127

Surrogate Legend

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

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-87928-7	Trip Blank	87	100	91	107
LCS 600-128503/2	Lab Control Sample	93	102	93	102
MB 600-128503/4	Method Blank	87	97	92	100

Surrogate Legend

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

QC Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-128503/4
Matrix: Water
Analysis Batch: 128503

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.000990	U	0.00500	0.000990	mg/L			03/02/14 11:34	1
Benzene	0.0000800	U	0.00100	0.0000800	mg/L			03/02/14 11:34	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/02/14 11:34	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/02/14 11:34	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/02/14 11:34	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/02/14 11:34	1
Carbon disulfide	0.0003825	J	0.00200	0.000240	mg/L			03/02/14 11:34	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/02/14 11:34	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/02/14 11:34	1
Chlorobenzene	0.000120	U	0.00100	0.000120	mg/L			03/02/14 11:34	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/02/14 11:34	1
Chloroform	0.000130	U	0.00100	0.000130	mg/L			03/02/14 11:34	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/02/14 11:34	1
1,1-Dichloroethane	0.000110	U	0.00100	0.000110	mg/L			03/02/14 11:34	1
1,2-Dichloroethane	0.000140	U	0.00100	0.000140	mg/L			03/02/14 11:34	1
1,1-Dichloroethene	0.000190	U	0.00100	0.000190	mg/L			03/02/14 11:34	1
trans-1,2-Dichloroethene	0.0000900	U	0.00100	0.0000900	mg/L			03/02/14 11:34	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/02/14 11:34	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/02/14 11:34	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/02/14 11:34	1
Ethylbenzene	0.000110	U	0.00100	0.000110	mg/L			03/02/14 11:34	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/02/14 11:34	1
Methylene Chloride	0.000150	U	0.00500	0.000150	mg/L			03/02/14 11:34	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/02/14 11:34	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/02/14 11:34	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/02/14 11:34	1
Tetrachloroethene	0.000130	U	0.00100	0.000130	mg/L			03/02/14 11:34	1
Toluene	0.000150	U	0.00100	0.000150	mg/L			03/02/14 11:34	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/02/14 11:34	1
1,1,2-Trichloroethane	0.000280	U	0.00100	0.000280	mg/L			03/02/14 11:34	1
Trichloroethene	0.000180	U	0.00100	0.000180	mg/L			03/02/14 11:34	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/02/14 11:34	1
Vinyl chloride	0.000110	U	0.00200	0.000110	mg/L			03/02/14 11:34	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/02/14 11:34	1
m-Xylene & p-Xylene	0.000170	U	0.00100	0.000170	mg/L			03/02/14 11:34	1
Xylenes, Total	0.000260	U	0.00100	0.000260	mg/L			03/02/14 11:34	1
cis-1,2-Dichloroethene	0.0000600	U	0.00100	0.0000600	mg/L			03/02/14 11:34	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/02/14 11:34	1
1,2-Dichloroethene, Total	0.000300	U	0.00100	0.000300	mg/L			03/02/14 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*70 - 130*		*03/02/14 11:34*	*1*
Dibromofluoromethane	*97*		*62 - 130*		*03/02/14 11:34*	*1*
4-Bromofluorobenzene	*92*		*67 - 139*		*03/02/14 11:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*50 - 134*		*03/02/14 11:34*	*1*

QC Sample Results

TestAmerica Job ID: 600-87928-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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

Lab Sample ID: LCS 600-128503/2
Matrix: Water
Analysis Batch: 128503

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0200	0.01968		mg/L		98	18 - 144
Benzene	0.0100	0.01017		mg/L		102	70 - 130
Chlorobromomethane	0.0100	0.009251		mg/L		93	58 - 130
Bromoform	0.0100	0.009139		mg/L		91	54 - 133
Bromomethane	0.0100	0.01038		mg/L		104	25 - 150
2-Butanone (MEK)	0.0200	0.02056		mg/L		103	41 - 141
Carbon disulfide	0.0100	0.01080		mg/L		108	55 - 150
Carbon tetrachloride	0.0100	0.01199		mg/L		120	70 - 144
Dibromochloromethane	0.0100	0.008678		mg/L		87	62 - 130
Chlorobenzene	0.0100	0.008875		mg/L		89	69 - 130
Chloroethane	0.0100	0.01073		mg/L		107	47 - 150
Chloroform	0.0100	0.01098		mg/L		110	70 - 130
Chloromethane	0.0100	0.009382		mg/L		94	10 - 150
1,1-Dichloroethane	0.0100	0.01089		mg/L		109	70 - 140
1,2-Dichloroethane	0.0100	0.01137		mg/L		114	67 - 134
1,1-Dichloroethene	0.0100	0.01085		mg/L		109	58 - 148
trans-1,2-Dichloroethene	0.0100	0.01055		mg/L		106	68 - 131
1,2-Dichloropropane	0.0100	0.01030		mg/L		103	70 - 130
cis-1,3-Dichloropropene	0.0100	0.009479		mg/L		95	57 - 130
trans-1,3-Dichloropropene	0.0100	0.008727		mg/L		87	60 - 130
Ethylbenzene	0.0100	0.009315		mg/L		93	70 - 130
2-Hexanone	0.0200	0.01612		mg/L		81	56 - 130
Methylene Chloride	0.0100	0.009561		mg/L		96	55 - 147
4-Methyl-2-pentanone (MIBK)	0.0200	0.01956		mg/L		98	62 - 136
Styrene	0.0100	0.008399		mg/L		84	70 - 130
1,1,2,2-Tetrachloroethane	0.0100	0.008456		mg/L		85	58 - 133
Tetrachloroethene	0.0100	0.007960		mg/L		80	47 - 150
Toluene	0.0100	0.009288		mg/L		93	70 - 130
1,1,1-Trichloroethane	0.0100	0.01195		mg/L		120	70 - 136
1,1,2-Trichloroethane	0.0100	0.008336		mg/L		83	70 - 130
Trichloroethene	0.0100	0.009718		mg/L		97	70 - 130
Vinyl acetate	0.0200	0.02050		mg/L		102	10 - 150
Vinyl chloride	0.0100	0.01016		mg/L		102	33 - 150
o-Xylene	0.0100	0.009398		mg/L		94	70 - 130
m-Xylene & p-Xylene	0.0100	0.008711		mg/L		87	70 - 130
Xylenes, Total	0.0200	0.01811		mg/L		91	70 - 130
cis-1,2-Dichloroethene	0.0100	0.009990		mg/L		100	68 - 130
Bromodichloromethane	0.0100	0.01078		mg/L		108	70 - 131
1,2-Dichloroethene, Total	0.0200	0.02054		mg/L		103	69 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*70 - 130*
Dibromofluoromethane	*102*		*62 - 130*
4-Bromofluorobenzene	*93*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*102*		*50 - 134*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-128581/3
Matrix: Solid
Analysis Batch: 128581

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00166	U	0.0100	0.00166	mg/Kg			03/03/14 13:48	1
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			03/03/14 13:48	1
Chlorobromomethane	0.00178	U	0.00500	0.00178	mg/Kg			03/03/14 13:48	1
Bromoform	0.00137	U	0.00500	0.00137	mg/Kg			03/03/14 13:48	1
Bromomethane	0.000830	U	0.0100	0.000830	mg/Kg			03/03/14 13:48	1
2-Butanone (MEK)	0.00190	U	0.0100	0.00190	mg/Kg			03/03/14 13:48	1
Carbon disulfide	0.000550	U	0.0100	0.000550	mg/Kg			03/03/14 13:48	1
Carbon tetrachloride	0.00113	U	0.00500	0.00113	mg/Kg			03/03/14 13:48	1
Dibromochloromethane	0.000940	U	0.00500	0.000940	mg/Kg			03/03/14 13:48	1
Chlorobenzene	0.000960	U	0.00500	0.000960	mg/Kg			03/03/14 13:48	1
Chloroethane	0.00140	U	0.0100	0.00140	mg/Kg			03/03/14 13:48	1
Chloroform	0.000660	U	0.00500	0.000660	mg/Kg			03/03/14 13:48	1
Chloromethane	0.00166	U	0.0100	0.00166	mg/Kg			03/03/14 13:48	1
1,1-Dichloroethane	0.000870	U	0.00500	0.000870	mg/Kg			03/03/14 13:48	1
1,2-Dichloroethane	0.000900	U	0.00500	0.000900	mg/Kg			03/03/14 13:48	1
1,1-Dichloroethene	0.00122	U	0.00500	0.00122	mg/Kg			03/03/14 13:48	1
cis-1,2-Dichloroethene	0.000830	U	0.00500	0.000830	mg/Kg			03/03/14 13:48	1
trans-1,2-Dichloroethene	0.00114	U	0.00500	0.00114	mg/Kg			03/03/14 13:48	1
1,2-Dichloropropane	0.000710	U	0.00500	0.000710	mg/Kg			03/03/14 13:48	1
cis-1,3-Dichloropropene	0.000540	U	0.00500	0.000540	mg/Kg			03/03/14 13:48	1
trans-1,3-Dichloropropene	0.000580	U	0.00500	0.000580	mg/Kg			03/03/14 13:48	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			03/03/14 13:48	1
2-Hexanone	0.00101	U	0.0100	0.00101	mg/Kg			03/03/14 13:48	1
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			03/03/14 13:48	1
4-Methyl-2-pentanone (MIBK)	0.00147	U	0.0100	0.00147	mg/Kg			03/03/14 13:48	1
Styrene	0.000710	U	0.00500	0.000710	mg/Kg			03/03/14 13:48	1
1,1,2,2-Tetrachloroethane	0.000870	U	0.00500	0.000870	mg/Kg			03/03/14 13:48	1
Tetrachloroethene	0.000710	U	0.00500	0.000710	mg/Kg			03/03/14 13:48	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			03/03/14 13:48	1
1,1,1-Trichloroethane	0.000740	U	0.00500	0.000740	mg/Kg			03/03/14 13:48	1
1,1,2-Trichloroethane	0.000730	U	0.0400	0.000730	mg/Kg			03/03/14 13:48	1
Trichloroethene	0.00140	U	0.00500	0.00140	mg/Kg			03/03/14 13:48	1
Vinyl acetate	0.000930	U	0.0100	0.000930	mg/Kg			03/03/14 13:48	1
Vinyl chloride	0.000900	U	0.0100	0.000900	mg/Kg			03/03/14 13:48	1
o-Xylene	0.00113	U	0.00500	0.00113	mg/Kg			03/03/14 13:48	1
m-Xylene & p-Xylene	0.00152	U	0.0100	0.00152	mg/Kg			03/03/14 13:48	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			03/03/14 13:48	1
Bromodichloromethane	0.000660	U	0.00500	0.000660	mg/Kg			03/03/14 13:48	1
1,2-Dichloroethene, Total	0.00190	U	0.0100	0.00190	mg/Kg			03/03/14 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*50 - 130*		*03/03/14 13:48*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*03/03/14 13:48*	*1*
4-Bromofluorobenzene	*124*		*57 - 140*		*03/03/14 13:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*		*03/03/14 13:48*	*1*

QC Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-128581/4
Matrix: Solid
Analysis Batch: 128581

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.08994		mg/Kg		90	13 - 150
Benzene	0.0500	0.05071		mg/Kg		101	70 - 131
Chlorobromomethane	0.0500	0.05136		mg/Kg		103	70 - 132
Bromoform	0.0500	0.07030		mg/Kg		141	43 - 150
Bromomethane	0.0500	0.05845		mg/Kg		117	37 - 147
2-Butanone (MEK)	0.100	0.08696		mg/Kg		87	33 - 150
Carbon disulfide	0.0500	0.05381		mg/Kg		108	51 - 141
Carbon tetrachloride	0.0500	0.05355		mg/Kg		107	58 - 130
Dibromochloromethane	0.0500	0.06238		mg/Kg		125	65 - 134
Chlorobenzene	0.0500	0.06170		mg/Kg		123	63 - 131
Chloroethane	0.0500	0.05701		mg/Kg		114	40 - 150
Chloroform	0.0500	0.05155		mg/Kg		103	69 - 130
Chloromethane	0.0500	0.05789		mg/Kg		116	44 - 141
1,1-Dichloroethane	0.0500	0.05237		mg/Kg		105	63 - 140
1,2-Dichloroethane	0.0500	0.05166		mg/Kg		103	58 - 137
1,1-Dichloroethene	0.0500	0.05722		mg/Kg		114	62 - 142
cis-1,2-Dichloroethene	0.0500	0.05154		mg/Kg		103	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05175		mg/Kg		103	69 - 130
1,2-Dichloropropane	0.0500	0.05394		mg/Kg		108	70 - 130
cis-1,3-Dichloropropene	0.0500	0.06208		mg/Kg		124	65 - 130
trans-1,3-Dichloropropene	0.0500	0.06049		mg/Kg		121	70 - 130
Ethylbenzene	0.0500	0.06167		mg/Kg		123	66 - 130
2-Hexanone	0.100	0.1107		mg/Kg		111	35 - 150
Methylene Chloride	0.0500	0.04953		mg/Kg		99	61 - 150
4-Methyl-2-pentanone (MIBK)	0.100	0.08848		mg/Kg		88	21 - 150
Styrene	0.0500	0.06151		mg/Kg		123	65 - 133
1,1,2,2-Tetrachloroethane	0.0500	0.06394		mg/Kg		128	61 - 138
Tetrachloroethene	0.0500	0.05291		mg/Kg		106	43 - 143
Toluene	0.0500	0.06202		mg/Kg		124	67 - 130
1,1,1-Trichloroethane	0.0500	0.05319		mg/Kg		106	59 - 130
1,1,2-Trichloroethane	0.0500	0.06133		mg/Kg		123	67 - 134
Trichloroethene	0.0500	0.05139		mg/Kg		103	63 - 135
Vinyl acetate	0.100	0.09968		mg/Kg		100	40 - 150
Vinyl chloride	0.0500	0.05939		mg/Kg		119	40 - 148
o-Xylene	0.0500	0.06330		mg/Kg		127	62 - 130
m-Xylene & p-Xylene	0.0500	0.06193		mg/Kg		124	64 - 130
Xylenes, Total	0.100	0.1252		mg/Kg		125	63 - 130
Bromodichloromethane	0.0500	0.04830		mg/Kg		97	67 - 138
1,2-Dichloroethene, Total	0.100	0.1033		mg/Kg		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*112*		*50 - 130*
Dibromofluoromethane	*91*		*68 - 140*
4-Bromofluorobenzene	*120*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 600-128581/5
Matrix: Solid
Analysis Batch: 128581

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.100	0.09500		mg/Kg		95	13 - 150	5	30
Benzene	0.0500	0.05142		mg/Kg		103	70 - 131	1	30
Chlorobromomethane	0.0500	0.04977		mg/Kg		100	70 - 132	3	30
Bromoform	0.0500	0.06939		mg/Kg		139	43 - 150	1	30
Bromomethane	0.0500	0.05676		mg/Kg		114	37 - 147	3	30
2-Butanone (MEK)	0.100	0.08911		mg/Kg		89	33 - 150	2	30
Carbon disulfide	0.0500	0.05303		mg/Kg		106	51 - 141	1	30
Carbon tetrachloride	0.0500	0.05450		mg/Kg		109	58 - 130	2	30
Dibromochloromethane	0.0500	0.06271		mg/Kg		125	65 - 134	1	30
Chlorobenzene	0.0500	0.06201		mg/Kg		124	63 - 131	1	30
Chloroethane	0.0500	0.05607		mg/Kg		112	40 - 150	2	30
Chloroform	0.0500	0.05294		mg/Kg		106	69 - 130	3	30
Chloromethane	0.0500	0.05615		mg/Kg		112	44 - 141	3	30
1,1-Dichloroethane	0.0500	0.05195		mg/Kg		104	63 - 140	1	30
1,2-Dichloroethane	0.0500	0.05110		mg/Kg		102	58 - 137	1	30
1,1-Dichloroethene	0.0500	0.05744		mg/Kg		115	62 - 142	0	30
cis-1,2-Dichloroethene	0.0500	0.05119		mg/Kg		102	70 - 130	1	30
trans-1,2-Dichloroethene	0.0500	0.05231		mg/Kg		105	69 - 130	1	30
1,2-Dichloropropane	0.0500	0.05555		mg/Kg		111	70 - 130	3	30
cis-1,3-Dichloropropene	0.0500	0.06262		mg/Kg		125	65 - 130	1	30
trans-1,3-Dichloropropene	0.0500	0.06087		mg/Kg		122	70 - 130	1	30
Ethylbenzene	0.0500	0.06333		mg/Kg		127	66 - 130	3	30
2-Hexanone	0.100	0.1080		mg/Kg		108	35 - 150	2	30
Methylene Chloride	0.0500	0.04791		mg/Kg		96	61 - 150	3	30
4-Methyl-2-pentanone (MIBK)	0.100	0.08880		mg/Kg		89	21 - 150	0	30
Styrene	0.0500	0.06178		mg/Kg		124	65 - 133	0	30
1,1,2,2-Tetrachloroethane	0.0500	0.06311		mg/Kg		126	61 - 138	1	30
Tetrachloroethene	0.0500	0.05648		mg/Kg		113	43 - 143	7	30
Toluene	0.0500	0.06233		mg/Kg		125	67 - 130	0	30
1,1,1-Trichloroethane	0.0500	0.05376		mg/Kg		108	59 - 130	1	30
1,1,2-Trichloroethane	0.0500	0.06060		mg/Kg		121	67 - 134	1	30
Trichloroethene	0.0500	0.05150		mg/Kg		103	63 - 135	0	30
Vinyl acetate	0.100	0.09704		mg/Kg		97	40 - 150	3	30
Vinyl chloride	0.0500	0.05664		mg/Kg		113	40 - 148	5	30
o-Xylene	0.0500	0.06327		mg/Kg		127	62 - 130	0	30
m-Xylene & p-Xylene	0.0500	0.06338		mg/Kg		127	64 - 130	2	30
Xylenes, Total	0.100	0.1267		mg/Kg		127	63 - 130	1	30
Bromodichloromethane	0.0500	0.04852		mg/Kg		97	67 - 138	0	30
1,2-Dichloroethene, Total	0.100	0.1035		mg/Kg		104	70 - 130	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*116*		*50 - 130*
Dibromofluoromethane	*94*		*68 - 140*
4-Bromofluorobenzene	*128*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 130*

QC Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-128646/3-A
Matrix: Solid
Analysis Batch: 128700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 128646

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.208	U	1.25	0.208	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Benzene	0.0788	U	0.625	0.0788	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Chlorobromomethane	0.223	U	0.625	0.223	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Bromoform	0.171	U	0.625	0.171	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Bromomethane	0.104	U	1.25	0.104	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
2-Butanone (MEK)	0.238	U	1.25	0.238	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Carbon disulfide	0.0688	U	1.25	0.0688	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Carbon tetrachloride	0.141	U	0.625	0.141	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Dibromochloromethane	0.118	U	0.625	0.118	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Chlorobenzene	0.120	U	0.625	0.120	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Chloroethane	0.175	U	1.25	0.175	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Chloroform	0.0825	U	0.625	0.0825	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Chloromethane	0.208	U	1.25	0.208	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,1-Dichloroethane	0.109	U	0.625	0.109	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,2-Dichloroethane	0.113	U	0.625	0.113	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,1-Dichloroethene	0.153	U	0.625	0.153	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
cis-1,2-Dichloroethene	0.104	U	0.625	0.104	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
trans-1,2-Dichloroethene	0.143	U	0.625	0.143	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,2-Dichloropropane	0.0888	U	0.625	0.0888	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
cis-1,3-Dichloropropene	0.0675	U	0.625	0.0675	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
trans-1,3-Dichloropropene	0.0725	U	0.625	0.0725	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
2-Hexanone	0.126	U	1.25	0.126	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Methylene Chloride	0.8957	J	1.25	0.274	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
4-Methyl-2-pentanone (MIBK)	0.184	U	1.25	0.184	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Styrene	0.0888	U	0.625	0.0888	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,1,2,2-Tetrachloroethane	0.109	U	0.625	0.109	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Tetrachloroethene	0.0888	U	0.625	0.0888	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Toluene	0.173	U	0.625	0.173	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,1,1-Trichloroethane	0.0925	U	0.625	0.0925	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,1,2-Trichloroethane	0.0913	U	5.00	0.0913	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Trichloroethene	0.175	U	0.625	0.175	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Vinyl acetate	0.116	U	1.25	0.116	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Vinyl chloride	0.113	U	1.25	0.113	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
o-Xylene	0.141	U	0.625	0.141	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
m-Xylene & p-Xylene	0.190	U	1.25	0.190	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
Bromodichloromethane	0.0825	U	0.625	0.0825	mg/Kg		03/04/14 10:00	03/04/14 13:13	1
1,2-Dichloroethene, Total	0.238	U	1.25	0.238	mg/Kg		03/04/14 10:00	03/04/14 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*50 - 130*	*03/04/14 10:00*	*03/04/14 13:13*	*1*
Dibromofluoromethane	*111*		*68 - 140*	*03/04/14 10:00*	*03/04/14 13:13*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*03/04/14 10:00*	*03/04/14 13:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*127*		*61 - 130*	*03/04/14 10:00*	*03/04/14 13:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-128646/1-A
Matrix: Solid
Analysis Batch: 128700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 128646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	12.5	14.17		mg/Kg		113	13 - 150
Benzene	6.25	5.383		mg/Kg		86	70 - 131
Chlorobromomethane	6.25	5.307		mg/Kg		85	70 - 132
Bromoform	6.25	5.975		mg/Kg		96	43 - 150
Bromomethane	6.25	6.329		mg/Kg		101	37 - 147
2-Butanone (MEK)	12.5	12.79		mg/Kg		102	33 - 150
Carbon disulfide	6.25	5.205		mg/Kg		83	51 - 141
Carbon tetrachloride	6.25	5.627		mg/Kg		90	58 - 130
Dibromochloromethane	6.25	5.026		mg/Kg		80	65 - 134
Chlorobenzene	6.25	5.217		mg/Kg		83	63 - 131
Chloroethane	6.25	6.946		mg/Kg		111	40 - 150
Chloroform	6.25	5.635		mg/Kg		90	69 - 130
Chloromethane	6.25	6.170		mg/Kg		99	44 - 141
1,1-Dichloroethane	6.25	5.620		mg/Kg		90	63 - 140
1,2-Dichloroethane	6.25	6.220		mg/Kg		100	58 - 137
1,1-Dichloroethene	6.25	5.490		mg/Kg		88	62 - 142
cis-1,2-Dichloroethene	6.25	5.291		mg/Kg		85	70 - 130
trans-1,2-Dichloroethene	6.25	5.502		mg/Kg		88	69 - 130
1,2-Dichloropropane	6.25	5.637		mg/Kg		90	70 - 130
cis-1,3-Dichloropropene	6.25	4.829		mg/Kg		77	65 - 130
trans-1,3-Dichloropropene	6.25	5.125		mg/Kg		82	70 - 130
Ethylbenzene	6.25	5.547		mg/Kg		89	66 - 130
2-Hexanone	12.5	10.92		mg/Kg		87	35 - 150
Methylene Chloride	6.25	5.377		mg/Kg		86	61 - 150
4-Methyl-2-pentanone (MIBK)	12.5	12.18		mg/Kg		97	21 - 150
Styrene	6.25	5.247		mg/Kg		84	65 - 133
1,1,2,2-Tetrachloroethane	6.25	5.542		mg/Kg		89	61 - 138
Tetrachloroethene	6.25	4.849		mg/Kg		78	43 - 143
Toluene	6.25	5.303		mg/Kg		85	67 - 130
1,1,1-Trichloroethane	6.25	6.195		mg/Kg		99	59 - 130
1,1,2-Trichloroethane	6.25	4.750	J	mg/Kg		76	67 - 134
Trichloroethene	6.25	5.451		mg/Kg		87	63 - 135
Vinyl acetate	12.5	12.94		mg/Kg		104	40 - 150
Vinyl chloride	6.25	5.622		mg/Kg		90	40 - 148
o-Xylene	6.25	5.108		mg/Kg		82	62 - 130
m-Xylene & p-Xylene	6.25	5.084		mg/Kg		81	64 - 130
Xylenes, Total	12.5	10.19		mg/Kg		82	63 - 130
Bromodichloromethane	6.25	5.308		mg/Kg		85	67 - 138
1,2-Dichloroethene, Total	12.5	10.79		mg/Kg		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*87*		*50 - 130*
Dibromofluoromethane	*96*		*68 - 140*
4-Bromofluorobenzene	*93*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*

QC Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 600-128646/2-A
Matrix: Solid
Analysis Batch: 128700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 128646

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	12.5	13.12		mg/Kg		105	13 - 150	8	30
Benzene	6.25	5.908		mg/Kg		95	70 - 131	9	30
Chlorobromomethane	6.25	5.505		mg/Kg		88	70 - 132	4	30
Bromoform	6.25	6.238		mg/Kg		100	43 - 150	4	30
Bromomethane	6.25	5.966		mg/Kg		95	37 - 147	6	30
2-Butanone (MEK)	12.5	10.58		mg/Kg		85	33 - 150	19	30
Carbon disulfide	6.25	5.871		mg/Kg		94	51 - 141	12	30
Carbon tetrachloride	6.25	6.024		mg/Kg		96	58 - 130	7	30
Dibromochloromethane	6.25	5.281		mg/Kg		85	65 - 134	5	30
Chlorobenzene	6.25	5.715		mg/Kg		91	63 - 131	9	30
Chloroethane	6.25	6.945		mg/Kg		111	40 - 150	0	30
Chloroform	6.25	5.764		mg/Kg		92	69 - 130	2	30
Chloromethane	6.25	6.009		mg/Kg		96	44 - 141	3	30
1,1-Dichloroethane	6.25	5.992		mg/Kg		96	63 - 140	6	30
1,2-Dichloroethane	6.25	6.106		mg/Kg		98	58 - 137	2	30
1,1-Dichloroethene	6.25	6.303		mg/Kg		101	62 - 142	14	30
cis-1,2-Dichloroethene	6.25	5.859		mg/Kg		94	70 - 130	10	30
trans-1,2-Dichloroethene	6.25	6.100		mg/Kg		98	69 - 130	10	30
1,2-Dichloropropane	6.25	6.020		mg/Kg		96	70 - 130	7	30
cis-1,3-Dichloropropene	6.25	5.292		mg/Kg		85	65 - 130	9	30
trans-1,3-Dichloropropene	6.25	5.420		mg/Kg		87	70 - 130	6	30
Ethylbenzene	6.25	6.164		mg/Kg		99	66 - 130	11	30
2-Hexanone	12.5	10.74		mg/Kg		86	35 - 150	2	30
Methylene Chloride	6.25	5.856		mg/Kg		94	61 - 150	9	30
4-Methyl-2-pentanone (MIBK)	12.5	11.59		mg/Kg		93	21 - 150	5	30
Styrene	6.25	5.565		mg/Kg		89	65 - 133	6	30
1,1,2,2-Tetrachloroethane	6.25	5.556		mg/Kg		89	61 - 138	0	30
Tetrachloroethene	6.25	5.448		mg/Kg		87	43 - 143	12	30
Toluene	6.25	5.866		mg/Kg		94	67 - 130	10	30
1,1,1-Trichloroethane	6.25	6.911		mg/Kg		111	59 - 130	11	30
1,1,2-Trichloroethane	6.25	5.089		mg/Kg		81	67 - 134	7	30
Trichloroethene	6.25	5.714		mg/Kg		91	63 - 135	5	30
Vinyl acetate	12.5	12.70		mg/Kg		102	40 - 150	2	30
Vinyl chloride	6.25	5.537		mg/Kg		89	40 - 148	2	30
o-Xylene	6.25	5.405		mg/Kg		86	62 - 130	6	30
m-Xylene & p-Xylene	6.25	5.448		mg/Kg		87	64 - 130	7	30
Xylenes, Total	12.5	10.85		mg/Kg		87	63 - 130	6	30
Bromodichloromethane	6.25	5.554		mg/Kg		89	67 - 138	5	30
1,2-Dichloroethene, Total	12.5	11.96		mg/Kg		96	70 - 130	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*88*		*50 - 130*
Dibromofluoromethane	*86*		*68 - 140*
4-Bromofluorobenzene	*93*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*

QC Association Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

GC/MS VOA

Analysis Batch: 128503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-87928-7	Trip Blank	Total/NA	Water	8260B	
LCS 600-128503/2	Lab Control Sample	Total/NA	Water	8260B	
MB 600-128503/4	Method Blank	Total/NA	Water	8260B	

Prep Batch: 128504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-87928-1	A1-EP1-1-2'	Total/NA	Solid	5035	
600-87928-2	A1-EP1-5-6'	Total/NA	Solid	5035	
600-87928-3	A1-EP1-10-11'	Total/NA	Solid	5035	
600-87928-4	A1-EP2-1-2'	Total/NA	Solid	5035	
600-87928-5	A1-EP2-5-6'	Total/NA	Solid	5035	
600-87928-6	A1-EP2-10-11'	Total/NA	Solid	5035	

Analysis Batch: 128581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-87928-1	A1-EP1-1-2'	Total/NA	Solid	8260B	128504
600-87928-2	A1-EP1-5-6'	Total/NA	Solid	8260B	128504
600-87928-3	A1-EP1-10-11'	Total/NA	Solid	8260B	128504
600-87928-4	A1-EP2-1-2'	Total/NA	Solid	8260B	128504
600-87928-5	A1-EP2-5-6'	Total/NA	Solid	8260B	128504
600-87928-6	A1-EP2-10-11'	Total/NA	Solid	8260B	128504
LCS 600-128581/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-128581/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 600-128581/3	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 128646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-128646/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-128646/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
MB 600-128646/3-A	Method Blank	Total/NA	Solid	5030B	

Prep Batch: 128649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-87928-3 - DL	A1-EP1-10-11'	Total/NA	Solid	5035	
600-87928-6 - DL	A1-EP2-10-11'	Total/NA	Solid	5035	
600-87928-6 - DL2	A1-EP2-10-11'	Total/NA	Solid	5035	

Analysis Batch: 128700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-87928-3 - DL	A1-EP1-10-11'	Total/NA	Solid	8260B	128649
600-87928-6 - DL	A1-EP2-10-11'	Total/NA	Solid	8260B	128649
LCS 600-128646/1-A	Lab Control Sample	Total/NA	Solid	8260B	128646
LCSD 600-128646/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	128646
MB 600-128646/3-A	Method Blank	Total/NA	Solid	8260B	128646

Analysis Batch: 128794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-87928-6 - DL2	A1-EP2-10-11'	Total/NA	Solid	8260B	128649

QC Association Summary

TestAmerica Job ID: 600-87928-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

General Chemistry

Analysis Batch: 128434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-87928-1	A1-EP1-1-2'	Total/NA	Solid	Moisture	
600-87928-2	A1-EP1-5-6'	Total/NA	Solid	Moisture	
600-87928-3	A1-EP1-10-11'	Total/NA	Solid	Moisture	
600-87928-4	A1-EP2-1-2'	Total/NA	Solid	Moisture	
600-87928-5	A1-EP2-5-6'	Total/NA	Solid	Moisture	
600-87928-6	A1-EP2-10-11'	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Client Sample ID: A1-EP1-1-2'

Lab Sample ID: 600-87928-1
Matrix: Solid
Percent Solids: 82.2

Date Collected: 02/26/14 16:15
Date Received: 02/28/14 10:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.79 g	5 g	128504	03/02/14 10:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5.79 g	5 g	128581	03/03/14 18:01	WS1	TAL HOU
Total/NA	Analysis	Moisture		1			128434	02/28/14 13:45	AYS	TAL HOU

Client Sample ID: A1-EP1-5-6'

Lab Sample ID: 600-87928-2
Matrix: Solid
Percent Solids: 82.6

Date Collected: 02/26/14 16:20
Date Received: 02/28/14 10:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.44 g	5 g	128504	03/02/14 10:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5.44 g	5 g	128581	03/03/14 18:25	WS1	TAL HOU
Total/NA	Analysis	Moisture		1			128434	02/28/14 13:45	AYS	TAL HOU

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Client Sample ID: A1-EP1-10-11'

Lab Sample ID: 600-87928-3
Matrix: Solid
Percent Solids: 77.8

Date Collected: 02/26/14 16:25
Date Received: 02/28/14 10:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	DL		6.31 g	5 mL	128649	03/02/14 12:00	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	1	6.31 g	5 mL	128700	03/04/14 17:45	KLV	TAL HOU
Total/NA	Prep	5035			6.87 g	5 g	128504	03/02/14 10:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	6.87 g	5 g	128581	03/03/14 18:50	WS1	TAL HOU
Total/NA	Analysis	Moisture		1			128434	02/28/14 13:45	AYS	TAL HOU

Client Sample ID: A1-EP2-1-2'

Lab Sample ID: 600-87928-4
Matrix: Solid
Percent Solids: 83.8

Date Collected: 02/26/14 16:35
Date Received: 02/28/14 10:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.35 g	5 g	128504	03/02/14 10:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5.35 g	5 g	128581	03/03/14 19:14	WS1	TAL HOU
Total/NA	Analysis	Moisture		1			128434	02/28/14 13:45	AYS	TAL HOU

Client Sample ID: A1-EP2-5-6'

Lab Sample ID: 600-87928-5
Matrix: Solid
Percent Solids: 82.9

Date Collected: 02/26/14 16:40
Date Received: 02/28/14 10:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.48 g	5 g	128504	03/02/14 10:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	6.48 g	5 g	128581	03/03/14 19:39	WS1	TAL HOU
Total/NA	Analysis	Moisture		1			128434	02/28/14 13:45	AYS	TAL HOU

Lab Chronicle

TestAmerica Job ID: 600-87928-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Client Sample ID: A1-EP2-10-11'

Lab Sample ID: 600-87928-6
Matrix: Solid
Percent Solids: 81.7

Date Collected: 02/26/14 16:45
Date Received: 02/28/14 10:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	DL		6.16 g	5 mL	128649	03/02/14 12:00	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	1	6.16 g	5 mL	128700	03/04/14 18:09	KLV	TAL HOU
Total/NA	Prep	5035	DL2		6.16 g	5 mL	128649	03/02/14 12:00	KLV	TAL HOU
Total/NA	Analysis	8260B	DL2	10	6.16 g	5 mL	128794	03/05/14 18:19	KLV	TAL HOU
Total/NA	Prep	5035			6.31 g	5 g	128504	03/03/14 16:18	WS1	TAL HOU
Total/NA	Analysis	8260B		1	6.31 g	5 g	128581	03/03/14 20:03	WS1	TAL HOU
Total/NA	Analysis	Moisture		1			128434	02/28/14 13:45	AYS	TAL HOU

Client Sample ID: Trip Blank

Lab Sample ID: 600-87928-7
Matrix: Water

Date Collected: 02/26/14 00:00
Date Received: 02/28/14 10:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	128503	03/02/14 15:53	WS1	TAL HOU

Laboratory References:
TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87928-1

Laboratory: TestAmerica Houston

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Sampler: Travis Clawson	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-26712-9288.1
Phone: 713-725-1442	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 1
			Job #: 3307

Client Information

Client Contact: Mr. Kevin Dworsky
Company: Pastor, Behling & Wheeler LLC
Address: 620 E. Airline
City: Victoria
State, Zip: TX, 77901
Phone:
Email: kevin.dworsky@pbwllc.com
Project Name: Formosa Plastic Pilot Test- Gainco
Site: Formosa Point Comfort

Due Date Requested:
TAT Requested (days): 10 day
PO #: Purchase Order not required
WO #:
Project #: 60004994 3307
SSOW#:

Analysis Requested

600-87928 Chain of Custody

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, o=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	Moisture - Local Method	TO-15 (TestAmerica Knoxville)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
A1-EP1-1-2	2-26-14	1615		Sa.	N	N	✓	✓		5	
A1-EP1-5-6		1620			N	N	✓	✓		5	
A1-EP1-10-11		1625			N	N	✓	✓		5	
A1-EP2-1-2		1635			N	N	✓	✓		5	
A1-EP2-5-6		1640			N	N	✓	✓		5	
A1-EP2-10-11		1645			N	N	✓	✓		5	
Trip Blank	—	—		W	N	N	✓			2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months

Deliverable Requested: I, II, III, IV, Other (specify): Standard QA/QC

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 2-27-14 1800	Company: PBW	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time: 2/28/14 1014	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-87931-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

For:
Pastor, Behling & Wheeler LLC
620 E. Airline
Victoria, Texas 77901

Attn: Mr. Kevin Dworsky

Authorized for release by:
3/18/2014 10:30:53 AM
Sophia Shah, Project Management Assistant I
sophia.shah@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Method Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-87931-1	A1-EP1	Water	02/27/14 08:30	02/28/14 10:14
600-87931-2	A1-EP2	Water	02/27/14 10:55	02/28/14 10:14
600-87931-3	A1-MP1	Water	02/27/14 07:50	02/28/14 10:14
600-87931-4	A1-MP2	Water	02/27/14 09:05	02/28/14 10:14
600-87931-5	A1-MP3	Water	02/27/14 09:50	02/28/14 10:14
600-87931-6	A1-MP4	Water	02/27/14 10:20	02/28/14 10:14

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Client Sample ID: A1-EP1
Date Collected: 02/27/14 08:30
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87931-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.98	U	10.0	1.98	mg/L			03/06/14 19:49	2000
Benzene	**3.98**		2.00	0.160	mg/L			03/06/14 19:49	2000
Chlorobromomethane	0.360	U	2.00	0.360	mg/L			03/06/14 19:49	2000
Bromoform	0.380	U	2.00	0.380	mg/L			03/06/14 19:49	2000
Bromomethane	0.500	U	4.00	0.500	mg/L			03/06/14 19:49	2000
2-Butanone (MEK)	1.52	U	4.00	1.52	mg/L			03/06/14 19:49	2000
Carbon disulfide	0.480	U	4.00	0.480	mg/L			03/06/14 19:49	2000
Carbon tetrachloride	0.300	U	2.00	0.300	mg/L			03/06/14 19:49	2000
Dibromochloromethane	0.300	U	2.00	0.300	mg/L			03/06/14 19:49	2000
Chlorobenzene	0.240	U	2.00	0.240	mg/L			03/06/14 19:49	2000
Chloroethane	0.160	U	4.00	0.160	mg/L			03/06/14 19:49	2000
Chloroform	0.260	U	2.00	0.260	mg/L			03/06/14 19:49	2000
Chloromethane	0.360	U	4.00	0.360	mg/L			03/06/14 19:49	2000
1,1-Dichloroethane	**12.1**		2.00	0.220	mg/L			03/06/14 19:49	2000
1,1-Dichloroethene	**1.72**	**J**	2.00	0.380	mg/L			03/06/14 19:49	2000
trans-1,2-Dichloroethene	**7.99**		2.00	0.180	mg/L			03/06/14 19:49	2000
1,2-Dichloropropane	0.320	U	2.00	0.320	mg/L			03/06/14 19:49	2000
cis-1,3-Dichloropropene	0.360	U	2.00	0.360	mg/L			03/06/14 19:49	2000
trans-1,3-Dichloropropene	0.420	U	2.00	0.420	mg/L			03/06/14 19:49	2000
Ethylbenzene	0.220	U	2.00	0.220	mg/L			03/06/14 19:49	2000
2-Hexanone	0.700	U	4.00	0.700	mg/L			03/06/14 19:49	2000
Methylene Chloride	**1.12**	**J**	10.0	0.300	mg/L			03/06/14 19:49	2000
4-Methyl-2-pentanone (MIBK)	0.900	U	4.00	0.900	mg/L			03/06/14 19:49	2000
Styrene	0.140	U	2.00	0.140	mg/L			03/06/14 19:49	2000
1,1,2,2-Tetrachloroethane	0.440	U	2.00	0.440	mg/L			03/06/14 19:49	2000
Tetrachloroethene	**2.59**		2.00	0.260	mg/L			03/06/14 19:49	2000
Toluene	0.300	U	2.00	0.300	mg/L			03/06/14 19:49	2000
1,1,1-Trichloroethane	0.300	U	2.00	0.300	mg/L			03/06/14 19:49	2000
1,1,2-Trichloroethane	**9.23**		2.00	0.560	mg/L			03/06/14 19:49	2000
Trichloroethene	**5.78**		2.00	0.360	mg/L			03/06/14 19:49	2000
Vinyl acetate	0.420	U	4.00	0.420	mg/L			03/06/14 19:49	2000
Vinyl chloride	**16.1**		4.00	0.220	mg/L			03/06/14 19:49	2000
o-Xylene	0.240	U	2.00	0.240	mg/L			03/06/14 19:49	2000
m-Xylene & p-Xylene	0.340	U	2.00	0.340	mg/L			03/06/14 19:49	2000
Xylenes, Total	0.520	U	2.00	0.520	mg/L			03/06/14 19:49	2000
cis-1,2-Dichloroethene	**3.33**		2.00	0.120	mg/L			03/06/14 19:49	2000
Bromodichloromethane	0.320	U	2.00	0.320	mg/L			03/06/14 19:49	2000
1,2-Dichloroethene, Total	**11.3**		2.00	0.600	mg/L			03/06/14 19:49	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*70 - 130*		*03/06/14 19:49*	*2000*
Dibromofluoromethane	*92*		*62 - 130*		*03/06/14 19:49*	*2000*
4-Bromofluorobenzene	*103*		*67 - 139*		*03/06/14 19:49*	*2000*
1,2-Dichloroethane-d4 (Surr)	*72*		*50 - 134*		*03/06/14 19:49*	*2000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**1940**		200	28.0	mg/L			03/07/14 15:01	200000

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Client Sample ID: A1-EP1

Lab Sample ID: 600-87931-1
Matrix: Water

Date Collected: 02/27/14 08:30
Date Received: 02/28/14 10:14

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		70 - 130		03/07/14 15:01	200000
Dibromofluoromethane	93		62 - 130		03/07/14 15:01	200000
4-Bromofluorobenzene	94		67 - 139		03/07/14 15:01	200000
1,2-Dichloroethane-d4 (Surr)	96		50 - 134		03/07/14 15:01	200000

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Client Sample ID: A1-EP2

Lab Sample ID: 600-87931-2
Matrix: Water

Date Collected: 02/27/14 10:55
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.990	U	5.00	0.990	mg/L			03/06/14 18:32	1000
Benzene	**4.45**		1.00	0.0800	mg/L			03/06/14 18:32	1000
Chlorobromomethane	0.180	U	1.00	0.180	mg/L			03/06/14 18:32	1000
Bromoform	0.190	U	1.00	0.190	mg/L			03/06/14 18:32	1000
Bromomethane	0.250	U	2.00	0.250	mg/L			03/06/14 18:32	1000
2-Butanone (MEK)	0.760	U	2.00	0.760	mg/L			03/06/14 18:32	1000
Carbon disulfide	0.240	U	2.00	0.240	mg/L			03/06/14 18:32	1000
Carbon tetrachloride	0.150	U	1.00	0.150	mg/L			03/06/14 18:32	1000
Dibromochloromethane	0.150	U	1.00	0.150	mg/L			03/06/14 18:32	1000
Chlorobenzene	**0.261**	**J**	1.00	0.120	mg/L			03/06/14 18:32	1000
Chloroethane	0.0800	U	2.00	0.0800	mg/L			03/06/14 18:32	1000
Chloromethane	0.180	U	2.00	0.180	mg/L			03/06/14 18:32	1000
1,1-Dichloroethane	**8.36**		1.00	0.110	mg/L			03/06/14 18:32	1000
1,1-Dichloroethene	**1.39**		1.00	0.190	mg/L			03/06/14 18:32	1000
trans-1,2-Dichloroethene	**5.82**		1.00	0.0900	mg/L			03/06/14 18:32	1000
1,2-Dichloropropane	0.160	U	1.00	0.160	mg/L			03/06/14 18:32	1000
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	mg/L			03/06/14 18:32	1000
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	mg/L			03/06/14 18:32	1000
Ethylbenzene	0.110	U	1.00	0.110	mg/L			03/06/14 18:32	1000
2-Hexanone	0.350	U	2.00	0.350	mg/L			03/06/14 18:32	1000
Methylene Chloride	**0.846**	**J**	5.00	0.150	mg/L			03/06/14 18:32	1000
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	mg/L			03/06/14 18:32	1000
Styrene	0.0700	U	1.00	0.0700	mg/L			03/06/14 18:32	1000
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	mg/L			03/06/14 18:32	1000
Tetrachloroethene	**4.27**		1.00	0.130	mg/L			03/06/14 18:32	1000
Toluene	0.150	U	1.00	0.150	mg/L			03/06/14 18:32	1000
1,1,1-Trichloroethane	0.150	U	1.00	0.150	mg/L			03/06/14 18:32	1000
1,1,2-Trichloroethane	**12.4**		1.00	0.280	mg/L			03/06/14 18:32	1000
Trichloroethene	**6.35**		1.00	0.180	mg/L			03/06/14 18:32	1000
Vinyl acetate	0.210	U	2.00	0.210	mg/L			03/06/14 18:32	1000
Vinyl chloride	**10.3**		2.00	0.110	mg/L			03/06/14 18:32	1000
o-Xylene	0.120	U	1.00	0.120	mg/L			03/06/14 18:32	1000
m-Xylene & p-Xylene	0.170	U	1.00	0.170	mg/L			03/06/14 18:32	1000
Xylenes, Total	0.260	U	1.00	0.260	mg/L			03/06/14 18:32	1000
cis-1,2-Dichloroethene	**2.84**		1.00	0.0600	mg/L			03/06/14 18:32	1000
Bromodichloromethane	0.160	U	1.00	0.160	mg/L			03/06/14 18:32	1000
1,2-Dichloroethene, Total	**8.66**		1.00	0.300	mg/L			03/06/14 18:32	1000

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Client Sample ID: A1-EP2

Date Collected: 02/27/14 10:55
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87931-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		70 - 130		03/06/14 18:32	1000
Dibromofluoromethane	84		62 - 130		03/06/14 18:32	1000
4-Bromofluorobenzene	107		67 - 139		03/06/14 18:32	1000
1,2-Dichloroethane-d4 (Surr)	62		50 - 134		03/06/14 18:32	1000

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	**98.2**		10.0	1.30	mg/L			03/06/14 18:58	10000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		70 - 130		03/06/14 18:58	10000
Dibromofluoromethane	90		62 - 130		03/06/14 18:58	10000
4-Bromofluorobenzene	102		67 - 139		03/06/14 18:58	10000
1,2-Dichloroethane-d4 (Surr)	78		50 - 134		03/06/14 18:58	10000

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**2000**		200	28.0	mg/L			03/06/14 19:24	200000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		03/06/14 19:24	200000
Dibromofluoromethane	90		62 - 130		03/06/14 19:24	200000
4-Bromofluorobenzene	96		67 - 139		03/06/14 19:24	200000
1,2-Dichloroethane-d4 (Surr)	88		50 - 134		03/06/14 19:24	200000

Client Sample ID: A1-MP1

Date Collected: 02/27/14 07:50
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87931-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.98	U	10.0	1.98	mg/L			03/06/14 20:15	2000
Benzene	**5.14**		2.00	0.160	mg/L			03/06/14 20:15	2000
Chlorobromomethane	0.360	U	2.00	0.360	mg/L			03/06/14 20:15	2000
Bromoform	0.380	U	2.00	0.380	mg/L			03/06/14 20:15	2000
Bromomethane	0.500	U	4.00	0.500	mg/L			03/06/14 20:15	2000
2-Butanone (MEK)	1.52	U	4.00	1.52	mg/L			03/06/14 20:15	2000
Carbon disulfide	0.480	U	4.00	0.480	mg/L			03/06/14 20:15	2000
Carbon tetrachloride	0.300	U	2.00	0.300	mg/L			03/06/14 20:15	2000
Dibromochloromethane	0.300	U	2.00	0.300	mg/L			03/06/14 20:15	2000
Chlorobenzene	0.240	U	2.00	0.240	mg/L			03/06/14 20:15	2000
Chloroethane	0.160	U	4.00	0.160	mg/L			03/06/14 20:15	2000
Chloromethane	0.360	U	4.00	0.360	mg/L			03/06/14 20:15	2000
1,1-Dichloroethane	**14.1**		2.00	0.220	mg/L			03/06/14 20:15	2000
1,1-Dichloroethene	**2.31**		2.00	0.380	mg/L			03/06/14 20:15	2000
trans-1,2-Dichloroethene	**10.9**		2.00	0.180	mg/L			03/06/14 20:15	2000
1,2-Dichloropropane	0.320	U	2.00	0.320	mg/L			03/06/14 20:15	2000
cis-1,3-Dichloropropene	0.360	U	2.00	0.360	mg/L			03/06/14 20:15	2000
trans-1,3-Dichloropropene	0.420	U	2.00	0.420	mg/L			03/06/14 20:15	2000
Ethylbenzene	0.220	U	2.00	0.220	mg/L			03/06/14 20:15	2000
2-Hexanone	0.700	U	4.00	0.700	mg/L			03/06/14 20:15	2000

Client Sample ID: A1-MP1

Date Collected: 02/27/14 07:50
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87931-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**1.16**	J	10.0	0.300	mg/L			03/06/14 20:15	2000
4-Methyl-2-pentanone (MIBK)	0.900	U	4.00	0.900	mg/L			03/06/14 20:15	2000
Styrene	0.140	U	2.00	0.140	mg/L			03/06/14 20:15	2000
1,1,2,2-Tetrachloroethane	0.440	U	2.00	0.440	mg/L			03/06/14 20:15	2000
Tetrachloroethene	**2.88**		2.00	0.260	mg/L			03/06/14 20:15	2000
Toluene	0.300	U	2.00	0.300	mg/L			03/06/14 20:15	2000
1,1,1-Trichloroethane	0.300	U	2.00	0.300	mg/L			03/06/14 20:15	2000
1,1,2-Trichloroethane	**9.17**		2.00	0.560	mg/L			03/06/14 20:15	2000
Trichloroethene	**7.01**		2.00	0.360	mg/L			03/06/14 20:15	2000
Vinyl acetate	0.420	U	4.00	0.420	mg/L			03/06/14 20:15	2000
Vinyl chloride	**24.0**		4.00	0.220	mg/L			03/06/14 20:15	2000
o-Xylene	0.240	U	2.00	0.240	mg/L			03/06/14 20:15	2000
m-Xylene & p-Xylene	0.340	U	2.00	0.340	mg/L			03/06/14 20:15	2000
Xylenes, Total	0.520	U	2.00	0.520	mg/L			03/06/14 20:15	2000
cis-1,2-Dichloroethene	**4.16**		2.00	0.120	mg/L			03/06/14 20:15	2000
Bromodichloromethane	0.320	U	2.00	0.320	mg/L			03/06/14 20:15	2000
1,2-Dichloroethene, Total	**15.1**		2.00	0.600	mg/L			03/06/14 20:15	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*03/06/14 20:15*	*2000*
Dibromofluoromethane	*88*		*62 - 130*		*03/06/14 20:15*	*2000*
4-Bromofluorobenzene	*100*		*67 - 139*		*03/06/14 20:15*	*2000*
1,2-Dichloroethane-d4 (Surr)	*67*		*50 - 134*		*03/06/14 20:15*	*2000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	**147**		10.0	1.30	mg/L			03/07/14 15:27	10000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/07/14 15:27*	*10000*
Dibromofluoromethane	*88*		*62 - 130*		*03/07/14 15:27*	*10000*
4-Bromofluorobenzene	*93*		*67 - 139*		*03/07/14 15:27*	*10000*
1,2-Dichloroethane-d4 (Surr)	*74*		*50 - 134*		*03/07/14 15:27*	*10000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**3010**		200	28.0	mg/L			03/07/14 15:52	200000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/07/14 15:52*	*200000*
Dibromofluoromethane	*90*		*62 - 130*		*03/07/14 15:52*	*200000*
4-Bromofluorobenzene	*94*		*67 - 139*		*03/07/14 15:52*	*200000*
1,2-Dichloroethane-d4 (Surr)	*91*		*50 - 134*		*03/07/14 15:52*	*200000*

Client Sample ID: A1-MP2

Date Collected: 02/27/14 09:05
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87931-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.95	U	25.0	4.95	mg/L			03/07/14 16:18	5000

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Client Sample ID: A1-MP2
Date Collected: 02/27/14 09:05
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87931-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.87**		5.00	0.400	mg/L			03/07/14 16:18	5000
Chlorobromomethane	0.900	U	5.00	0.900	mg/L			03/07/14 16:18	5000
Bromoform	0.950	U	5.00	0.950	mg/L			03/07/14 16:18	5000
Bromomethane	1.25	U	10.0	1.25	mg/L			03/07/14 16:18	5000
2-Butanone (MEK)	3.80	U	10.0	3.80	mg/L			03/07/14 16:18	5000
Carbon disulfide	1.20	U	10.0	1.20	mg/L			03/07/14 16:18	5000
Carbon tetrachloride	0.750	U	5.00	0.750	mg/L			03/07/14 16:18	5000
Dibromochloromethane	0.750	U	5.00	0.750	mg/L			03/07/14 16:18	5000
Chlorobenzene	0.600	U	5.00	0.600	mg/L			03/07/14 16:18	5000
Chloroethane	0.400	U	10.0	0.400	mg/L			03/07/14 16:18	5000
Chloroform	**150**		5.00	0.650	mg/L			03/07/14 16:18	5000
Chloromethane	0.900	U	10.0	0.900	mg/L			03/07/14 16:18	5000
1,1-Dichloroethane	**15.7**		5.00	0.550	mg/L			03/07/14 16:18	5000
1,1-Dichloroethene	**2.53**	**J**	5.00	0.950	mg/L			03/07/14 16:18	5000
trans-1,2-Dichloroethene	**11.0**		5.00	0.450	mg/L			03/07/14 16:18	5000
1,2-Dichloropropane	0.800	U	5.00	0.800	mg/L			03/07/14 16:18	5000
cis-1,3-Dichloropropene	0.900	U	5.00	0.900	mg/L			03/07/14 16:18	5000
trans-1,3-Dichloropropene	1.05	U	5.00	1.05	mg/L			03/07/14 16:18	5000
Ethylbenzene	0.550	U	5.00	0.550	mg/L			03/07/14 16:18	5000
2-Hexanone	1.75	U	10.0	1.75	mg/L			03/07/14 16:18	5000
Methylene Chloride	0.750	U	25.0	0.750	mg/L			03/07/14 16:18	5000
4-Methyl-2-pentanone (MIBK)	2.25	U	10.0	2.25	mg/L			03/07/14 16:18	5000
Styrene	0.350	U	5.00	0.350	mg/L			03/07/14 16:18	5000
1,1,2,2-Tetrachloroethane	1.10	U	5.00	1.10	mg/L			03/07/14 16:18	5000
Tetrachloroethene	**4.45**	**J**	5.00	0.650	mg/L			03/07/14 16:18	5000
Toluene	0.750	U	5.00	0.750	mg/L			03/07/14 16:18	5000
1,1,1-Trichloroethane	0.750	U	5.00	0.750	mg/L			03/07/14 16:18	5000
1,1,2-Trichloroethane	**9.73**		5.00	1.40	mg/L			03/07/14 16:18	5000
Trichloroethene	**8.54**		5.00	0.900	mg/L			03/07/14 16:18	5000
Vinyl acetate	1.05	U	10.0	1.05	mg/L			03/07/14 16:18	5000
Vinyl chloride	**28.1**		10.0	0.550	mg/L			03/07/14 16:18	5000
o-Xylene	0.600	U	5.00	0.600	mg/L			03/07/14 16:18	5000
m-Xylene & p-Xylene	0.850	U	5.00	0.850	mg/L			03/07/14 16:18	5000
Xylenes, Total	1.30	U	5.00	1.30	mg/L			03/07/14 16:18	5000
cis-1,2-Dichloroethene	**4.08**	**J**	5.00	0.300	mg/L			03/07/14 16:18	5000
Bromodichloromethane	0.800	U	5.00	0.800	mg/L			03/07/14 16:18	5000
1,2-Dichloroethene, Total	**15.1**		5.00	1.50	mg/L			03/07/14 16:18	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/07/14 16:18*	*5000*
Dibromofluoromethane	*87*		*62 - 130*		*03/07/14 16:18*	*5000*
4-Bromofluorobenzene	*96*		*67 - 139*		*03/07/14 16:18*	*5000*
1,2-Dichloroethane-d4 (Surr)	*72*		*50 - 134*		*03/07/14 16:18*	*5000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**3780**		200	28.0	mg/L			03/07/14 16:44	200000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*		*03/07/14 16:44*	*200000*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Client Sample ID: A1-MP2

Lab Sample ID: 600-87931-4

Date Collected: 02/27/14 09:05
Matrix: Water
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*103*		*62 - 130*		*03/07/14 16:44*	*200000*
4-Bromofluorobenzene	*104*		*67 - 139*		*03/07/14 16:44*	*200000*
1,2-Dichloroethane-d4 (Surr)	*105*		*50 - 134*		*03/07/14 16:44*	*200000*

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Client Sample ID: A1-MP3

Lab Sample ID: 600-87931-5

Date Collected: 02/27/14 09:50
Matrix: Water
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.95	U	25.0	4.95	mg/L			03/07/14 17:10	5000
Benzene	**6.36**		5.00	0.400	mg/L			03/07/14 17:10	5000
Chlorobromomethane	0.900	U	5.00	0.900	mg/L			03/07/14 17:10	5000
Bromoform	0.950	U	5.00	0.950	mg/L			03/07/14 17:10	5000
Bromomethane	1.25	U	10.0	1.25	mg/L			03/07/14 17:10	5000
2-Butanone (MEK)	3.80	U	10.0	3.80	mg/L			03/07/14 17:10	5000
Carbon disulfide	1.20	U	10.0	1.20	mg/L			03/07/14 17:10	5000
Carbon tetrachloride	0.750	U	5.00	0.750	mg/L			03/07/14 17:10	5000
Dibromochloromethane	0.750	U	5.00	0.750	mg/L			03/07/14 17:10	5000
Chlorobenzene	0.600	U	5.00	0.600	mg/L			03/07/14 17:10	5000
Chloroethane	0.400	U	10.0	0.400	mg/L			03/07/14 17:10	5000
Chloroform	**153**		5.00	0.650	mg/L			03/07/14 17:10	5000
Chloromethane	0.900	U	10.0	0.900	mg/L			03/07/14 17:10	5000
1,1-Dichloroethane	**13.2**		5.00	0.550	mg/L			03/07/14 17:10	5000
1,1-Dichloroethene	**2.92**	**J**	5.00	0.950	mg/L			03/07/14 17:10	5000
trans-1,2-Dichloroethene	**9.67**		5.00	0.450	mg/L			03/07/14 17:10	5000
1,2-Dichloropropane	**5.57**		5.00	0.800	mg/L			03/07/14 17:10	5000
cis-1,3-Dichloropropene	0.900	U	5.00	0.900	mg/L			03/07/14 17:10	5000
trans-1,3-Dichloropropene	1.05	U	5.00	1.05	mg/L			03/07/14 17:10	5000
Ethylbenzene	0.550	U	5.00	0.550	mg/L			03/07/14 17:10	5000
2-Hexanone	**7.29**	**J**	10.0	1.75	mg/L			03/07/14 17:10	5000
Methylene Chloride	0.750	U	25.0	0.750	mg/L			03/07/14 17:10	5000
4-Methyl-2-pentanone (MIBK)	2.25	U	10.0	2.25	mg/L			03/07/14 17:10	5000
Styrene	0.350	U	5.00	0.350	mg/L			03/07/14 17:10	5000
1,1,2,2-Tetrachloroethane	1.10	U	5.00	1.10	mg/L			03/07/14 17:10	5000
Tetrachloroethene	**6.72**		5.00	0.650	mg/L			03/07/14 17:10	5000
Toluene	0.750	U	5.00	0.750	mg/L			03/07/14 17:10	5000
1,1,1-Trichloroethane	**6.96**		5.00	0.750	mg/L			03/07/14 17:10	5000
1,1,2-Trichloroethane	**12.4**		5.00	1.40	mg/L			03/07/14 17:10	5000
Trichloroethene	**9.80**		5.00	0.900	mg/L			03/07/14 17:10	5000
Vinyl acetate	1.05	U	10.0	1.05	mg/L			03/07/14 17:10	5000
Vinyl chloride	**29.3**		10.0	0.550	mg/L			03/07/14 17:10	5000
o-Xylene	0.600	U	5.00	0.600	mg/L			03/07/14 17:10	5000
m-Xylene & p-Xylene	0.850	U	5.00	0.850	mg/L			03/07/14 17:10	5000
Xylenes, Total	1.30	U	5.00	1.30	mg/L			03/07/14 17:10	5000
cis-1,2-Dichloroethene	**3.56**	**J**	5.00	0.300	mg/L			03/07/14 17:10	5000
Bromodichloromethane	0.800	U	5.00	0.800	mg/L			03/07/14 17:10	5000
1,2-Dichloroethene, Total	**13.2**		5.00	1.50	mg/L			03/07/14 17:10	5000

Client Sample Results

TestAmerica Job ID: 600-87931-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Client Sample ID: A1-MP3

Lab Sample ID: 600-87931-5
Matrix: Water

Date Collected: 02/27/14 09:50
Date Received: 02/28/14 10:14

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130		03/07/14 17:10	5000
Dibromofluoromethane	90		62 - 130		03/07/14 17:10	5000
4-Bromofluorobenzene	94		67 - 139		03/07/14 17:10	5000
1,2-Dichloroethane-d4 (Surr)	71		50 - 134		03/07/14 17:10	5000

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**3440**		200	28.0	mg/L			03/07/14 17:35	200000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)					03/07/14 17:35	200000
Dibromofluoromethane					03/07/14 17:35	200000
4-Bromofluorobenzene					03/07/14 17:35	200000
1,2-Dichloroethane-d4 (Surr)					03/07/14 17:35	200000

Client Sample ID: A1-MP4

Lab Sample ID: 600-87931-6
Matrix: Water

Date Collected: 02/27/14 10:20
Date Received: 02/28/14 10:14

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.95	U	25.0	4.95	mg/L			03/07/14 18:01	5000
Benzene	**6.11**		5.00	0.400	mg/L			03/07/14 18:01	5000
Chlorobromomethane	0.900	U	5.00	0.900	mg/L			03/07/14 18:01	5000
Bromoform	0.950	U	5.00	0.950	mg/L			03/07/14 18:01	5000
Bromomethane	1.25	U	10.0	1.25	mg/L			03/07/14 18:01	5000
2-Butanone (MEK)	3.80	U	10.0	3.80	mg/L			03/07/14 18:01	5000
Carbon disulfide	1.20	U	10.0	1.20	mg/L			03/07/14 18:01	5000
Carbon tetrachloride	0.750	U	5.00	0.750	mg/L			03/07/14 18:01	5000
Dibromochloromethane	0.750	U	5.00	0.750	mg/L			03/07/14 18:01	5000
Chlorobenzene	0.600	U	5.00	0.600	mg/L			03/07/14 18:01	5000
Chloroethane	0.400	U	10.0	0.400	mg/L			03/07/14 18:01	5000
Chloroform	**153**		5.00	0.650	mg/L			03/07/14 18:01	5000
Chloromethane	0.900	U	10.0	0.900	mg/L			03/07/14 18:01	5000
1,1-Dichloroethane	**13.3**		5.00	0.550	mg/L			03/07/14 18:01	5000
1,1-Dichloroethene	**3.16**	J	5.00	0.950	mg/L			03/07/14 18:01	5000
trans-1,2-Dichloroethene	**9.72**		5.00	0.450	mg/L			03/07/14 18:01	5000
1,2-Dichloropropane	0.800	U	5.00	0.800	mg/L			03/07/14 18:01	5000
cis-1,3-Dichloropropene	0.900	U	5.00	0.900	mg/L			03/07/14 18:01	5000
trans-1,3-Dichloropropene	1.05	U	5.00	1.05	mg/L			03/07/14 18:01	5000
Ethylbenzene	0.550	U	5.00	0.550	mg/L			03/07/14 18:01	5000
2-Hexanone	1.75	U	10.0	1.75	mg/L			03/07/14 18:01	5000
Methylene Chloride	0.750	U	25.0	0.750	mg/L			03/07/14 18:01	5000
4-Methyl-2-pentanone (MIBK)	2.25	U	10.0	2.25	mg/L			03/07/14 18:01	5000
Styrene	0.350	U	5.00	0.350	mg/L			03/07/14 18:01	5000
1,1,2,2-Tetrachloroethane	1.10	U	5.00	1.10	mg/L			03/07/14 18:01	5000
Tetrachloroethene	**6.85**		5.00	0.650	mg/L			03/07/14 18:01	5000
Toluene	0.750	U	5.00	0.750	mg/L			03/07/14 18:01	5000
1,1,1-Trichloroethane	0.750	U	5.00	0.750	mg/L			03/07/14 18:01	5000
1,1,2-Trichloroethane	**12.9**		5.00	1.40	mg/L			03/07/14 18:01	5000
Trichloroethene	**9.70**		5.00	0.900	mg/L			03/07/14 18:01	5000

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87931-1

Client Sample ID: A1-MP4
Date Collected: 02/27/14 10:20
Date Received: 02/28/14 10:14

Lab Sample ID: 600-87931-6
Matrix: Water

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Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	1.05	U	10.0	1.05	mg/L			03/07/14 18:01	5000
Vinyl chloride	**31.9**		10.0	0.550	mg/L			03/07/14 18:01	5000
o-Xylene	0.600	U	5.00	0.600	mg/L			03/07/14 18:01	5000
m-Xylene & p-Xylene	0.850	U	5.00	0.850	mg/L			03/07/14 18:01	5000
Xylenes, Total	1.30	U	5.00	1.30	mg/L			03/07/14 18:01	5000
cis-1,2-Dichloroethene	**3.48**	**J**	5.00	0.300	mg/L			03/07/14 18:01	5000
Bromodichloromethane	0.800	U	5.00	0.800	mg/L			03/07/14 18:01	5000
1,2-Dichloroethene, Total	**13.2**		5.00	1.50	mg/L			03/07/14 18:01	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*03/07/14 18:01*	*5000*
Dibromofluoromethane	*92*		*62 - 130*		*03/07/14 18:01*	*5000*
4-Bromofluorobenzene	*98*		*67 - 139*		*03/07/14 18:01*	*5000*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*03/07/14 18:01*	*5000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**4250**		200	28.0	mg/L			03/07/14 18:27	200000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*03/07/14 18:27*	*200000*
Dibromofluoromethane	*101*		*62 - 130*		*03/07/14 18:27*	*200000*
4-Bromofluorobenzene	*102*		*67 - 139*		*03/07/14 18:27*	*200000*
1,2-Dichloroethane-d4 (Surr)	*97*		*50 - 134*		*03/07/14 18:27*	*200000*

Definitions/Glossary

TestAmerica Job ID: 600-87931-1

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

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

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

3/18/2014

Client Information

Client Contact: Mr. Kevin Dworsky
Company: Pastor, Behling & Wheeler LLC
Address: 620 E. Airline
City: Victoria
State, Zip: TX, 77901
Phone:
Email: kevin.dworsky@pbwllc.com
Project Name: Formosa Plastic Pilot Test- Gainco
Site: Formosa Point Comfort

Sampler: Travis Clausen
Phone: 713-725-1442

Due Date Requested:
TAT Requested (days): 10 days
PO #: Purchase Order not required
WO #:
Project #: 60004994 3307
SSOW#:

Lab PM: Kudchadkar, Sachin G
E-Mail: sachin.kudchadkar@testamericainc.com
Carrier Tracking No(s):
COC No: 600-26712-9288.1
Page: Page 1 of 1
Job #: 3307

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil/waste, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	Moisture - Local Method	TO-15 (TestAmerica Knoxville)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
A1 - ~~IP1~~ EP1	2-27-14	830	G	W	N	N	V			3	
A1 - ~~IP2~~ EP2		1055			N	N	V			3	
A1 - MP1		750			N	N	V			3	
A1 - MP2		905			N	N	V			3	
A1 - MP 3		950			N	N	V			3	
A1 - MP 4		1020			N	N	V			3	

600-87931 Chain of Custody

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Standard QA/QC

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	2-27-14 1800	PBW			
Relinquished by	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by: [signature]	Date/Time: 03/04/14 1015	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-87999-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

For:
Pastor, Behling & Wheeler LLC
620 E. Airline
Victoria, Texas 77901

Attn: Mr. Kevin Dworsky

Authorized for release by:
3/18/2014 10:38:01 AM
Sophia Shah, Project Management Assistant I
sophia.shah@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Method Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-87999-1	A2-EP1-1-2'	Solid	02/27/14 15:55	03/01/14 09:09
600-87999-2	A2-EP1-7-8'	Solid	02/27/14 16:10	03/01/14 09:09
600-87999-3	A2-EP1-14-15'	Solid	02/27/14 16:15	03/01/14 09:09
600-87999-4	A2-EP2-1-2'	Solid	02/27/14 16:35	03/01/14 09:09
600-87999-5	A2-EP2-7-8'	Solid	02/27/14 16:45	03/01/14 09:09
600-87999-6	A2-EP2-14-15'	Solid	02/27/14 16:55	03/01/14 09:09
600-87999-7	Trip Blank	Water	02/27/14 00:00	03/01/14 09:09

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Client Sample ID: A2-EP1-1-2'

Date Collected: 02/27/14 15:55
Date Received: 03/01/14 09:09

Lab Sample ID: 600-87999-1

Matrix: Solid
Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0306**		0.0101	0.00167	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Benzene	0.000634	U	0.00503	0.000634	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Chlorobromomethane	0.00179	U	0.00503	0.00179	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Bromoform	0.00138	U	0.00503	0.00138	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Bromomethane	0.000835	U	0.0101	0.000835	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
2-Butanone (MEK)	0.00191	U	0.0101	0.00191	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Carbon disulfide	0.000553	U	0.0101	0.000553	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Carbon tetrachloride	0.00114	U	0.00503	0.00114	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Dibromochloromethane	0.000946	U	0.00503	0.000946	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Chlorobenzene	0.000966	U	0.00503	0.000966	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Chloroethane	0.00141	U	0.0101	0.00141	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Chloroform	0.000664	U	0.00503	0.000664	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Chloromethane	0.00167	U	0.0101	0.00167	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,1-Dichloroethane	0.000875	U	0.00503	0.000875	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,2-Dichloroethane	0.000906	U	0.00503	0.000906	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,1-Dichloroethene	0.00123	U	0.00503	0.00123	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
cis-1,2-Dichloroethene	0.000835	U	0.00503	0.000835	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
trans-1,2-Dichloroethene	0.00115	U	0.00503	0.00115	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,2-Dichloropropane	0.000714	U	0.00503	0.000714	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
cis-1,3-Dichloropropene	0.000543	U	0.00503	0.000543	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
trans-1,3-Dichloropropene	0.000584	U	0.00503	0.000584	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Ethylbenzene	0.00103	U	0.00503	0.00103	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
2-Hexanone	0.00102	U	0.0101	0.00102	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Methylene Chloride	0.00220	U	0.0101	0.00220	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
4-Methyl-2-pentanone (MIBK)	0.00148	U	0.0101	0.00148	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Styrene	0.000714	U	0.00503	0.000714	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,1,2,2-Tetrachloroethane	0.000875	U	0.00503	0.000875	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Tetrachloroethene	0.000714	U	0.00503	0.000714	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Toluene	0.00139	U	0.00503	0.00139	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,1,1-Trichloroethane	0.000745	U	0.00503	0.000745	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,1,2-Trichloroethane	0.000735	U	0.0402	0.000735	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Trichloroethene	0.00141	U	0.00503	0.00141	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Vinyl acetate	0.000936	U	0.0101	0.000936	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Vinyl chloride	0.000906	U	0.0101	0.000906	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
o-Xylene	0.00114	U	0.00503	0.00114	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
m-Xylene & p-Xylene	0.00153	U	0.0101	0.00153	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Xylenes, Total	0.00114	U	0.00503	0.00114	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
Bromodichloromethane	0.000664	U	0.00503	0.000664	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1
1,2-Dichloroethene, Total	0.00191	U	0.0101	0.00191	mg/Kg	☼	03/07/14 11:46	03/09/14 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*115*		*50 - 130*	*03/07/14 11:46*	*03/09/14 17:38*	*1*
Dibromofluoromethane	*99*		*68 - 140*	*03/07/14 11:46*	*03/09/14 17:38*	*1*
4-Bromofluorobenzene	*133*		*57 - 140*	*03/07/14 11:46*	*03/09/14 17:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*03/07/14 11:46*	*03/09/14 17:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17**		1.0	1.0	%			03/04/14 15:33	1
Percent Solids	**83**		1.0	1.0	%			03/04/14 15:33	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Client Sample ID: A2-EP1-7-8'

Date Collected: 02/27/14 16:10
Date Received: 03/01/14 09:09

Lab Sample ID: 600-87999-2
Matrix: Solid
Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0219**		0.00885	0.00147	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Benzene	0.000558	U	0.00442	0.000558	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Chlorobromomethane	0.00158	U	0.00442	0.00158	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Bromoform	0.00121	U	0.00442	0.00121	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Bromomethane	0.000735	U	0.00885	0.000735	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
2-Butanone (MEK)	0.00168	U	0.00885	0.00168	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Carbon disulfide	0.000487	U	0.00885	0.000487	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Carbon tetrachloride	0.00100	U	0.00442	0.00100	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Dibromochloromethane	0.000832	U	0.00442	0.000832	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Chlorobenzene	0.000850	U	0.00442	0.000850	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Chloroethane	0.00124	U	0.00885	0.00124	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Chloroform	0.000584	U	0.00442	0.000584	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Chloromethane	0.00147	U	0.00885	0.00147	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,1-Dichloroethane	0.000770	U	0.00442	0.000770	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,2-Dichloroethane	0.000796	U	0.00442	0.000796	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,1-Dichloroethene	0.00108	U	0.00442	0.00108	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
cis-1,2-Dichloroethene	0.000735	U	0.00442	0.000735	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
trans-1,2-Dichloroethene	0.00101	U	0.00442	0.00101	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,2-Dichloropropane	0.000628	U	0.00442	0.000628	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
cis-1,3-Dichloropropene	0.000478	U	0.00442	0.000478	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
trans-1,3-Dichloropropene	0.000513	U	0.00442	0.000513	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Ethylbenzene	0.000903	U	0.00442	0.000903	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
2-Hexanone	0.000894	U	0.00885	0.000894	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Methylene Chloride	0.00194	U	0.00885	0.00194	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
4-Methyl-2-pentanone (MIBK)	0.00130	U	0.00885	0.00130	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Styrene	0.000628	U	0.00442	0.000628	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,1,2,2-Tetrachloroethane	0.000770	U	0.00442	0.000770	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Tetrachloroethene	0.000628	U	0.00442	0.000628	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Toluene	0.00122	U	0.00442	0.00122	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,1,1-Trichloroethane	0.000655	U	0.00442	0.000655	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,1,2-Trichloroethane	0.000646	U	0.0354	0.000646	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Trichloroethene	0.00124	U	0.00442	0.00124	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Vinyl acetate	0.000823	U	0.00885	0.000823	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Vinyl chloride	0.000796	U	0.00885	0.000796	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
o-Xylene	0.00100	U	0.00442	0.00100	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
m-Xylene & p-Xylene	0.00135	U	0.00885	0.00135	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Xylenes, Total	0.00100	U	0.00442	0.00100	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
Bromodichloromethane	0.000584	U	0.00442	0.000584	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1
1,2-Dichloroethene, Total	0.00168	U	0.00885	0.00168	mg/Kg	☼	03/07/14 11:46	03/09/14 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*50 - 130*	*03/07/14 11:46*	*03/09/14 18:03*	*1*
Dibromofluoromethane	*94*		*68 - 140*	*03/07/14 11:46*	*03/09/14 18:03*	*1*
4-Bromofluorobenzene	*113*		*57 - 140*	*03/07/14 11:46*	*03/09/14 18:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*	*03/07/14 11:46*	*03/09/14 18:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13**		1.0	1.0	%			03/04/14 15:33	1
Percent Solids	**87**		1.0	1.0	%			03/04/14 15:33	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Client Sample ID: A2-EP1-14-15'

Date Collected: 02/27/14 16:15
Date Received: 03/01/14 09:09

Lab Sample ID: 600-87999-3

Matrix: Solid
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00140	U	0.00845	0.00140	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Benzene	0.000532	U	0.00422	0.000532	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Chlorobromomethane	0.00150	U	0.00422	0.00150	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Bromoform	**0.00807**		0.00422	0.00116	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Bromomethane	0.000701	U	0.00845	0.000701	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
2-Butanone (MEK)	0.00161	U	0.00845	0.00161	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Carbon disulfide	0.000465	U	0.00845	0.000465	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Carbon tetrachloride	0.000955	U	0.00422	0.000955	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Dibromochloromethane	0.000794	U	0.00422	0.000794	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Chlorobenzene	0.000811	U	0.00422	0.000811	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Chloroethane	0.00118	U	0.00845	0.00118	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Chloroform	0.000558	U	0.00422	0.000558	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Chloromethane	0.00140	U	0.00845	0.00140	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,1-Dichloroethane	0.000735	U	0.00422	0.000735	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,2-Dichloroethane	0.000760	U	0.00422	0.000760	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,1-Dichloroethene	0.00103	U	0.00422	0.00103	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
cis-1,2-Dichloroethene	0.000701	U	0.00422	0.000701	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
trans-1,2-Dichloroethene	0.000963	U	0.00422	0.000963	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,2-Dichloropropane	0.000600	U	0.00422	0.000600	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
cis-1,3-Dichloropropene	0.000456	U	0.00422	0.000456	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
trans-1,3-Dichloropropene	0.000490	U	0.00422	0.000490	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Ethylbenzene	0.000862	U	0.00422	0.000862	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
2-Hexanone	0.000853	U	0.00845	0.000853	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Methylene Chloride	0.00185	U	0.00845	0.00185	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
4-Methyl-2-pentanone (MIBK)	0.00124	U	0.00845	0.00124	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Styrene	0.000600	U	0.00422	0.000600	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,1,2,2-Tetrachloroethane	0.000735	U	0.00422	0.000735	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Tetrachloroethene	0.000600	U	0.00422	0.000600	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Toluene	0.00117	U	0.00422	0.00117	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,1,1-Trichloroethane	0.000625	U	0.00422	0.000625	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,1,2-Trichloroethane	0.000617	U	0.0338	0.000617	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Trichloroethene	0.00118	U	0.00422	0.00118	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Vinyl acetate	0.000786	U	0.00845	0.000786	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Vinyl chloride	0.000760	U	0.00845	0.000760	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
o-Xylene	0.000955	U	0.00422	0.000955	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
m-Xylene & p-Xylene	0.00128	U	0.00845	0.00128	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Xylenes, Total	0.000955	U	0.00422	0.000955	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
Bromodichloromethane	0.000558	U	0.00422	0.000558	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1
1,2-Dichloroethene, Total	0.00161	U	0.00845	0.00161	mg/Kg	☼	03/07/14 11:46	03/09/14 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*112*		*50 - 130*	*03/07/14 11:46*	*03/09/14 18:27*	*1*
Dibromofluoromethane	*95*		*68 - 140*	*03/07/14 11:46*	*03/09/14 18:27*	*1*
4-Bromofluorobenzene	*114*		*57 - 140*	*03/07/14 11:46*	*03/09/14 18:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*03/07/14 11:46*	*03/09/14 18:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		1.0	1.0	%			03/04/14 15:33	1
Percent Solids	**85**		1.0	1.0	%			03/04/14 15:33	1

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Client Sample ID: A2-EP2-1-2'

Date Collected: 02/27/14 16:35
Date Received: 03/01/14 09:09

Lab Sample ID: 600-87999-4
Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0186**		0.0102	0.00169	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Benzene	0.000643	U	0.00511	0.000643	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Chlorobromomethane	0.00182	U	0.00511	0.00182	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Bromoform	0.00140	U	0.00511	0.00140	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Bromomethane	0.000847	U	0.0102	0.000847	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
2-Butanone (MEK)	0.00194	U	0.0102	0.00194	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Carbon disulfide	0.000562	U	0.0102	0.000562	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Carbon tetrachloride	0.00115	U	0.00511	0.00115	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Dibromochloromethane	0.000960	U	0.00511	0.000960	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Chlorobenzene	0.000980	U	0.00511	0.000980	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Chloroethane	0.00143	U	0.0102	0.00143	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Chloroform	0.000674	U	0.00511	0.000674	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Chloromethane	0.00169	U	0.0102	0.00169	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,1-Dichloroethane	0.000888	U	0.00511	0.000888	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,2-Dichloroethane	0.000919	U	0.00511	0.000919	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,1-Dichloroethene	0.00125	U	0.00511	0.00125	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
cis-1,2-Dichloroethene	0.000847	U	0.00511	0.000847	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
trans-1,2-Dichloroethene	0.00116	U	0.00511	0.00116	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,2-Dichloropropane	0.000725	U	0.00511	0.000725	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
cis-1,3-Dichloropropene	0.000551	U	0.00511	0.000551	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
trans-1,3-Dichloropropene	0.000592	U	0.00511	0.000592	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Ethylbenzene	0.00104	U	0.00511	0.00104	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
2-Hexanone	0.00103	U	0.0102	0.00103	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Methylene Chloride	0.00224	U	0.0102	0.00224	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
4-Methyl-2-pentanone (MIBK)	0.00150	U	0.0102	0.00150	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Styrene	0.000725	U	0.00511	0.000725	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,1,2,2-Tetrachloroethane	0.000888	U	0.00511	0.000888	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Tetrachloroethene	0.000725	U	0.00511	0.000725	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Toluene	0.00141	U	0.00511	0.00141	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,1,1-Trichloroethane	0.000756	U	0.00511	0.000756	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,1,2-Trichloroethane	0.000745	U	0.0408	0.000745	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Trichloroethene	0.00143	U	0.00511	0.00143	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Vinyl acetate	0.000950	U	0.0102	0.000950	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Vinyl chloride	0.000919	U	0.0102	0.000919	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
o-Xylene	0.00115	U	0.00511	0.00115	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
m-Xylene & p-Xylene	0.00155	U	0.0102	0.00155	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Xylenes, Total	0.00115	U	0.00511	0.00115	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
Bromodichloromethane	0.000674	U	0.00511	0.000674	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1
1,2-Dichloroethene, Total	0.00194	U	0.0102	0.00194	mg/Kg	☼	03/07/14 11:46	03/09/14 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*111*		*50 - 130*	*03/07/14 11:46*	*03/09/14 18:52*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*03/07/14 11:46*	*03/09/14 18:52*	*1*
4-Bromofluorobenzene	*115*		*57 - 140*	*03/07/14 11:46*	*03/09/14 18:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*03/07/14 11:46*	*03/09/14 18:52*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16**		1.0	1.0	%			03/04/14 15:33	1
Percent Solids	**84**		1.0	1.0	%			03/04/14 15:33	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Client Sample ID: A2-EP2-7-8'

Date Collected: 02/27/14 16:45
Date Received: 03/01/14 09:09

Lab Sample ID: 600-87999-5

Matrix: Solid
Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00145	U	0.00873	0.00145	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Benzene	0.000550	U	0.00436	0.000550	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Chlorobromomethane	0.00155	U	0.00436	0.00155	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Bromoform	0.00120	U	0.00436	0.00120	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Bromomethane	0.000724	U	0.00873	0.000724	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
2-Butanone (MEK)	0.00166	U	0.00873	0.00166	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Carbon disulfide	0.000480	U	0.00873	0.000480	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Carbon tetrachloride	0.000986	U	0.00436	0.000986	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Dibromochloromethane	0.000820	U	0.00436	0.000820	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Chlorobenzene	0.000838	U	0.00436	0.000838	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Chloroethane	0.00122	U	0.00873	0.00122	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Chloroform	0.000576	U	0.00436	0.000576	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Chloromethane	0.00145	U	0.00873	0.00145	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,1-Dichloroethane	0.000759	U	0.00436	0.000759	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,2-Dichloroethane	0.000785	U	0.00436	0.000785	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,1-Dichloroethene	0.00106	U	0.00436	0.00106	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
cis-1,2-Dichloroethene	0.000724	U	0.00436	0.000724	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
trans-1,2-Dichloroethene	0.000995	U	0.00436	0.000995	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,2-Dichloropropane	0.000620	U	0.00436	0.000620	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
cis-1,3-Dichloropropene	0.000471	U	0.00436	0.000471	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
trans-1,3-Dichloropropene	0.000506	U	0.00436	0.000506	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Ethylbenzene	0.000890	U	0.00436	0.000890	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
2-Hexanone	0.000881	U	0.00873	0.000881	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Methylene Chloride	0.00191	U	0.00873	0.00191	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
4-Methyl-2-pentanone (MIBK)	0.00128	U	0.00873	0.00128	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Styrene	0.000620	U	0.00436	0.000620	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,1,2,2-Tetrachloroethane	0.000759	U	0.00436	0.000759	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Tetrachloroethene	0.000620	U	0.00436	0.000620	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Toluene	0.00120	U	0.00436	0.00120	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,1,1-Trichloroethane	0.000646	U	0.00436	0.000646	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,1,2-Trichloroethane	0.000637	U	0.0349	0.000637	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Trichloroethene	0.00122	U	0.00436	0.00122	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Vinyl acetate	0.000812	U	0.00873	0.000812	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Vinyl chloride	0.000785	U	0.00873	0.000785	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
o-Xylene	0.000986	U	0.00436	0.000986	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
m-Xylene & p-Xylene	0.00133	U	0.00873	0.00133	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Xylenes, Total	0.000986	U	0.00436	0.000986	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
Bromodichloromethane	0.000576	U	0.00436	0.000576	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1
1,2-Dichloroethene, Total	0.00166	U	0.00873	0.00166	mg/Kg	☼	03/07/14 11:46	03/09/14 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*50 - 130*	*03/07/14 11:46*	*03/09/14 19:17*	*1*
Dibromofluoromethane	*94*		*68 - 140*	*03/07/14 11:46*	*03/09/14 19:17*	*1*
4-Bromofluorobenzene	*114*		*57 - 140*	*03/07/14 11:46*	*03/09/14 19:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*	*03/07/14 11:46*	*03/09/14 19:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17**		1.0	1.0	%			03/04/14 15:33	1
Percent Solids	**83**		1.0	1.0	%			03/04/14 15:33	1

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Client Sample ID: A2-EP2-14-15'
Date Collected: 02/27/14 16:55
Date Received: 03/01/14 09:09

Lab Sample ID: 600-87999-6
Matrix: Solid
Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00202	U	0.0121	0.00202	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Benzene	0.000765	U	0.00607	0.000765	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Chlorobromomethane	0.00216	U	0.00607	0.00216	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Bromoform	0.00166	U	0.00607	0.00166	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Bromomethane	0.00101	U	0.0121	0.00101	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
2-Butanone (MEK)	0.00231	U	0.0121	0.00231	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Carbon disulfide	0.000668	U	0.0121	0.000668	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Carbon tetrachloride	0.00137	U	0.00607	0.00137	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Dibromochloromethane	0.00114	U	0.00607	0.00114	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Chlorobenzene	0.00117	U	0.00607	0.00117	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Chloroethane	0.00170	U	0.0121	0.00170	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Chloroform	0.000802	U	0.00607	0.000802	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Chloromethane	0.00202	U	0.0121	0.00202	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,1-Dichloroethane	0.00106	U	0.00607	0.00106	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,2-Dichloroethane	0.00109	U	0.00607	0.00109	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,1-Dichloroethene	0.00148	U	0.00607	0.00148	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
cis-1,2-Dichloroethene	0.00101	U	0.00607	0.00101	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
trans-1,2-Dichloroethene	0.00138	U	0.00607	0.00138	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,2-Dichloropropane	0.000862	U	0.00607	0.000862	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
cis-1,3-Dichloropropene	0.000656	U	0.00607	0.000656	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
trans-1,3-Dichloropropene	0.000704	U	0.00607	0.000704	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Ethylbenzene	0.00124	U	0.00607	0.00124	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
2-Hexanone	0.00123	U	0.0121	0.00123	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Methylene Chloride	0.00266	U	0.0121	0.00266	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
4-Methyl-2-pentanone (MIBK)	0.00179	U	0.0121	0.00179	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Styrene	0.000862	U	0.00607	0.000862	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,1,2,2-Tetrachloroethane	0.00106	U	0.00607	0.00106	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Tetrachloroethene	0.000862	U	0.00607	0.000862	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Toluene	0.00168	U	0.00607	0.00168	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,1,1-Trichloroethane	0.000899	U	0.00607	0.000899	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,1,2-Trichloroethane	0.000887	U	0.0486	0.000887	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Trichloroethene	0.00170	U	0.00607	0.00170	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Vinyl acetate	0.00113	U	0.0121	0.00113	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Vinyl chloride	0.00109	U	0.0121	0.00109	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
o-Xylene	0.00137	U	0.00607	0.00137	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
m-Xylene & p-Xylene	0.00185	U	0.0121	0.00185	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Xylenes, Total	0.00137	U	0.00607	0.00137	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
Bromodichloromethane	0.000802	U	0.00607	0.000802	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1
1,2-Dichloroethene, Total	0.00231	U	0.0121	0.00231	mg/Kg	☼	03/07/14 11:46	03/09/14 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*111*		*50 - 130*	*03/07/14 11:46*	*03/09/14 19:41*	*1*
Dibromofluoromethane	*95*		*68 - 140*	*03/07/14 11:46*	*03/09/14 19:41*	*1*
4-Bromofluorobenzene	*127*		*57 - 140*	*03/07/14 11:46*	*03/09/14 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*03/07/14 11:46*	*03/09/14 19:41*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			03/04/14 15:33	1
Percent Solids	81		1.0	1.0	%			03/04/14 15:33	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Client Sample ID: Trip Blank

Lab Sample ID: 600-87999-7

Date Collected: 02/27/14 00:00
Matrix: Water
Date Received: 03/01/14 09:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.00452**	**J**	0.00500	0.000990	mg/L			03/09/14 17:03	1
Benzene	0.0000800	U	0.00100	0.0000800	mg/L			03/09/14 17:03	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/09/14 17:03	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/09/14 17:03	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/09/14 17:03	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/09/14 17:03	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/09/14 17:03	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/09/14 17:03	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/09/14 17:03	1
Chlorobenzene	0.000120	U	0.00100	0.000120	mg/L			03/09/14 17:03	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/09/14 17:03	1
Chloroform	0.000130	U	0.00100	0.000130	mg/L			03/09/14 17:03	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/09/14 17:03	1
1,1-Dichloroethane	0.000110	U	0.00100	0.000110	mg/L			03/09/14 17:03	1
1,2-Dichloroethane	0.000140	U	0.00100	0.000140	mg/L			03/09/14 17:03	1
1,1-Dichloroethene	0.000190	U	0.00100	0.000190	mg/L			03/09/14 17:03	1
trans-1,2-Dichloroethene	0.0000900	U	0.00100	0.0000900	mg/L			03/09/14 17:03	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/09/14 17:03	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/09/14 17:03	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/09/14 17:03	1
Ethylbenzene	0.000110	U	0.00100	0.000110	mg/L			03/09/14 17:03	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/09/14 17:03	1
Methylene Chloride	**0.00249**	**J**	0.00500	0.000150	mg/L			03/09/14 17:03	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/09/14 17:03	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/09/14 17:03	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/09/14 17:03	1
Tetrachloroethene	0.000130	U	0.00100	0.000130	mg/L			03/09/14 17:03	1
Toluene	0.000150	U	0.00100	0.000150	mg/L			03/09/14 17:03	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/09/14 17:03	1
1,1,2-Trichloroethane	0.000280	U	0.00100	0.000280	mg/L			03/09/14 17:03	1
Trichloroethene	0.000180	U	0.00100	0.000180	mg/L			03/09/14 17:03	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/09/14 17:03	1
Vinyl chloride	0.000110	U	0.00200	0.000110	mg/L			03/09/14 17:03	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/09/14 17:03	1
m-Xylene & p-Xylene	0.000170	U	0.00100	0.000170	mg/L			03/09/14 17:03	1
Xylenes, Total	0.000260	U	0.00100	0.000260	mg/L			03/09/14 17:03	1
cis-1,2-Dichloroethene	0.0000600	U	0.00100	0.0000600	mg/L			03/09/14 17:03	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/09/14 17:03	1
1,2-Dichloroethene, Total	0.000300	U	0.00100	0.000300	mg/L			03/09/14 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*03/09/14 17:03*	*1*
Dibromofluoromethane	*100*		*62 - 130*		*03/09/14 17:03*	*1*
4-Bromofluorobenzene	*92*		*67 - 139*		*03/09/14 17:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*		*03/09/14 17:03*	*1*

Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-87999-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

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

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

3/18/2014

Client Information	Sampler: Travis Clausen	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-26712-9288.1
Client Contact: Mr. Kevin Dworsky	Phone: 713-725-1442	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 1
Company: Pastor, Behling & Wheeler LLC				Job #: 3307
Address: 620 E. Airline	Due Date Requested:			
City: Victoria	TAT Requested (days): 10 days			
State, Zip: TX, 77901				
Phone:	PO #: Purchase Order not required			
Email: kevin.dworsky@pbwllc.com	WO #			
Project Name: Formosa Plastic Pilot Test- Gainco	Project #: 60004994 3307			
Site: Formosa Point Comfort	SSOW#:			

600-87999 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Swater, Soil, Oil, Sediment, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	Moisture - Local Method	TO-15 (TestAmerica Knoxville)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
A2-EP1-1-2'	2-27-14	1555		Soil	N	N	✓	✓		5	
A2-EP1-7-8'		1610			N	N	✓	✓		5	
A2-EP1-14-15'		1615			N	N	✓	✓		5	
A2-EP2-1-2'		1635			N	N	✓	✓		5	
A2-EP2-7-8'		1645			N	N	✓	✓		5	
A2-EP2-14-15'	✓	1655		✓	N	N	✓	✓		5	
Trip Blank	—	—		W	N	N	✓				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Standard QA/QC

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 2-28-14 1730	Company: PBW	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature]	Date/Time: 3/1/14 0905	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-88117-1
Client Project/Site: Formosa Plastic Pilot Test- Gainco

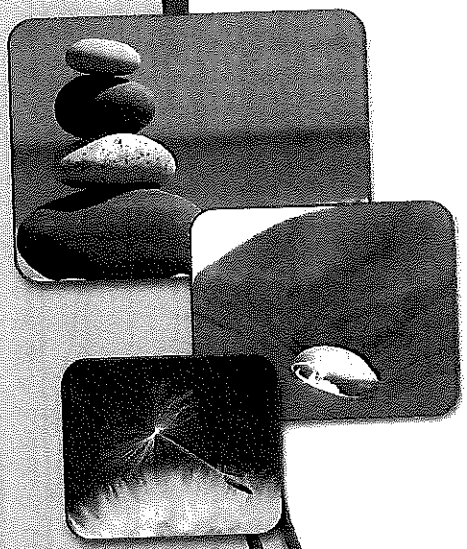
For:
Pastor, Behling & Wheeler LLC
620 E. Airline
Victoria, Texas 77901

Attn: Mr. Kevin Dworsky

Authorized for release by:
3/19/2014 4:10:35 PM
Sophia Shah, Project Management Assistant I
sophia.shah@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com



LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Method Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

5

Sample Summary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-88117-1	A2-EP1	Water	03/03/14 08:18	03/04/14 11:41
600-88117-2	A2-EP2	Water	03/03/14 11:40	03/04/14 11:41
600-88117-3	A2-MP1	Water	03/03/14 09:08	03/04/14 11:41
600-88117-4	A2-MP2	Water	03/03/14 09:39	03/04/14 11:41
600-88117-5	A2-MP3	Water	03/03/14 10:24	03/04/14 11:41
600-88117-6	A2-MP4	Water	03/03/14 11:50	03/04/14 11:41
600-88117-7	Trip Blank	Water	03/03/14 00:00	03/04/14 11:41

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-EP1
Date Collected: 03/03/14 08:18
Date Received: 03/04/14 11:41

Lab Sample ID: 600-88117-1
Matrix: Water

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Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.000990	U	0.00500	0.000990	mg/L			03/10/14 16:39	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/10/14 16:39	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/10/14 16:39	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/10/14 16:39	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/10/14 16:39	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/10/14 16:39	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/10/14 16:39	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 16:39	1
Chlorobenzene	**0.00422**		0.00100	0.000120	mg/L			03/10/14 16:39	1
Chloroethane	**0.00199**	**J**	0.00200	0.0000800	mg/L			03/10/14 16:39	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/10/14 16:39	1
1,1-Dichloroetherie	**0.0138**		0.00100	0.000190	mg/L			03/10/14 16:39	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 16:39	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/10/14 16:39	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/10/14 16:39	1
Ethylbenzene	**0.000497**	**J**	0.00100	0.000110	mg/L			03/10/14 16:39	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/10/14 16:39	1
Methylene Chloride	**0.000651**	**J**	0.00500	0.000150	mg/L			03/10/14 16:39	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/10/14 16:39	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/10/14 16:39	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/10/14 16:39	1
Toluene	**0.000225**	**J**	0.00100	0.000150	mg/L			03/10/14 16:39	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 16:39	1
1,1,2-Trichloroethane	**0.0340**		0.00100	0.000280	mg/L			03/10/14 16:39	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/10/14 16:39	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/10/14 16:39	1
m-Xylene & p-Xylene	**0.000538**	**J**	0.00100	0.000170	mg/L			03/10/14 16:39	1
Xylenes, Total	**0.000538**	**J**	0.00100	0.000260	mg/L			03/10/14 16:39	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*03/10/14 16:39*	*1*
Dibromofluoromethane	*90*		*62 - 130*		*03/10/14 16:39*	*1*
4-Bromofluorobenzene	*99*		*67 - 139*		*03/10/14 16:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*03/10/14 16:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.117**		0.0200	0.00160	mg/L			03/11/14 13:20	20
Chloroform	**0.0862**		0.0200	0.00260	mg/L			03/11/14 13:20	20
1,1-Dichloroethane	**0.141**		0.0200	0.00220	mg/L			03/11/14 13:20	20
1,2-Dichloroethane	**0.218**		0.0200	0.00280	mg/L			03/11/14 13:20	20
trans-1,2-Dichloroethene	**0.0276**		0.0200	0.00180	mg/L			03/11/14 13:20	20
Tetrachloroethene	**0.0525**		0.0200	0.00260	mg/L			03/11/14 13:20	20
Trichloroethene	**0.151**		0.0200	0.00360	mg/L			03/11/14 13:20	20
Vinyl chloride	**0.307**		0.0400	0.00220	mg/L			03/11/14 13:20	20
cis-1,2-Dichloroethene	**0.0956**		0.0200	0.00120	mg/L			03/11/14 13:20	20
1,2-Dichloroethene, Total	**0.123**		0.0200	0.00600	mg/L			03/11/14 13:20	20

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-EP1

Lab Sample ID: 600-88117-1
Matrix: Water

Date Collected: 03/03/14 08:18
Date Received: 03/04/14 11:41

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/11/14 13:20*	*20*
Dibromofluoromethane	*94*		*62 - 130*		*03/11/14 13:20*	*20*
4-Bromofluorobenzene	*85*		*67 - 139*		*03/11/14 13:20*	*20*
1,2-Dichloroethane-d4 (Surr)	*97*		*50 - 134*		*03/11/14 13:20*	*20*

Client Sample ID: A2-EP2

Lab Sample ID: 600-88117-2
Matrix: Water

Date Collected: 03/03/14 11:40
Date Received: 03/04/14 11:41

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.000990	U	0.00500	0.000990	mg/L			03/10/14 17:05	1
Benzene	**0.000911**	**J**	0.00100	0.0000800	mg/L			03/10/14 17:05	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/10/14 17:05	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/10/14 17:05	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/10/14 17:05	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/10/14 17:05	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/10/14 17:05	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:05	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:05	1
Chlorobenzene	**0.00284**		0.00100	0.000120	mg/L			03/10/14 17:05	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/10/14 17:05	1
Chloroform	**0.00947**		0.00100	0.000130	mg/L			03/10/14 17:05	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/10/14 17:05	1
1,1-Dichloroethane	**0.0411**		0.00100	0.000110	mg/L			03/10/14 17:05	1
1,2-Dichloroethane	**0.00260**		0.00100	0.000140	mg/L			03/10/14 17:05	1
1,1-Dichloroethene	**0.00521**		0.00100	0.000190	mg/L			03/10/14 17:05	1
trans-1,2-Dichloroethene	**0.00806**		0.00100	0.0000900	mg/L			03/10/14 17:05	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 17:05	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/10/14 17:05	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/10/14 17:05	1
Ethylbenzene	0.000110	U	0.00100	0.000110	mg/L			03/10/14 17:05	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/10/14 17:05	1
Methylene Chloride	0.000150	U	0.00500	0.000150	mg/L			03/10/14 17:05	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/10/14 17:05	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/10/14 17:05	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/10/14 17:05	1
Tetrachloroethene	**0.0459**		0.00100	0.000130	mg/L			03/10/14 17:05	1
Toluene	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:05	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:05	1
1,1,2-Trichloroethane	**0.0370**		0.00100	0.000280	mg/L			03/10/14 17:05	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/10/14 17:05	1
Vinyl chloride	**0.0312**		0.00200	0.000110	mg/L			03/10/14 17:05	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/10/14 17:05	1
m-Xylene & p-Xylene	0.000170	U	0.00100	0.000170	mg/L			03/10/14 17:05	1
Xylenes, Total	0.000260	U	0.00100	0.000260	mg/L			03/10/14 17:05	1
cis-1,2-Dichloroethene	**0.0203**		0.00100	0.0000600	mg/L			03/10/14 17:05	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 17:05	1
1,2-Dichloroethene, Total	**0.0284**		0.00100	0.000300	mg/L			03/10/14 17:05	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-EP2

Lab Sample ID: 600-88117-2

Date Collected: 03/03/14 11:40
Matrix: Water
Date Received: 03/04/14 11:41

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*03/10/14 17:05*	*1*
Dibromofluoromethane	*103*		*62 - 130*		*03/10/14 17:05*	*1*
4-Bromofluorobenzene	*96*		*67 - 139*		*03/10/14 17:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*50 - 134*		*03/10/14 17:05*	*1*

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Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**0.113**		0.0100	0.00180	mg/L			03/11/14 13:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*03/11/14 13:45*	*10*
Dibromofluoromethane	*100*		*62 - 130*		*03/11/14 13:45*	*10*
4-Bromofluorobenzene	*86*		*67 - 139*		*03/11/14 13:45*	*10*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*		*03/11/14 13:45*	*10*

Client Sample ID: A2-MP1

Lab Sample ID: 600-88117-3

Date Collected: 03/03/14 09:08
Matrix: Water
Date Received: 03/04/14 11:41

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.000990	U	0.00500	0.000990	mg/L			03/10/14 17:31	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/10/14 17:31	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/10/14 17:31	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/10/14 17:31	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/10/14 17:31	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/10/14 17:31	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:31	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:31	1
Chlorobenzene	**0.00428**		0.00100	0.000120	mg/L			03/10/14 17:31	1
Chloroethane	**0.00798**		0.00200	0.0000800	mg/L			03/10/14 17:31	1
Chloroform	**0.0427**		0.00100	0.000130	mg/L			03/10/14 17:31	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/10/14 17:31	1
1,1-Dichloroethene	**0.0125**		0.00100	0.000190	mg/L			03/10/14 17:31	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 17:31	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/10/14 17:31	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/10/14 17:31	1
Ethylbenzene	**0.000455**	**J**	0.00100	0.000110	mg/L			03/10/14 17:31	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/10/14 17:31	1
Methylene Chloride	**0.00230**	**J**	0.00500	0.000150	mg/L			03/10/14 17:31	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/10/14 17:31	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/10/14 17:31	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/10/14 17:31	1
Tetrachloroethene	**0.0433**		0.00100	0.000130	mg/L			03/10/14 17:31	1
Toluene	**0.000290**	**J**	0.00100	0.000150	mg/L			03/10/14 17:31	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:31	1
1,1,2-Trichloroethane	**0.0471**		0.00100	0.000280	mg/L			03/10/14 17:31	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/10/14 17:31	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/10/14 17:31	1
m-Xylene & p-Xylene	**0.000548**	**J**	0.00100	0.000170	mg/L			03/10/14 17:31	1
Xylenes, Total	**0.000548**	**J**	0.00100	0.000260	mg/L			03/10/14 17:31	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-MP1

Lab Sample ID: 600-88117-3
Matrix: Water

Date Collected: 03/03/14 09:08
Date Received: 03/04/14 11:41

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*03/10/14 17:31*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*03/10/14 17:31*	*1*
4-Bromofluorobenzene	*98*		*67 - 139*		*03/10/14 17:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*03/10/14 17:31*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.119**		0.0200	0.00160	mg/L			03/11/14 18:28	20
1,1-Dichloroethane	**0.139**		0.0200	0.00220	mg/L			03/11/14 18:28	20
1,2-Dichloroethane	**0.156**		0.0200	0.00280	mg/L			03/11/14 18:28	20
trans-1,2-Dichloroethene	**0.0250**		0.0200	0.00180	mg/L			03/11/14 18:28	20
Trichloroethene	**0.159**		0.0200	0.00360	mg/L			03/11/14 18:28	20
Vinyl chloride	**0.261**		0.0400	0.00220	mg/L			03/11/14 18:28	20
cis-1,2-Dichloroethene	**0.0694**		0.0200	0.00120	mg/L			03/11/14 18:28	20
1,2-Dichloroethene, Total	**0.0944**		0.0200	0.00600	mg/L			03/11/14 18:28	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*03/11/14 18:28*	*20*
Dibromofluoromethane	*94*		*62 - 130*		*03/11/14 18:28*	*20*
4-Bromofluorobenzene	*96*		*67 - 139*		*03/11/14 18:28*	*20*
1,2-Dichloroethane-d4 (Surr)	*98*		*50 - 134*		*03/11/14 18:28*	*20*

Client Sample ID: A2-MP2

Lab Sample ID: 600-88117-4
Matrix: Water

Date Collected: 03/03/14 09:39
Date Received: 03/04/14 11:41

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.00962**		0.00500	0.000990	mg/L			03/12/14 10:49	1
Benzene	**0.00625**		0.00100	0.0000800	mg/L			03/12/14 10:49	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/12/14 10:49	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/12/14 10:49	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/12/14 10:49	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/12/14 10:49	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/12/14 10:49	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/12/14 10:49	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/12/14 10:49	1
Chlorobenzene	**0.00178**		0.00100	0.000120	mg/L			03/12/14 10:49	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/12/14 10:49	1
Chloroform	**0.00949**		0.00100	0.000130	mg/L			03/12/14 10:49	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/12/14 10:49	1
1,1-Dichloroethane	**0.0349**		0.00100	0.000110	mg/L			03/12/14 10:49	1
1,2-Dichloroethane	**0.0140**		0.00100	0.000140	mg/L			03/12/14 10:49	1
1,1-Dichloroethene	**0.00312**		0.00100	0.000190	mg/L			03/12/14 10:49	1
trans-1,2-Dichloroethene	**0.00597**		0.00100	0.0000900	mg/L			03/12/14 10:49	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/12/14 10:49	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/12/14 10:49	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-MP2

Lab Sample ID: 600-88117-4

Date Collected: 03/03/14 09:39
Matrix: Water
Date Received: 03/04/14 11:41

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/12/14 10:49	1
Ethylbenzene	**0.000470**	**J**	0.00100	0.000110	mg/L			03/12/14 10:49	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/12/14 10:49	1
Methylene Chloride	0.000150	U	0.00500	0.000150	mg/L			03/12/14 10:49	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/12/14 10:49	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/12/14 10:49	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/12/14 10:49	1
Tetrachloroethene	**0.0231**		0.00100	0.000130	mg/L			03/12/14 10:49	1
Toluene	**0.000223**	**J**	0.00100	0.000150	mg/L			03/12/14 10:49	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/12/14 10:49	1
1,1,2-Trichloroethane	**0.0269**		0.00100	0.000280	mg/L			03/12/14 10:49	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/12/14 10:49	1
Vinyl chloride	**0.0202**		0.00200	0.000110	mg/L			03/12/14 10:49	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/12/14 10:49	1
m-Xylene & p-Xylene	**0.000528**	**J**	0.00100	0.000170	mg/L			03/12/14 10:49	1
Xylenes, Total	**0.000528**	**J**	0.00100	0.000260	mg/L			03/12/14 10:49	1
cis-1,2-Dichloroethene	**0.0218**		0.00100	0.0000600	mg/L			03/12/14 10:49	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/12/14 10:49	1
1,2-Dichloroethene, Total	**0.0278**		0.00100	0.000300	mg/L			03/12/14 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*70 - 130*		*03/12/14 10:49*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*03/12/14 10:49*	*1*
4-Bromofluorobenzene	*89*		*67 - 139*		*03/12/14 10:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*50 - 134*		*03/12/14 10:49*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**0.0798**		0.0200	0.00360	mg/L			03/11/14 19:19	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/11/14 19:19*	*20*
Dibromofluoromethane	*106*		*62 - 130*		*03/11/14 19:19*	*20*
4-Bromofluorobenzene	*96*		*67 - 139*		*03/11/14 19:19*	*20*
1,2-Dichloroethane-d4 (Surr)	*109*		*50 - 134*		*03/11/14 19:19*	*20*

Client Sample ID: A2-MP3

Lab Sample ID: 600-88117-5

Date Collected: 03/03/14 10:24
Matrix: Water
Date Received: 03/04/14 11:41

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.000990	U	0.00500	0.000990	mg/L			03/10/14 17:56	1
Benzene	**0.000807**	**J**	0.00100	0.0000800	mg/L			03/10/14 17:56	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/10/14 17:56	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/10/14 17:56	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/10/14 17:56	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/10/14 17:56	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/10/14 17:56	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:56	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-MP3
Date Collected: 03/03/14 10:24
Date Received: 03/04/14 11:41

Lab Sample ID: 600-88117-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:56	1
Chlorobenzene	**0.00253**		0.00100	0.000120	mg/L			03/10/14 17:56	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/10/14 17:56	1
Chloroform	**0.0164**		0.00100	0.000130	mg/L			03/10/14 17:56	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/10/14 17:56	1
1,1-Dichloroethane	**0.0419**		0.00100	0.000110	mg/L			03/10/14 17:56	1
1,2-Dichloroethane	**0.000994**	**J**	0.00100	0.000140	mg/L			03/10/14 17:56	1
1,1-Dichloroethene	**0.00505**		0.00100	0.000190	mg/L			03/10/14 17:56	1
trans-1,2-Dichloroethene	**0.00584**		0.00100	0.0000900	mg/L			03/10/14 17:56	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 17:56	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/10/14 17:56	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/10/14 17:56	1
Ethylbenzene	**0.000458**	**J**	0.00100	0.000110	mg/L			03/10/14 17:56	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/10/14 17:56	1
Methylene Chloride	0.000150	U	0.00500	0.000150	mg/L			03/10/14 17:56	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/10/14 17:56	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/10/14 17:56	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/10/14 17:56	1
Toluene	**0.000181**	**J**	0.00100	0.000150	mg/L			03/10/14 17:56	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 17:56	1
1,1,2-Trichloroethane	**0.0355**		0.00100	0.000280	mg/L			03/10/14 17:56	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/10/14 17:56	1
Vinyl chloride	**0.0219**		0.00200	0.000110	mg/L			03/10/14 17:56	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/10/14 17:56	1
m-Xylene & p-Xylene	**0.000505**	**J**	0.00100	0.000170	mg/L			03/10/14 17:56	1
Xylenes, Total	**0.000505**	**J**	0.00100	0.000260	mg/L			03/10/14 17:56	1
cis-1,2-Dichloroethene	**0.0211**		0.00100	0.0000600	mg/L			03/10/14 17:56	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 17:56	1
1,2-Dichloroethene, Total	**0.0269**		0.00100	0.000300	mg/L			03/10/14 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*03/10/14 17:56*	*1*
Dibromofluoromethane	*101*		*62 - 130*		*03/10/14 17:56*	*1*
4-Bromofluorobenzene	*92*		*67 - 139*		*03/10/14 17:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*50 - 134*		*03/10/14 17:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.0497**		0.0100	0.00130	mg/L			03/11/14 18:54	10
Trichloroethene	**0.118**		0.0100	0.00180	mg/L			03/11/14 18:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/11/14 18:54*	*10*
Dibromofluoromethane	*110*		*62 - 130*		*03/11/14 18:54*	*10*
4-Bromofluorobenzene	*99*		*67 - 139*		*03/11/14 18:54*	*10*
1,2-Dichloroethane-d4 (Surr)	*112*		*50 - 134*		*03/11/14 18:54*	*10*

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-MP4
Date Collected: 03/03/14 11:50
Date Received: 03/04/14 11:41

Lab Sample ID: 600-88117-6
Matrix: Water

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Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.00788**		0.00500	0.000990	mg/L			03/12/14 11:15	1
Benzene	**0.000795**	**J**	0.00100	0.0000800	mg/L			03/12/14 11:15	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/12/14 11:15	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/12/14 11:15	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/12/14 11:15	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/12/14 11:15	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/12/14 11:15	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/12/14 11:15	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/12/14 11:15	1
Chlorobenzene	**0.00246**		0.00100	0.000120	mg/L			03/12/14 11:15	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/12/14 11:15	1
Chloroform	**0.00519**		0.00100	0.000130	mg/L			03/12/14 11:15	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/12/14 11:15	1
1,2-Dichloroethane	**0.00442**		0.00100	0.000140	mg/L			03/12/14 11:15	1
1,1-Dichloroethene	**0.00509**		0.00100	0.000190	mg/L			03/12/14 11:15	1
trans-1,2-Dichloroethene	**0.00965**		0.00100	0.0000900	mg/L			03/12/14 11:15	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/12/14 11:15	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/12/14 11:15	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/12/14 11:15	1
Ethylbenzene	**0.000482**	**J**	0.00100	0.000110	mg/L			03/12/14 11:15	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/12/14 11:15	1
Methylene Chloride	0.000150	U	0.00500	0.000150	mg/L			03/12/14 11:15	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/12/14 11:15	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/12/14 11:15	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/12/14 11:15	1
Tetrachloroethene	**0.0331**		0.00100	0.000130	mg/L			03/12/14 11:15	1
Toluene	**0.000223**	**J**	0.00100	0.000150	mg/L			03/12/14 11:15	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/12/14 11:15	1
1,1,2-Trichloroethane	**0.0464**		0.00100	0.000280	mg/L			03/12/14 11:15	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/12/14 11:15	1
Vinyl chloride	**0.0429**		0.00200	0.000110	mg/L			03/12/14 11:15	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/12/14 11:15	1
m-Xylene & p-Xylene	**0.000525**	**J**	0.00100	0.000170	mg/L			03/12/14 11:15	1
Xylenes, Total	**0.000525**	**J**	0.00100	0.000260	mg/L			03/12/14 11:15	1
cis-1,2-Dichloroethene	**0.0243**		0.00100	0.0000600	mg/L			03/12/14 11:15	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/12/14 11:15	1
1,2-Dichloroethene, Total	**0.0340**		0.00100	0.000300	mg/L			03/12/14 11:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/12/14 11:15*	*1*
Dibromofluoromethane	*97*		*62 - 130*		*03/12/14 11:15*	*1*
4-Bromofluorobenzene	*87*		*67 - 139*		*03/12/14 11:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*		*03/12/14 11:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.0497**		0.0200	0.00220	mg/L			03/12/14 12:06	20
Trichloroethene	**0.0849**		0.0200	0.00360	mg/L			03/12/14 12:06	20

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: A2-MP4

Lab Sample ID: 600-88117-6
Matrix: Water

Date Collected: 03/03/14 11:50
Date Received: 03/04/14 11:41

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		70 - 130		03/12/14 12:06	20
Dibromofluoromethane	102		62 - 130		03/12/14 12:06	20
4-Bromofluorobenzene	90		67 - 139		03/12/14 12:06	20
1,2-Dichloroethane-d4 (Surr)	106		50 - 134		03/12/14 12:06	20

Client Sample ID: Trip Blank

Lab Sample ID: 600-88117-7
Matrix: Water

Date Collected: 03/03/14 00:00
Date Received: 03/04/14 11:41

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.000990	U	0.00500	0.000990	mg/L			03/10/14 16:13	1
Benzene	0.0000800	U	0.00100	0.0000800	mg/L			03/10/14 16:13	1
Chlorobromomethane	0.000180	U	0.00100	0.000180	mg/L			03/10/14 16:13	1
Bromoform	0.000190	U	0.00100	0.000190	mg/L			03/10/14 16:13	1
Bromomethane	0.000250	U	0.00200	0.000250	mg/L			03/10/14 16:13	1
2-Butanone (MEK)	0.000760	U	0.00200	0.000760	mg/L			03/10/14 16:13	1
Carbon disulfide	0.000240	U	0.00200	0.000240	mg/L			03/10/14 16:13	1
Carbon tetrachloride	0.000150	U	0.00100	0.000150	mg/L			03/10/14 16:13	1
Dibromochloromethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 16:13	1
Chlorobenzene	0.000120	U	0.00100	0.000120	mg/L			03/10/14 16:13	1
Chloroethane	0.0000800	U	0.00200	0.0000800	mg/L			03/10/14 16:13	1
Chloroform	0.000130	U	0.00100	0.000130	mg/L			03/10/14 16:13	1
Chloromethane	0.000180	U	0.00200	0.000180	mg/L			03/10/14 16:13	1
1,1-Dichloroethane	0.000110	U	0.00100	0.000110	mg/L			03/10/14 16:13	1
1,2-Dichloroethane	0.000140	U	0.00100	0.000140	mg/L			03/10/14 16:13	1
1,1-Dichloroethene	0.000190	U	0.00100	0.000190	mg/L			03/10/14 16:13	1
trans-1,2-Dichloroethene	0.0000900	U	0.00100	0.0000900	mg/L			03/10/14 16:13	1
1,2-Dichloropropane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 16:13	1
cis-1,3-Dichloropropene	0.000180	U	0.00100	0.000180	mg/L			03/10/14 16:13	1
trans-1,3-Dichloropropene	0.000210	U	0.00100	0.000210	mg/L			03/10/14 16:13	1
Ethylbenzene	0.000110	U	0.00100	0.000110	mg/L			03/10/14 16:13	1
2-Hexanone	0.000350	U	0.00200	0.000350	mg/L			03/10/14 16:13	1
Methylene Chloride	0.000150	U	0.00500	0.000150	mg/L			03/10/14 16:13	1
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.00200	0.000450	mg/L			03/10/14 16:13	1
Styrene	0.0000700	U	0.00100	0.0000700	mg/L			03/10/14 16:13	1
1,1,2,2-Tetrachloroethane	0.000220	U	0.00100	0.000220	mg/L			03/10/14 16:13	1
Tetrachloroethene	0.000130	U	0.00100	0.000130	mg/L			03/10/14 16:13	1
Toluene	0.000150	U	0.00100	0.000150	mg/L			03/10/14 16:13	1
1,1,1-Trichloroethane	0.000150	U	0.00100	0.000150	mg/L			03/10/14 16:13	1
1,1,2-Trichloroethane	0.000280	U	0.00100	0.000280	mg/L			03/10/14 16:13	1
Trichloroethene	0.000180	U	0.00100	0.000180	mg/L			03/10/14 16:13	1
Vinyl acetate	0.000210	U	0.00200	0.000210	mg/L			03/10/14 16:13	1
Vinyl chloride	0.000110	U	0.00200	0.000110	mg/L			03/10/14 16:13	1
o-Xylene	0.000120	U	0.00100	0.000120	mg/L			03/10/14 16:13	1
m-Xylene & p-Xylene	0.000170	U	0.00100	0.000170	mg/L			03/10/14 16:13	1
Xylenes, Total	0.000260	U	0.00100	0.000260	mg/L			03/10/14 16:13	1
cis-1,2-Dichloroethene	0.0000600	U	0.00100	0.0000600	mg/L			03/10/14 16:13	1
Bromodichloromethane	0.000160	U	0.00100	0.000160	mg/L			03/10/14 16:13	1
1,2-Dichloroethene, Total	0.000300	U	0.00100	0.000300	mg/L			03/10/14 16:13	1

Client Sample Results

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Client Sample ID: Trip Blank
Date Collected: 03/03/14 00:00
Date Received: 03/04/14 11:41

Lab Sample ID: 600-88117-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130		03/10/14 16:13	1
Dibromofluoromethane	106		62 - 130		03/10/14 16:13	1
4-Bromofluorobenzene	94		67 - 139		03/10/14 16:13	1
1,2-Dichloroethane-d4 (Surr)	108		50 - 134		03/10/14 16:13	1

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Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC
Project/Site: Formosa Plastic Pilot Test- Gainco

TestAmerica Job ID: 600-88117-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

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

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

3/19/2014

Client Information

Client Contact: Mr. Kevin Dworsky
Company: Pastor, Behling & Wheeler LLC
Address: 620 E. Airline
City: Victoria
State, Zip: TX, 77901
Phone:
Email: kevin dworsky@pbwllc.com
Project Name: Formosa Plastic Pilot Test- Gainco
Site: Formosa Point Comfort

Sampler: Travis Claudin
Phone: 713-725-1442

Lab PM: Kudchadkar, Sachin G
E-Mail: sachin.kudchadkar@testamericainc.com

Carrier Tracking No(s):

COC No.: 600-26712-9288.1
Page: Page 1 of 1
Job #: 3307

Due Date Requested:
TAT Requested (days): 10 day
PO #: Purchase Order not required
WO #:
Project #: 60004994 3307
SSOW#:

600-88117 Chain of Custody

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	Moisture - Local Method	TO-15 (TestAmerica Knoxville)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		N	N					
A2-EP1	3-3-14	818		water	N	N	✓			3	
A2-EP2		1140			N	N	✓			3	
A2-mp1		908			N	N	✓			3	
A2-mp2		939			N	N	✓			3	
A2-mp3		1024			N	N	✓			3	
A2-mp4		1150			N	N	✓			3	
Trip Blank					N	N	✓			2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify): Standard QAQC

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:
Relinquished by:	Date/Time: 3/3/14 1726	Company: PBW	Received by: / Date/Time: / Company:
Relinquished by:	Date/Time:	Company:	Received by: / Date/Time: / Company:
Relinquished by:	Date/Time:	Company:	Received by: / Date/Time: / Company:

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

APPENDIX E

Data Summary Tables – DPE

TABLE E-1
VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES
Area 1
Formosa Pilot Treatability Study
DPE

Location ID:	A1-EP-1						A1-EP-2					
Sample Depth (ft bgs):	(1-2)		(5-6)		(10-11)		(1-2)		(5-6)		(10-11)	
Sample Date:	2/26/2014		2/26/2014		2/26/2014		2/26/2014		2/26/2014		2/26/2014	
Constituent	mg/kg	Flag[1]	mg/kg	Flag	mg/kg	Flag	mg/kg	Flag	mg/kg	Flag	mg/kg	Flag
Total Volatile Organic Compounds (VOCs) by EPA Method 8260B												
1,1,1-Trichloroethane	0.000777	U	0.000824	U	0.000692	U *	0.000826	U	0.000689	U	0.000717	U
1,1,2,2-Tetrachloroethane	0.000914	U	0.000969	U	0.000814	U *	0.000971	U	0.000809	U	0.000843	U
1,1,2-Trichloroethane	0.00922	J	0.00880	J	0.461	J	0.000814	U	0.0617		0.584	J
1,1-Dichloroethane	0.00463	J	0.00501	J	0.591		0.000971	U	0.0106		0.456	
1,1-Dichloroethene	0.00128	U	0.00136	U	0.0121	*	0.00136	U	0.00114	U	0.00780	
1,2-Dichloroethane	0.0165		0.0546		0.0593	*	0.0765		0.0192		30.6	
1,2-Dichloropropane	0.000746	U	0.000790	U	0.000664	U *	0.000792	U	0.000661	U	0.000688	U
2-Butanone (MEK)	0.00200	U	0.00212	U	0.00178	U *	0.00212	U	0.00177	U	0.00184	U
2-Hexanone	0.00106	U	0.00112	U	0.000945	U *	0.00113	U	0.000940	U	0.000979	U
4-Methyl-2-pentanone (MIBK)	0.00154	U	0.00164	U	0.00138	U *	0.00164	U	0.00137	U	0.00142	U
Acetone	0.00174	U	0.00185	U	0.00155	U *	0.0226		0.00154	U	0.00161	U
Benzene	0.000662	U	0.000701	U	0.00200	J *	0.000703	U	0.000586	U	0.00191	J
Bromodichloromethane	0.00706		0.00702		0.338	E *	0.000736	U	0.0517		0.488	E
Bromoform	0.00144	U	0.00153	U	0.00128	U	0.00153	U	0.00127	U	0.00133	U
Bromomethane	0.000872	U	0.000924	U	0.000777	U *	0.000926	U	0.000772	U	0.000805	U
Carbon disulfide	0.000578	U	0.000612	U	0.000515	U *	0.000614	U	0.000512	U	0.000533	U
Carbon tetrachloride	0.00119	U	0.00126	U	0.00106	U *	0.00126	U	0.00105	U	0.00110	U
Chlorobenzene	0.00101	U	0.00107	U	0.00172	J *	0.00107	U	0.000893	U	0.000931	U
Chlorobromomethane	0.00187	U	0.00198	U	0.00167	U *	0.00199	U	0.00166	U	0.00173	U
Chloroethane	0.00147	U	0.00156	U	0.00131	U *	0.00156	U	0.00130	U	0.00136	U
Chloroform	0.0617		0.0611		3.68		0.00803		0.160		2.35	
Chloromethane	0.00174	U	0.00185	U	0.00155	U *	0.00185	U	0.00154	U	0.00161	U
cis-1,2-Dichloroethene	0.000872	U	0.000924	U	0.404		0.000926	U	0.000772	U	0.367	
cis-1,3-Dichloropropene	0.000567	U	0.000601	U	0.000505	U *	0.000602	U	0.000502	U	0.000523	U
Dibromochloromethane	0.000987	U	0.00105	U	0.000879	U *	0.00105	U	0.000875	U	0.000911	U
Ethylbenzene	0.00107	U	0.00114	U	0.000954	U *	0.00114	U	0.000949	U	0.000989	U
Methylene Chloride	0.00230	U	0.00244	U	0.0194	*	0.00244	U	0.00204	U	0.0172	
m-Xylene & p-Xylene	0.00160	U	0.00169	U	0.00142	U *	0.00170	U	0.00141	U	0.00147	U
o-Xylene	0.00119	U	0.00126	U	0.00106	U *	0.00126	U	0.00105	U	0.00110	U
Styrene	0.000746	U	0.000790	U	0.000664	U *	0.000792	U	0.000661	U	0.000688	U
Tetrachloroethene	0.00416	J	0.00248	J	0.0432	*	0.000792	U	0.00943		0.0431	
Toluene	0.00145	U	0.00154	U	0.00133	J *	0.00154	U	0.00128	U	0.00134	U
trans-1,2-Dichloroethene	0.00120	U	0.00196	J	0.500		0.00127	U	0.00363	J	0.427	
trans-1,3-Dichloropropene	0.000609	U	0.000646	U	0.000543	U *	0.000647	U	0.000540	U	0.000562	U
Trichloroethene	0.00298	J	0.00257	J	0.460		0.00156	U	0.00767		0.425	
Vinyl acetate	0.000977	U	0.00104	U	0.000870	U *	0.00104	U	0.000865	U	0.000901	U
Vinyl chloride	0.000945	U	0.00100	U	0.0280	*	0.00100	U	0.000837	U	0.0244	
1,2-Dichloroethene, Total	0.00119	U	0.00126	U	0.904		0.00212	U	0.00363	J	0.0735	
Xylenes, Total	0.00200	U	0.00212	U	0.00106	U *	0.00126	U	0.00105	U	0.00110	U

Notes:
1) Flags:
U = analyte was not detected at or above SDL
J = result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value
E = result is greater than the UQL and the concentration is an estimated value
* = ISTD response or retention time outside acceptable limits

TABLE E-2
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER SAMPLES
Area 1
Formosa Pilot Treatability Study
DPE

Location ID:	A1-EP-1		A1-EP-2		A1-MP-1		A1-MP-2		A1-MP-3		A1-MP-4	
Sample Date:	2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014	
Constituent	mg/L	Flag	mg/L	Flag	mg/L	Flag	mg/L	Flag	mg/L	Flag	mg/L	Flag
Total Volatile Organic Compounds (VOCs) by EPA Method 8260B												
1,1,1-Trichloroethane	0.300	U	0.150	U	0.300	U	0.750	U	6.96		0.750	U
1,1,2,2-Tetrachloroethane	0.440	U	0.220	U	0.440	U	1.10	U	1.10	U	1.10	U
1,1,2-Trichloroethane	9.23		12.4		9.17		9.73		12.4		12.9	
1,1-Dichloroethane	12.1		8.36		14.1		15.7		13.2		13.3	
1,1-Dichloroethene	1.72	J	1.39		2.31		2.53	J	2.92	J	3.16	J
1,2-Dichloroethane	1940		2000				3780		3440		4250	
1,2-Dichloropropane	0.320	U	0.160	U	0.320	U	0.800	U	5.57		0.800	U
2-Butanone (MEK)	1.52	U	0.760	U	1.52	U	3.80	U	3.80	U	3.80	U
2-Hexanone	0.700	U	0.350	U	0.700	U	1.75	U	7.29	J	1.75	U
4-Methyl-2-pentanone (MIBK)	0.900	U	0.450	U	0.900	U	2.25	U	2.25	U	2.25	U
Acetone	1.98	U	0.990	U	1.98	U	4.95	U	4.95	U	4.95	U
Benzene	3.98		4.45		5.14		5.87		6.36		6.11	
Bromodichloromethane	0.320	U	0.160	U	0.320	U	0.800	U	0.800	U	0.800	U
Bromoform	0.380	U	0.190	U	0.380	U	0.950	U	0.950	U	0.950	U
Bromomethane	0.500	U	0.250	U	0.500	U	1.25	U	1.25	U	1.25	U
Carbon disulfide	0.480	U	0.240	U	0.480	U	1.20	U	1.20	U	1.20	U
Carbon tetrachloride	0.300	U	0.150	U	0.300	U	0.750	U	0.750	U	0.750	U
Chlorobenzene	0.240	U	0.261	J	0.240	U	0.600	U	0.600	U	0.600	U
Chlorobromomethane	0.360	U	0.180	U	0.360	U	0.900	U	0.900	U	0.900	U
Chloroethane	0.160	U	0.0800	U	0.160	U	0.400	U	0.400	U	0.400	U
Chloroform	0.260	U	98.2		147		150		153		153	
Chloromethane	0.360	U	0.180	U	0.360	U	0.900	U	0.900	U	0.900	U
cis-1,2-Dichloroethene	3.33		2.84		4.16		4.08	J	3.56	J	3.48	J
cis-1,3-Dichloropropene	0.360	U	0.180	U	0.360	U	0.900	U	0.900	U	0.900	U
Dibromochloromethane	0.300	U	0.150	U	0.300	U	0.750	U	0.750	U	0.750	U
Ethylbenzene	0.220	U	0.110	U	0.220	U	0.550	U	0.550	U	0.550	U
Methylene Chloride	1.12	J	0.846	J	1.16	J	0.750	U	0.750	U	0.750	U
m-Xylene & p-Xylene	0.340	U	0.170	U	0.340	U	0.850	U	0.850	U	0.850	U
o-Xylene	0.240	U	0.120	U	0.240	U	0.600	U	0.600	U	0.600	U
Styrene	0.140	U	0.0700	U	0.140	U	0.350	U	0.350	U	0.350	U
Tetrachloroethene	2.59		4.27		2.88		4.45	J	6.72		6.85	
Toluene	0.300	U	0.150	U	0.300	U	0.750	U	0.750	U	0.750	U
trans-1,2-Dichloroethene	7.99		5.82		10.9		11.0		9.67		9.72	
trans-1,3-Dichloropropene	0.420	U	0.210	U	0.420	U	1.05	U	1.05	U	1.05	U
Trichloroethene	5.78		6.35		7.01		8.54		9.80		9.70	
Vinyl acetate	0.420	U	0.210	U	0.420	U	1.05	U	1.05	U	1.05	U
Vinyl chloride	16.1		10.3		24.0		28.1		29.3		31.9	
1,2-Dichloroethene, Total	11.3		8.66		15.1		15.1		13.2		13.2	
Xylenes, Total	0.520	U	0.260	U	0.520	U	1.30	U	1.30	U	1.30	U

Notes:
1) Flags:
U = analyte was not detected at or above SDL
J = result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value

TABLE E-3
VOLATILE ORGANIC COMPOUNDS IN AIR SAMPLES
Area 1
Formosa Pilot Treatability Study
DPE

Location ID:	Area 1																	
Sample No:	Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6		Sample 7		Sample 8		Sample 9	
Sample Date:	2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014	
Constituent	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag
Total Volatile Organic Compounds (VOCs) by EPA Method 8260B																		
1,1,1-Trichloroethane	1870	UH	1830	UH	1850	UH	1790	UH	1750	UH	1770	UH	1870	UH	1770	UH	1790	UH
1,1,2,2-Tetrachloroethane	3800	UH	3710	UH	3760	UH	3640	UH	3550	UH	3600	UH	3800	UH	3600	UH	3640	UH
1,1,2-Trichloro-1,2,2-trifluoroethane	1930	UH	1890	UH	1910	UH	1850	UH	1810	UH	1830	UH	1930	UH	1830	UH	1850	UH
1,1,2-Trichloroethane	3370	UH	3290	UH	3330	UH	3420	JH	3150	UH	3500	JH	4400	JH	3240	JH	7420	JH
1,1-Dichloroethane	8590	JH	10700	JH	13900	H	13900	H	11100	JH	13700	H	15200	H	11900	H	16800	H
1,1-Dichloroethene	2120	UH	2350	JH	3230	JH	3290	JH	2310	JH	3920	JH	3700	JH	2480	JH	3760	JH
1,2,4-Trichlorobenzene	6110	UH	5960	UH	6040	UH	5850	UH	5710	UH	5780	UH	6110	UH	5780	UH	5850	UH
1,2,4-Trimethylbenzene	3930	UH	3830	UH	3880	UH	3760	UH	3670	UH	3720	UH	3930	UH	3720	UH	3760	UH
1,2-Dibromoethane (EDB)	2740	UH	2680	UH	2710	UH	2630	UH	2560	UH	2600	UH	2740	UH	2600	UH	2630	UH
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1990	UH	1950	UH	1970	UH	1910	UH	1860	UH	1890	UH	1990	UH	1890	UH	1910	UH
1,2-Dichlorobenzene	4360	UH	4260	UH	4310	UH	4180	UH	4080	UH	4130	UH	4360	UH	4130	UH	4180	UH
1,2-Dichloroethane	1100000	H	1180000	H	1480000	H	1570000	H	1200000	H	1410000	H	1570000	H	1300000	H	2190000	H
1,2-Dichloropropane	3240	UH	3160	UH	3200	UH	3110	UH	3030	UH	3070	UH	3240	UH	3070	UH	3110	UH
1,3,5-Trimethylbenzene	4050	UH	3960	UH	4000	UH	3880	UH	3790	UH	3830	UH	4050	UH	3830	UH	3880	UH
1,3-Dichlorobenzene	4050	UH	3960	UH	4000	UH	3880	UH	3790	UH	3830	UH	4050	UH	3830	UH	3880	UH
1,4-Dichlorobenzene	3990	UH	3890	UH	3940	UH	3820	UH	3730	UH	3780	UH	3990	UH	3780	UH	3820	UH
Benzene	3490	UH	3410	UH	3450	UH	3790	JH	3260	UH	3300	UH	4740	JH	3470	JH	5560	JH
Benzyl chloride	4860	UH	4750	UH	4800	UH	4660	UH	4540	UH	4600	UH	4860	UH	4600	UH	4660	UH
Bromomethane	1990	UH	1950	UH	1970	UH	1910	UH	1860	UH	1890	UH	1990	UH	1890	UH	1910	UH
Carbon tetrachloride	2370	UH	2310	UH	2340	UH	2270	UH	2210	UH	2240	UH	2370	UH	2240	UH	2270	UH
Chlorobenzene	3050	UH	2980	UH	3020	UH	2930	UH	2850	UH	2890	UH	3050	UH	2890	UH	2930	UH
Chloroethane	2180	UH	2130	UH	2160	UH	2090	UH	2040	UH	2060	UH	2180	UH	2060	UH	2090	UH
Chloroform	91400	H	107000	H	136000	H	152000	H	113000	H	146000	H	157000	H	118000	H	170000	H
Chloromethane	9970	UH	9740	UH	9860	UH	9560	UH	9320	UH	9440	UH	9970	UH	9440	UH	9560	UH
cis-1,2-Dichloroethene	3740	UH	3650	UH	3700	UH	3580	UH	3500	UH	3540	UH	3740	UH	3540	UH	3580	UH
cis-1,3-Dichloropropene	4610	UH	4500	UH	4560	UH	4420	UH	4310	UH	4370	UH	4610	UH	4370	UH	4420	UH
Dichlorodifluoromethane	4240	UH	4140	UH	4190	UH	4060	UH	3960	UH	4010	UH	4240	UH	4010	UH	4060	UH
Ethylbenzene	4240	UH	4140	UH	4190	UH	4060	UH	3960	UH	4010	UH	4240	UH	4010	UH	4060	UH
Hexachlorobutadiene	4860	UH	4750	UH	4800	UH	4660	UH	4540	UH	4600	UH	4860	UH	4600	UH	4660	UH
Methylene Chloride	8100	UH	7910	UH	8010	UH	7770	UH	7570	UH	7670	UH	8100	UH	7670	UH	7770	UH
m-Xylene & p-Xylene	7480	UH	7300	UH	7390	UH	7170	UH	6990	UH	7080	UH	7480	UH	7080	UH	7170	UH
o-Xylene	3800	UH	3710	UH	3760	UH	3640	UH	3550	UH	3600	UH	3800	UH	3600	UH	3640	UH
Styrene	3620	UH	3530	UH	3570	UH	3460	UH	3380	UH	3420	UH	3620	UH	3420	UH	3460	UH
Tetrachloroethene	2490	UH	2430	UH	2460	UH	2690	JH	2360	JH	2740	JH	3800	JH	2580	JH	4200	JH
Toluene	7480	UH	7300	UH	7390	UH	7170	UH	6990	UH	7080	UH	7480	UH	7080	UH	7170	UH
trans-1,3-Dichloropropene	2990	UH	2920	UH	2960	UH	2870	UH	2800	UH	2830	UH	2990	UH	2830	UH	2870	UH
Trichloroethene	2770	JH	3840	JH	4420	JH	5090	JH	3360	JH	5010	JH	6330	JH	4720	JH	6140	JH
Trichlorofluoromethane	1500	UH	1460	UH	1480	UH	1430	UH	1400	UH	1420	UH	1500	UH	1420	UH	1430	UH
Vinyl chloride	28500	H	35200	H	45600	H	40800	H	34400	H	46900	H	40500	H	31800	H	36800	H

Notes:
1) Flags:
H = sample was prepped or analyzed beyond the specific holding time
U = analyte was not detected at or above SDL
J = result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value

TABLE E-4
VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES
Area 2
Formosa Pilot Treatability Study
DPE

Location ID:	A2-EP-1						A2-EP-2					
Sample Depth (ft bgs):	(1-2)		(7-8)		(14-15)		(1-2)		(7-8)		(14-15)	
Sample Date:	2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014		2/27/2014	
Constituent	mg/kg	Flag	mg/kg	Flag	mg/kg	Flag	mg/kg	Flag	mg/kg	Flag	mg/kg	Flag
Total Volatile Organic Compounds (VOCs) by EPA Method 8260B												
1,1,1-Trichloroethane	0.000745	U	0.000655	U	0.000625	U	0.000756	U	0.000646	U	0.000899	U
1,1,2,2-Tetrachloroethane	0.000875	U	0.000770	U	0.000735	U	0.000888	U	0.000759	U	0.00106	U
1,1,2-Trichloroethane	0.000735	U	0.000646	U	0.000617	U	0.000745	U	0.000637	U	0.000887	U
1,1-Dichloroethane	0.000875	U	0.000770	U	0.000735	U	0.000888	U	0.000759	U	0.00106	U
1,1-Dichloroethene	0.00123	U	0.00108	U	0.00103	U	0.00125	U	0.00106	U	0.00148	U
1,2-Dichloroethane	0.000906	U	0.000796	U	0.000760	U	0.000919	U	0.000785	U	0.00109	U
1,2-Dichloropropane	0.000714	U	0.000628	U	0.000600	U	0.000725	U	0.000620	U	0.000862	U
2-Butanone (MEK)	0.00191	U	0.00168	U	0.00161	U	0.00194	U	0.00166	U	0.00231	U
2-Hexanone	0.00102	U	0.000894	U	0.000853	U	0.00103	U	0.000881	U	0.00123	U
4-Methyl-2-pentanone (MIBK)	0.00148	U	0.00130	U	0.00124	U	0.00150	U	0.00128	U	0.00179	U
Acetone	0.0306		0.0219		0.00140	U	0.0186		0.00145	U	0.00202	U
Benzene	0.000634	U	0.000558	U	0.000532	U	0.000643	U	0.000550	U	0.000765	U
Bromodichloromethane	0.000664	U	0.000584	U	0.000558	U	0.000674	U	0.000576	U	0.000802	U
Bromoform	0.00138	U	0.00121	U	0.00807		0.00140	U	0.00120	U	0.00166	U
Bromomethane	0.000835	U	0.000735	U	0.000701	U	0.000847	U	0.000724	U	0.00101	U
Carbon disulfide	0.000553	U	0.000487	U	0.000465	U	0.000562	U	0.000480	U	0.000668	U
Carbon tetrachloride	0.00114	U	0.00100	U	0.000955	U	0.00115	U	0.000986	U	0.00137	U
Chlorobenzene	0.000966	U	0.000850	U	0.000811	U	0.000980	U	0.000838	U	0.00117	U
Chlorobromomethane	0.00179	U	0.00158	U	0.00150	U	0.00182	U	0.00155	U	0.00216	U
Chloroethane	0.00141	U	0.00124	U	0.00118	U	0.00143	U	0.00122	U	0.00170	U
Chloroform	0.000664	U	0.000584	U	0.000558	U	0.000674	U	0.000576	U	0.000802	U
Chloromethane	0.00167	U	0.00147	U	0.00140	U	0.00169	U	0.00145	U	0.00202	U
cis-1,2-Dichloroethene	0.000835	U	0.000735	U	0.000701	U	0.000847	U	0.000724	U	0.00101	U
cis-1,3-Dichloropropene	0.000543	U	0.000478	U	0.000456	U	0.000551	U	0.000471	U	0.000656	U
Dibromochloromethane	0.000946	U	0.000832	U	0.000794	U	0.000960	U	0.000820	U	0.00114	U
Ethylbenzene	0.00103	U	0.000903	U	0.000862	U	0.00104	U	0.000890	U	0.00124	U
Methylene Chloride	0.00220	U	0.00194	U	0.00185	U	0.00224	U	0.00191	U	0.00266	U
m-Xylene & p-Xylene	0.00153	U	0.00135	U	0.00128	U	0.00155	U	0.00133	U	0.00185	U
o-Xylene	0.00114	U	0.00100	U	0.000955	U	0.00115	U	0.000986	U	0.00137	U
Styrene	0.000714	U	0.000628	U	0.000600	U	0.000725	U	0.000620	U	0.000862	U
Tetrachloroethene	0.000714	U	0.000628	U	0.000600	U	0.000725	U	0.000620	U	0.000862	U
Toluene	0.00139	U	0.00122	U	0.00117	U	0.00141	U	0.00120	U	0.00168	U
trans-1,2-Dichloroethene	0.00115	U	0.00101	U	0.000963	U	0.00116	U	0.000995	U	0.00138	U
trans-1,3-Dichloropropene	0.000584	U	0.000513	U	0.000490	U	0.000592	U	0.000506	U	0.000704	U
Trichloroethene	0.00141	U	0.00124	U	0.00118	U	0.00143	U	0.00122	U	0.00170	U
Vinyl acetate	0.000936	U	0.000823	U	0.000786	U	0.000950	U	0.000812	U	0.00113	U
Vinyl chloride	0.000906	U	0.000796	U	0.000760	U	0.000919	U	0.000785	U	0.00109	U
1,2-Dichloroethene, Total	0.00191	U	0.00168	U	0.00161	U	0.00194	U	0.00166	U	0.00231	U
Xylenes, Total	0.00114	U	0.00100	U	0.000955	U	0.00115	U	0.000986	U	0.00137	U

Notes:
1) Flags:
U = analyzed but not detected above the listed method detection limit

TABLE E-5
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER SAMPLES
Area 2
Formosa Pilot Treatability Study
DPE

Location ID:	A2-EP-1		A2-EP-2		A2-MP-1		A2-MP-2		A2-MP-3		A2-MP-4	
Sample Date:	3/3/2014		3/3/2014		3/3/2014		3/3/2014		3/3/2014		3/3/2014	
Constituent	mg/L	Flag	mg/L	Flag	mg/L	Flag	mg/L	Flag	mg/L	Flag	mg/L	Flag
Total Volatile Organic Compounds (VOCs) by EPA Method 8260B												
1,1,1-Trichloroethane	0.000150	U	0.000150	U	0.000150	U	0.000150	U	0.000150	U	0.000150	U
1,1,2,2-Tetrachloroethane	0.000220	U	0.000220	U	0.000220	U	0.000220	U	0.000220	U	0.000220	U
1,1,2-Trichloroethane	0.0340		0.0370		0.0471		0.0269		0.0355		0.0464	
1,1-Dichloroethane	0.141		0.0411		0.139		0.0349		0.0419			
1,1-Dichloroethene	0.0138		0.00521		0.0125		0.00312		0.00505		0.00509	
1,2-Dichloroethane	0.218		0.00260		0.156		0.0140		0.000994	J	0.00442	
1,2-Dichloropropane	0.000160	U	0.000160	U	0.000160	U	0.000160	U	0.000160	U	0.000160	U
2-Butanone (MEK)	0.000760	U	0.000760	U	0.000760	U	0.000760	U	0.000760	U	0.000760	U
2-Hexanone	0.000350	U	0.000350	U	0.000350	U	0.000350	U	0.000350	U	0.000350	U
4-Methyl-2-pentanone (MIBK)	0.000450	U	0.000450	U	0.000450	U	0.000450	U	0.000450	U	0.000450	U
Acetone	0.000990	U	0.000990	U	0.000990	U	0.00962		0.000990	U	0.00788	
Benzene	0.117		0.000911	J	0.119		0.00625		0.000807	J	0.000795	J
Bromodichloromethane	0.000160	U	0.000160	U	0.000160	U	0.000160	U	0.000160	U	0.000160	U
Bromoform	0.000190	U	0.000190	U	0.000190	U	0.000190	U	0.000190	U	0.000190	U
Bromomethane	0.000250	U	0.000250	U	0.000250	U	0.000250	U	0.000250	U	0.000250	U
Carbon disulfide	0.000240	U	0.000240	U	0.000240	U	0.000240	U	0.000240	U	0.000240	U
Carbon tetrachloride	0.000150	U	0.000150	U	0.000150	U	0.000150	U	0.000150	U	0.000150	U
Chlorobenzene	0.00422		0.00284		0.00428		0.00178		0.00253		0.00246	
Chlorobromomethane	0.000180	U	0.000180	U	0.000180	U	0.000180	U	0.000180	U	0.000180	U
Chloroethane	0.00199	J	0.0000800	U	0.00798		0.0000800	U	0.0000800	U	0.0000800	U
Chloroform	0.0862		0.00947		0.0427		0.00949		0.0164		0.00519	
Chloromethane	0.000180	U	0.000180	U	0.000180	U	0.000180	U	0.000180	U	0.000180	U
cis-1,2-Dichloroethene	0.0956		0.0203		0.0694		0.0218		0.0211		0.0243	
cis-1,3-Dichloropropene	0.000180	U	0.000180	U	0.000180	U	0.000180	U	0.000180	U	0.000180	U
Dibromochloromethane	0.000150	U	0.000150	U	0.000150	U	0.000150	U	0.000150	U	0.000150	U
Ethylbenzene	0.000497	J	0.000110	U	0.000455	J	0.000470	J	0.000458	J	0.000482	J
Methylene Chloride	0.000651	J	0.000150	U	0.00230	J	0.000150	U	0.000150	U	0.000150	U
m-Xylene & p-Xylene	0.000538	J	0.000170	U	0.000548	J	0.000528	J	0.000505	J	0.000525	J
o-Xylene	0.000120	U	0.000120	U	0.000120	U	0.000120	U	0.000120	U	0.000120	U
Styrene	0.0000700	U	0.0000700	U	0.0000700	U	0.0000700	U	0.0000700	U	0.0000700	U
Tetrachloroethene	0.0525		0.0459		0.0433		0.0231		0.0497		0.0331	
Toluene	0.000225	J	0.000150	U	0.000290	J	0.000223	J	0.000181	J	0.000223	J
trans-1,2-Dichloroethene	0.0276		0.00806		0.0250		0.00597		0.00584		0.00965	
trans-1,3-Dichloropropene	0.000210	U	0.000210	U	0.000210	U	0.000210	U	0.000210	U	0.000210	U
Trichloroethene	0.151		0.113		0.159		0.0798		0.118		0.0849	
Vinyl acetate	0.000210	U	0.000210	U	0.000210	U	0.000210	U	0.000210	U	0.000210	U
Vinyl chloride	0.307		0.0312		0.261		0.0202		0.0219		0.0429	
1,2-Dichloroethene, Total	0.123		0.0284		0.0944		0.0278		0.0269		0.0340	
Xylenes, Total	0.000538	J	0.000260	U	0.000548	J	0.000528	J	0.000505	J	0.000525	J

Notes:
1) Flags:
U = analyzed but not detected above the listed method detection limit
J = analyte detected below quantitation limit but above method detection limit

TABLE E-6
VOLATILE ORGANIC COMPOUNDS IN AIR SAMPLES
Area 2
Formosa Pilot Treatability Study
DPE

Location ID:	Area 2																					
Sample No:	Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6		Sample 7		Sample 8		Sample 9		Sample 10		Sample 11	
Sample Date:	3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/7/2014		3/7/2014		3/7/2014		3/7/2014		3/7/2014	
Constituent	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag	ppb (v/v)	Flag
Total Volatile Organic Compounds (VOCs) by EPA Method 8260B																						
1,1,1-Trichloroethane	808	UH	6.07	UH	0.600	UH	0.600	UH	0.600	U	0.600	U	0.600	U	0.600	U	0.600	U	0.600	U	0.600	U
1,1,2,2-Tetrachloroethane	1640	UH	12.3	UH	1.22	UH	1.22	UH	1.22	U	1.22	U	1.22	U	1.22	U	1.22	U	1.22	U	1.22	U
1,1,2-Trichloro-1,2,2-trifluoroethane	835	UH	6.27	UH	0.620	UH	0.620	UH	0.620	U	0.620	U	0.620	U	0.620	U	0.620	U	0.620	U	0.620	U
1,1,2-Trichloroethane	1450	UH	133	H	17.7	H	17.2	H	10.0		11.4		18.2		18.7		19.1		8.72		19.5	
1,1-Dichloroethane	1940	JH	83.7	H	41.5	H	53.6	H	33.9		34.3		48.5		48.2		47.4		21.7		47.9	
1,1-Dichloroethene	916	UH	10.9	JH	5.28	H	5.92	H	4.31		4.02		4.51		4.84		4.20		2.20	J	4.37	
1,2,4-Trichlorobenzene	2640	UH	19.8	UH	1.96	UH	1.96	UH	1.96	U	1.96	U	1.96	U	1.96	U	1.96	U	1.96	U	1.96	U
1,2,4-Trimethylbenzene	1700	UH	31.3	JH	18.8	H	9.09	H	6.39		18.0		18.4		41.2		62.4		36.7		40.9	
1,2-Dibromoethane (EDB)	1190	UH	8.90	UH	0.880	UH	0.880	UH	0.880	U	0.880	U	0.880	U	0.880	U	0.880	U	0.880	U	0.880	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	862	UH	6.47	UH	0.640	UH	0.640	UH	0.640	U	0.640	U	0.640	U	0.640	U	0.640	U	0.640	U	0.640	U
1,2-Dichlorobenzene	1890	UH	14.2	UH	1.40	UH	1.40	UH	1.40	U	1.40	U	1.40	U	1.40	U	1.40	U	1.40	U	1.40	U
1,2-Dichloroethane	274000	H	2580	H	794	H	358	H	530		1020	E	337		372		359		167		380	
1,2-Dichloropropane	1400	UH	10.5	UH	1.04	UH	1.04	UH	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
1,3,5-Trimethylbenzene	1750	UH	13.1	UH	5.75	H	3.09	JH	3.04	J	5.05		4.86		11.5		17.7		12.6		10.7	
1,3-Dichlorobenzene	1750	UH	13.1	UH	1.30	UH	1.30	UH	1.30	U	1.30	U	1.30	U	1.30	U	1.30	U	1.30	U	1.30	U
1,4-Dichlorobenzene	1720	UH	12.9	UH	1.28	UH	1.28	UH	1.28	U	1.28	U	1.28	U	1.28	U	1.28	U	2.44	J	1.28	U
Benzene	1510	UH	77.0	H	40.5	H	52.8	H	32.3		31.2		62.1		63.2		59.9		28.7		63.7	
Benzyl chloride	2100	UH	15.8	UH	1.56	UH	1.56	UH	1.56	U	1.56	U	1.56	U	1.56	U	1.56	U	1.56	U	1.56	U
Bromomethane	862	UH	6.47	UH	0.640	UH	0.640	UH	0.640	U	0.640	U	0.640	U	0.640	U	0.640	U	0.640	U	0.640	U
Carbon tetrachloride	1020	UH	7.68	UH	0.760	UH	0.760	UH	0.760	U	0.760	U	0.760	U	0.760	U	0.760	U	0.760	U	0.760	U
Chlorobenzene	1320	UH	28.3	JH	1.90	JH	1.51	JH	0.980	U	0.980	U	1.31	J	1.73	J	1.43	J	0.980	U	1.46	J
Chloroethane	943	UH	7.08	UH	1.33	JH	1.75	JH	0.972	J	0.936	J	1.32	J	1.14	J	1.29	J	1.03	J	1.31	J
Chloroform	21300	H	157	H	75.9	H	49.0	H	69.2		118		48.3		49.5		48.6		22.4		49.7	
Chloromethane	4310	UH	32.4	UH	3.20	UH	3.20	UH	3.20	U	3.20	U	3.20	U	3.20	U	3.36	J	3.20	U	4.06	J
cis-1,2-Dichloroethene	1620	UH	45.4	H	23.3	H	28.4	H	14.4		12.5		23.9		24.1		23.2		10.8		24.2	
cis-1,3-Dichloropropene	1990	UH	15.0	UH	1.48	UH	1.48	UH	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
Dichlorodifluoromethane	1830	UH	13.7	UH	1.36	UH	1.36	UH	1.36	U	1.36	U	1.36	U	1.36	U	1.36	U	1.36	U	1.36	U
Ethylbenzene	1830	UH	13.7	UH	4.50	H	2.86	JH	2.02	J	3.65	J	3.59	J	7.54		9.90		4.17		7.10	
Hexachlorobutadiene	2100	UH	15.8	UH	1.56	UH	1.56	UH	1.56	U	1.56	U	1.56	U	1.56	U	1.56	U	1.56	U	1.56	U
Methylene Chloride	3500	UH	26.3	UH	27.7	H	14.0	H	36.4		83.0		10.6		11.3		2.93	J	7.79	J	9.88	J
m-Xylene & p-Xylene	3230	UH	31.3	JH	19.3	H	13.3	H	8.83		17.4		18.1		35.2		44.1		20.0		33.9	
o-Xylene	1640	UH	17.7	JH	9.84	H	5.72	H	3.63	J	7.95		7.73		15.4		22.9		12.4		16.1	
Styrene	1560	UH	11.7	UH	1.16	UH	1.16	UH	1.16	U	1.16	U	1.16	U	1.16	U	1.16	U	1.16	U	1.16	U
Tetrachloroethene	1080	UH	471	H	24.2	H	21.9	H	11.9		11.3		17.3		31.7		17.6		8.53		18.8	
Toluene	3230	UH	31.7	JH	34.9	H	14.0	H	21.4		43.3		14.0		27.2		30.5		68.0		25.2	
trans-1,3-Dichloropropene	1290	UH	9.71	UH	0.960	UH	0.960	UH	0.960	U	0.960	U	0.960	U	0.960	U	0.960	U	0.960	U	0.960	U
Trichloroethene	1000	JH	113	H	47.1	H	52.4	H	26.9		22.7		46.9		49.3		42.5		20.8		49.6	
Trichlorofluoromethane	647	UH	4.85	UH	0.480	UH	0.480	UH	0.480	U	0.480	U	0.480	U	0.492	J	0.480	U	0.480	U	0.480	U
Vinyl chloride	1910	UH	149	H	78.4	H	114	H	68.7		45.8		88.6		88.5		83.1		32.0		86.6	

Notes:
1) Flags:
U = analyte was not detected at or above the SDL
J = result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value
E = result is greater than the UQL and the concentration is an estimated value

APPENDIX F

Laboratory Analytical Data Reports – DPE (Electronic Copies)

Formosa Treatability Study
DPE
Laboratory Analytical Data
Reports

PBW
Pastor, Behling & Wheeler, LLC
Consulting Engineers
and Scientists

Formosa Plastics Corporation
Point Comfort, Texas